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Issue Article

Zulfiya Kojabayevna Dzhumanazarova
Karakalpak State University
Associate Professor of the Department of Organic and Inorganic Chemistry(KarSU),230100,
Republic of Uzbekistan, Nukus,Ch.Abdirov str.,1
zulya19_86@mail.ru

Aysanem Parakhat qizi Bektursinova
Karakalpak State University
Assistant teacher of the Department of Organic and Inorganic Chemistry(KarSU),230100,
Republic of Uzbekistan, Nukus,Ch.Abdirov str.,1
aysanem_bektursinova@mail.ru

RESEARCH OF COORDINATION COMPOUNDS OF STRONTIUM NITRATE WITH A MIXED LIGAND

Abstract: *Mixed-amide coordination compounds of strontium nitrate with thiocarbamide, acetamide, acetodiphenylamide, benzamide, and carbamide have been synthesized. The composition, identity, methods of coordination of the nitrate fragment, amide molecules were established, and the thermal behavior of the resulting coordination compounds was studied.*

Key words: *coordination compounds, synthesis, composition, physicochemical methods of analysis, IR absorption spectra, X-ray phase analysis.*

Language: *English*

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Introduction

In modern coordination chemistry, in the section of solid state chemistry, metal complexes containing various N,O donor centers in the ligand environment occupy a special place.[1, p.11]. Interest in them is due to the fact that the study of such metal complexes is developing in connection with their use as molecular magnets, catalytic systems, components of optical recording media, etc. They are good models for studying the problem of competitive coordination in the chemistry of complex compounds due to the specific effect of their environment on stereochemistry of polyhedra. Complex compounds of metals, having a number of specific properties, have found wide practical use in many sectors of the national economy. [2, p.40-43; 3, p.376-377]. Of particular interest among such complexes are polyamide compounds of metals with amides, which are biologically active substances. The use of substances containing donor atoms of amides of aliphatic acids as ligands, in particular carbamide, thiocarbamide, acetamide, acetodiphenylamide, benzamide, promote the formation of complex compounds containing macroelements.[4;7,p.19]. A technology for obtaining complex compounds of transition metal salts with organic ligands has been developed, and the processes of formation of coordination compounds in solutions and solid phases have been determined.[8, p.376-377; 9,p.64-65]. The physicochemical properties of the synthesized coordination compounds have been studied. Despite the extensive experimental material on the study of complexes of transition metal salts with amides, there were no materials on homogeneous and mixed-ligand coordination compounds of alkaline earth metal nitrates with amides. Because, transition metals are considered as typical complexing agents, while

alkaline earth metals are considered as substances difficult to form complex metals.

Material and methods.

To carry out the synthesis of coordination compounds, we have chosen the most efficient mechanochemical method, since it does not require scarce organic solvents and allows us to synthesize complexes of various compositions in high yield. The mechanochemical process of the interaction of metal nitrates and ligand molecules (urea, thiocarbamide,acetamide and acetodiphenylamide) is carried out by intensive grinding at room temperature in a ball mill of components taken in molar ratios of strontium nitrates and amides 1:1:1, respectively. This process was repeated 12 times. Molecules of carbamide (K), thiocarbamide (TK), acetamide (AA), acetodiphenylamide (ADP), benzamide (BA), and nitrate anion (NO3) contain donor atoms and promote the formation of coordination compounds with metal ions. In [9,p.64-65; 11,p.199-200], coordination compounds of a number of metal nitrates with amides were synthesized and studied. In the literature, there is no information about polyamide coordination compounds of strontium nitrates. The synthesis was carried out according to the procedure [12,p.489; 13,p.19].

Results and discussion

The complex of composition $Sr(NO_3)_2 \cdot AA \cdot BA \cdot H_2O$ was synthesized by intensive stirring of 2.12 g (0.01 mol) $Sr(NO_3)_2$c 1.1816 g (0.01 mol) acetamide and 1.21 g (0.01 mol) benzamide in a ball mill at room temperature for 0.15-0.20 hours. The product yield was 83.0%. 0.7628 g (0.01 mol) of thiocarbamide in a ball mill at room temperature for 0.15-0.20 hours. The product yield was 86.0%. 0.7628 g (0.01 mol) of thiocarbamide in a ball mill at room temperature for 0.15-0.20 hours. The product yield is 84.0%.

Analysis of the synthesized compounds for the content of magnesium and calcium was carried out according to [6,p.232;]. Nitrogen was determined by the Dumas method [12], carbon and hydrogen were determined by combustion in an oxygen stream (table. 1). To establish the individuality of the synthesized compounds, X-ray diffraction patterns were taken on a DRON-2.0 setup with a Cu anticathode [13,p.19;]. IR absorption spectra were recorded on spectrophotometers, IRTracer-100 from Shimadzu. IRTracer-100 (400-4000 cm^{-1})

Table 1. Results of elemental analysis of mixed-amide coordination compounds of strontium nitrate

Compounds	Me, %		N, %		S, %		C, %		H, %		Empirical formula
	Found	Calculated	Found	Calculated	Found	Calculated	Found	Calculated	Found	Calculated	
$Sr(NO_3)_2 \cdot CH_3CONH_2 \cdot C_6H_5 CONH_2\ H_2O$	21,34	21,46	13,47	13,66			26,14	26,34	3,33	3,41	$SrN_4C_9H_{14}O_9$
$Sr(NO_3)_2 \cdot CO(NH_2)_2 \cdot CS(NH_2)_2 \cdot H_2O$	26,13	26,34	25,06	25,15	9,41	9,58	7,11	7,18	2,81	2,99	$SrN_6C_2H_{10}SO_8$
$Sr(NO_3)_2 \cdot CH_3CO(N\ C_6H_5)_2\ CS(NH_2)_2 \cdot H_2O$	17,51	17,63	16,72	16,83	6,32	6,41	35,97	36,07	3,73	3,81	$SrN_6C_{15}H_{19}SO_8$

Frequencies were found in the IR absorption spectrum of a free urea molecule at 3443- ν_{as} (NH_2), 3347-ν_s(NH_2), 3255-2δ(NH_2), 1679-ν(CO), δ(NH_2), 1624-δ(NH_2), ν(CO),1464-ν(CN), 1152-1057-ρ(NH_2), 1002- ν(CN), 789-δ(NH_2), 573-δ(NCO) and 559-δ(NCN). In the IR absorption spectrum of an uncoordinated thiocarbamide molecule, it has frequencies at 3380- ν_{as} (NH_2), 3276-ν_s(NH_2), 3178-2δ(NH_2), 1619-δ(NH_2), δ(HNC), 1474-ν(CN),1413-ν(CS), 1084- ν(CN), 783-ρ(NH_2), 730-ν(CS), 631-δ(CS), δ(NCS), 487-δ(NCN) and 413- δ(NCS). In the IR absorption spectrum of AA, frequencies (cm^{-1}) were found at 3387-ν(NH_2), 3194 - 2δ(NH_2), 1670 - ν(C=O), 1626 - δ(NH_2), ν(CO), 1395 - ν(CN), 1348 - δ(CH_3), 1154 - ρ (NH_2), 1048 - ρ(CH_3), 1005 - ν(C-C), 875 - ν(C-C), 582 - δ(NCO) and 464 - δ(CCN).

In the IR absorption spectrum of an uncoordinated benzamide (BA) molecule, frequencies were found at3367 - $\nu(NH)_2$, 3172 - 2δ(NH_2), 3059 - ν(CH), 2885 - ν(CH), 2779 - ν(CH), 1955, 1893, 1810, 1659 - ν(C=O), 1623 - δ(NH_2), 1577 - $\nu_к$, 1450 - $\nu_к$, 1401 - ν(CH), 1297, 1179, 1143 - $\nu(NH)_2$, 1122, 1024, 918, 848, 812, 793, 685, 635, 529 and 411 $см^{-1}$.

An analysis of the IR absorption spectra of non-coordinated molecules of urea, thiocarbamide, acetamide, acetadiphenylamide, benzamide, and their complex compounds with strontium nitrates showed that, with the transition to the coordinated state, the values of some frequencies of amide molecules

change significantly. Due to the complexity of the IR absorption spectra of complex compounds of strontium nitrates with amides, we failed to attribute all the observed frequencies to the corresponding vibrations of the bond groups.

Comparison of IR absorption spectra of free molecules ofcarbamideand nitrocarbamideand complex compounds of compositions $Sr(NO_3)_2{\cdot}CH_3CONH_2{\cdot}C_6H_5CONH_2{\cdot}H_2O$ $Sr(NO_3)_2{\cdot}CO(NH_2)_2{\cdot}CS(NH_2)_2{\cdot}H_2O$ $Sr(NO_3)_2{\cdot}CH_3CO(NC_6H_5)_2$ $CS(NH_2)_2{\cdot}H_2O$ the coordination of carbamide and acetamide molecules through the oxygen atom of carbonyl groups was established (Fig1,2,3).

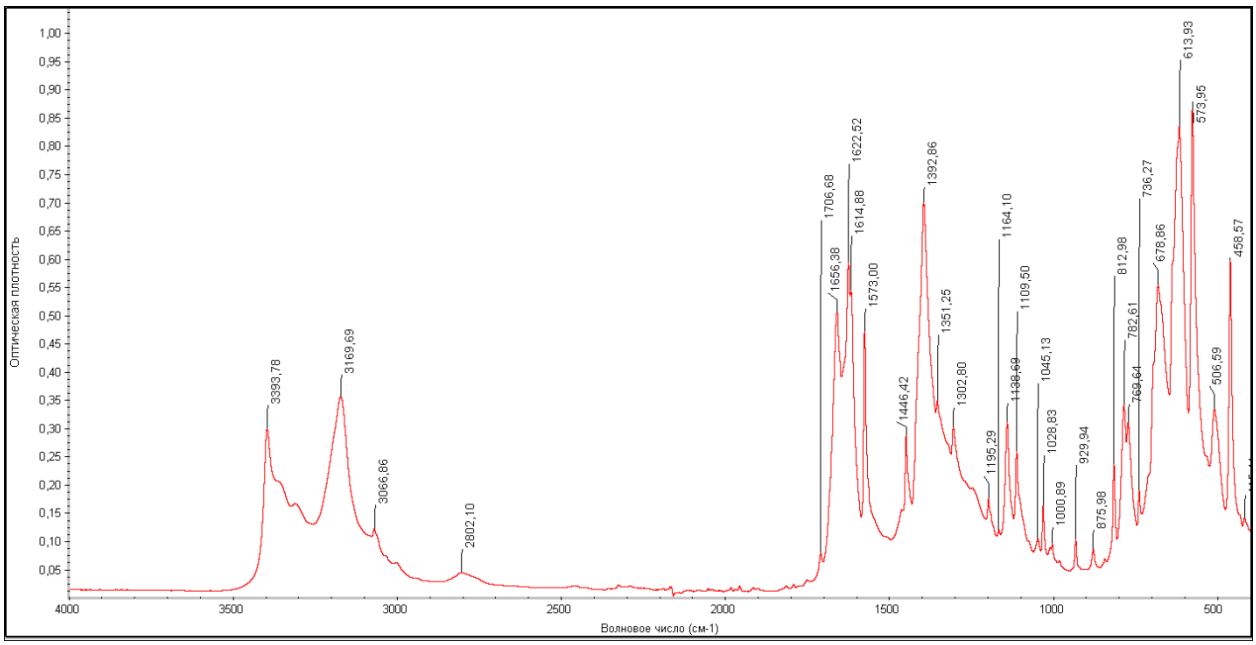

Fig. 1. IK-spectrum absorption mixed coordination compound nitrate strontium with acetamidom and benzamidom composition $Sr(NO_3)_2{\cdot}CH_3CONH_2{\cdot}C_6H_5CONH_2H_2O$

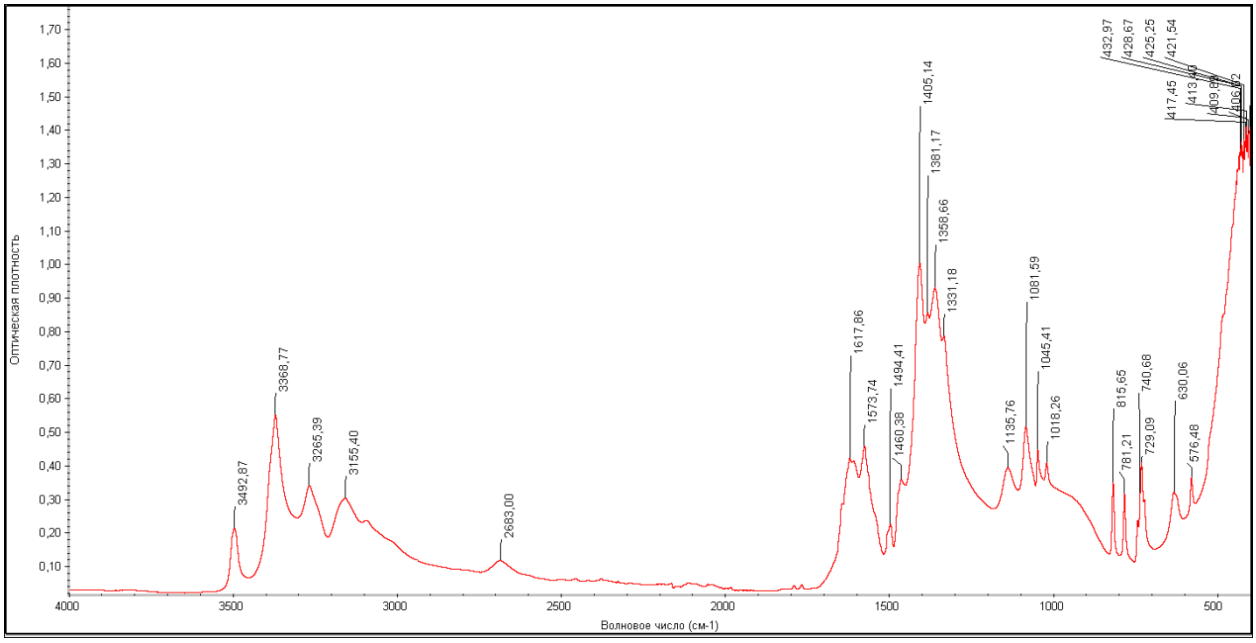

Fig.2. IR absorption spectrum of a mixed amide coordination compound of strontium nitrate with carbamide and thiocarbamide of the composition $Sr(NO_3)_2{\cdot}CO(NH_2)_2{\cdot}CS(NH_2)_2{\cdot}H_2O$

This is evidenced by a decrease in the frequency of the C=O bond by 17-48 cm-1 and an increase in the frequency of the stretching vibration of the C-N bond by 7-20 cm-1, respectively, in the cases of the coordinated state of carbamideandacetamide molecules. In the IR absorption spectra of the benzamide molecule, acetadiphenylamide, changes in the characteristic frequencies are observed in the region of stretching vibrations of the C=O, C-N bond and ring vibrations. The observed changes in the characteristic bands indicate the coordination of organic molecules with strontium atoms through the oxygen atoms of carbonyl groups.

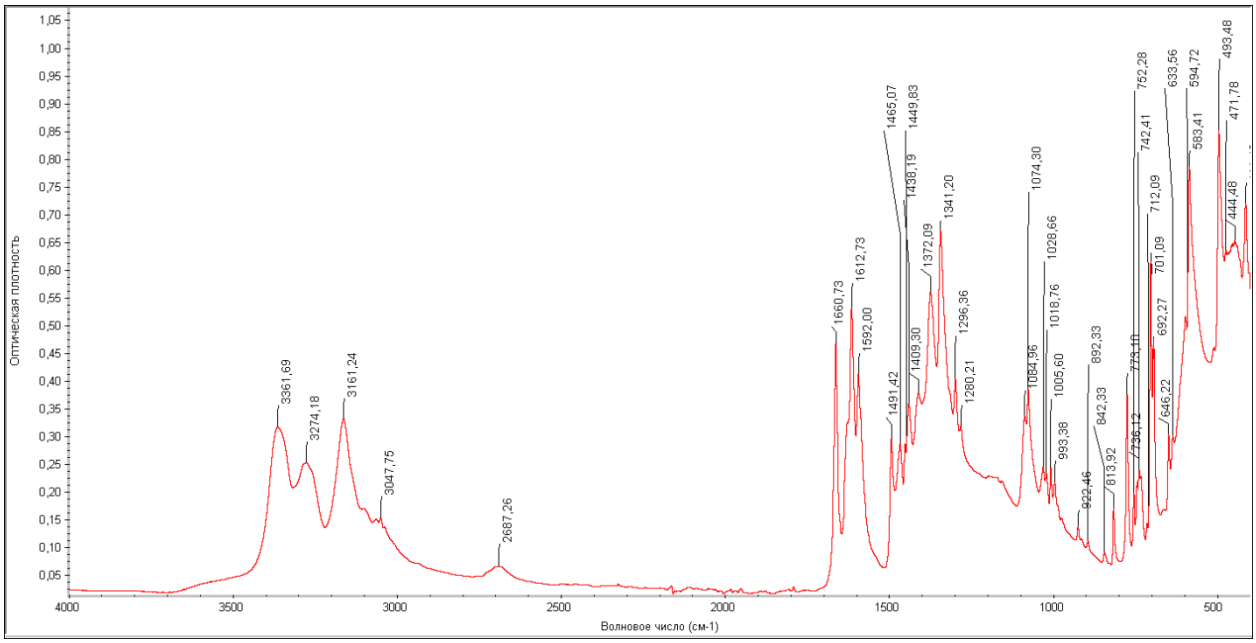

Fig.3. IR absorption spectrum of a mixed amide coordination compound of strontium nitrate with acetadiphenylamide and thiocarbamide of the composition $Sr(NO_3)_2 \cdot CH_3CO(NC_6H_5)_2CS(NH_2)_2 \cdot H_2O$

Comparison of interplanar distances and relative intensities of benzamide, acetamide, carbamide, thiocarbamide, acetadiphenylamide, nicotinamide and new complex compounds of strontium nitrates showed that they differ significantly from each other, from similar ones and from the original compounds. Consequently, the synthesized coordination compounds have individual crystal lattices [83; c. 3-8, 84; c. 4-5, 85; c. 282-284, 86; c. 199-200] (table.2).

Table 2. Interplanar distances and relative intensities of the lines of the coordination compound of nitrate with amides

Compounds	d, Å	J, %	d, Å	J, %	d, Å	J, %	d, Å	J, %	d, Å	J, %
$Sr(NO_3)_2 \cdot CH_3CONH_2 \cdot C_6H_5CONH_2$ H_2O	6,21	24	3,39	33	2,77	17	2,11	19	1,621	14
	5,79	26	3,31	31	2,69	14	2,09	21	1,611	16
	5,26	28	3,28	100	2,65	16	2,02	14	1,590	14
	4,96	33	3,22	45	2,62	19	1,935	31	1,580	14
	4,80	28	3,09	26	2,59	21	1,907	12	1,556	14
	4,25	22	3,06	62	2,44	79	1,860	10	1,532	10
	4,17	14	3,00	24	2,34	21	1,789	14	1,460	14
	4,02	19	2,95	21	2,33	21	1,751	17	1,450	14
	3,75	19	2,89	21	2,25	22	1,699	14	1,413	12
	3,44	17	2,83	26	2,16	22	1,670	12	1,343	14
$Sr(NO_3)_2 \cdot CO(NH_2)_2 \cdot CS(NH_2)_2 \cdot H_2O$	6,79	27	4,20	41	2,57	35	2,09	35	1,595	16
	6,53	41	4,12	35	2,54	41	2,00	59	1,551	19
	5,96	68	3,92	19	2,47	41	1,943	35	1,542	22
	5,81	43	3,79	24	2,41	41	1,927	32	1,378	19

Compounds	d, Å	J, %	d, Å	J, %	d, Å	J, %	d, Å	J, %	d, Å	J, %
	5,73	43	3,31	89	2,38	35	1,879	16	1,374	19
	5,52	49	3,04	100	2,33	27	1,860	19	1,344	16
	5,16	35	2,80	41	2,23	51	1,693	16	1,333	16
	4,96	54	2,73	24	2,17	41	1,653	19		
	4,86	54	2,66	24	2,13	22	1,639	19		
$Sr(NO_3)_2 \cdot CH_3CO(N\ C_6H_5)_2$ $CS(NH_2)_2 \cdot H_2O$	9,54	10	3,62	21	2,72	17	2,05	21	1,716	8
	9,18	11	3,41	27	2,69	17	2,01	6	1,657	10
	6,91	19	3,31	24	2,62	17	1,991	6	1,635	16
	6,53	17	**3,24**	**100**	2,58	12	1,938	5	1,551	6
	6,27	12	3.15	17	2,54	8	1,920	6	1,523	7
	4,88	83	3,07	37	2,48	7	1,882	7	1,483	5
	4,60	75	3,01	24	2,44	9	1,860	9	1,467	4
	4,25	9	2,91	12	2,38	17	1,816	8	1,385	6
	4,12	11	2,84	14	2,30	22	1,772	10	1,360	7
	4,02	18	2,80	12	2,20	14	1,759	7		
	3,84	10	2,74	22	2,07	24	1,722	10		

Conclusion

Thus, on the basis of the studies carried out, it was established that the possibility of synthesizing mixed-ligand coordination compounds of strontium nitrate by a mechanochemical method was established. The individuality of the synthesized compound was proved by physicochemical methods of analysis. The centers of coordination and the denticity of the acid residue are proven by IR spectroscopy data.

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Issue Article

A.P. Anarbaev
Unemployed
D.S.H.N., Professor

Sh.Kh. Yuldasheva
Unemployed
doctoral candidate applicant

PEST OF FLOWER CROPS OXYTHYREA CINCTELLA SCHAUM FROM THE ORDER – COLEOPTERA IN UZBEKISTAN

Abstract: *In this work, one of the families of lamellar mustaches, the Speckled Bronze (cinctella Schaum.) from the order of beetles (Coleoptera), is considered. Similarity to Oxythyrea funesta, occurrence, harmfulness and also, a brief review of the literature.*

Key words: *Beetle, lamellar, Oxythyrea cinctella Schaum, pest, rose, damage.*

Language: *Russian*

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ВРЕДИТЕЛЬ ЦВЕТОЧНЫХ КУЛЬТУР OXYTHYREA CINCTELLA SCHAUM ИЗ ОТРЯДА – COLEOPTERA В УЗБЕКИСТАНЕ

Аннотация: *В данной рабте рассмотривается один вид из семейств пластинчатоусых Рябая бронзовка (Oxythyrea cinctella Schaum.) из отряда жуков (Coleoptera). Сходство с Oxythyrea funesta, встречаемость, вредоносность а также, краткий обзор литературы.*

Ключевые слова: *Рябая бронзовка, пластинчатоусые, Oxythyrea cinctella Schaum, вредитель, роза, ущерб.*

Введение

УДК: 632.

Самый крупный отряд насекомых. Свое название жесткокрылые получили за жесткую переднюю пару крыльев (надкрылья), которые не используются при полете. В мире более 300 000 видов; наиболее обильны в зонах с жарким климатом. Подразделяются на 4 подотряда и почти 200 семейств. Наиболее многочисленны и заметны в наземных экосистемах жужелицы (Carabidae), стафилины (Staphylinidae), пластинчатоусые (Scarabaeidae), чернотелки (Tenebrionidae), нарывники (Meloidae), листоеды (Chrysomelidae), усачи (Cerambycidae), долгоносики (Curculionidae) (И.И. Темрешев, В.Л. Казенас, 2015).

Рассмотрим один вид из семейств пластинчатоусых рябая бронзовка (*Oxythyrea cinctella* Schaum) из отряда жуков *(Coleoptera)*. Вид очень похож на *Oxythyrea funesta*, но меньшего размера.

По-видимому, существует тенденция обозначать любого майского жука с белыми пятнами на черном фоне как, что вполне разумно в Западной Европе, поскольку это единственный вид, который может встретиться. Однако картина этих черно-белых становится все более сложной по мере продвижения на восток, когда в восточном Средиземноморье и странах Восточной Европы появляется еще несколько видов.

Показательным примером является один популярный фотогид, в котором *Oxythyrea funesta* описывается с использованием изображения *Oxythyrea cinctella* (Peter G. Sutton., 2012).

Есть ряд видов *Oxythyrea*, которые можно встретить в восточных странах и на островах Средиземноморья: *Oxythyrea abigail* Reiche and Saulcy, 1856, *Oxythyrea albopicta* (Motschulsky, 1845) *Oxythyrea cinctella* (Schaum, 1841), *Oxythyrea dulcis Reitter*, 1899 *Oxythyrea funesta* (Poda, 1761), *Oxythyrea noemi* Reiche and Saulcy, 1856 (Peter G. Sutton.2012).

Встречаемость *O.cinctella* Schaum в Португалии, Испании и Южной Италии, включая Сицилию, о которой ранее сообщал Медведев (1964), не подтверждается современными данными Blanco Villero, 1985; Mozos-Pascual, Martin-Cano, 1988, 1992; San Martin и др., 2001; Сметана, 2006; Таузин, 2012 (Kizub I.V., 2013).

Рисунок 1- (С.Колов, 2013).

Рисунок 2- (Ш.Юлдашева, 2021).

Известно, что в Украине *O.cinctella* Schaum является крайне редким видом и пока зарегистрирован только в Карадаге (Васько, Герасимов, 2005) и Новом Свете в Крыму (Kizub I.V., 2013).

Из культурных растений повреждает цветы и листья виноградной лозы, цветы яблони, груши, айвы, розы, тунга, цитрусовых культур, ржи и пшеницы, сафлора, подсолнечника, хлопчатника, кенафа, бамии, кунжута, капусты, люцерны, вики, гороха, кукурузы и других культур. Для рано цветущих культур менее вреден, чем олёнки (разные виды Epicometis), сильный вред приносит цитрусовым, сильно повреждает цветы роз (Медведев С.И. 1964).

Медведов также упомянул в своей книге, что вредитель наносит серьезный ущерб розам в Иране. В За Кавказье (Эльдар) в большом количестве поедает сорокопут красноголовый (*Lanius senator* niloticus Bonaparte) и сорокопут чернолобый (*Linatus minor* Gmel). Наиболее очевидным отличием от *O. funesta* является то, что у *O. cinctella* края грудной клетки имеют более или менее сплошной беловатый край (Медведев С.И. 1964).

В статье М.Ю.Калашяна (1970) говорится, что сведения о типовом материале отсутствуют. А также, автор отметил что данный вид остался незамеченным авторами, и в частности не было учтено в «Каталоге полеарктические жесткокрылые». В коллекции С.М.Яблокова-Хнзоряна хранятся 3 экземпляра *Oxythyrea cinctella*, происходящие из республики Средней Азии (Smetano, 2006).

Elias N. Handal и Zuhair S. Amr жуков описывают как цветочный майский жук. На Палестинском территории (Западный берег) зафиксировали четыре отряда, девять видов (Elias N. Handal и Zuhair S. Amr, 2018). Обычно O. cinctella встречается с Oxythyrea noemi (Rittner, Sabatinelli, 2010).

Днём скарабеи (Coleoptera: Scarabaeidae, Cetoniinae), используют зрительные и обонятельные стимулы при обнаружении цветов для кормления. В полевых экспериментах по отлову жуков в Турции, тестировании различных цветов и цветочных летучих соединений, сочетание флуоресцентного желтого цвета и смеси 2-фенилэтанола и (±) лавандулола приводит к наибольшему количеству пойманных *Oxythyrea cinctella* Schaum (Mehmet Bora Kaydan, 2022).

Ахмедьянов Денис Ришатович (2018) учёный из Узбекистана в статье приводит видовой состав семейства бронзовок и их краткое описание.

В диссертационной работе Ш. Аманов (2017) приводит сведения о вреде рябой бронзовки цветкам сафлоры. Сафлору вредят только взрослые жуки *O.cinctella*, разгрызая бутоны и стебли, личинки же, не нанося вреда сафлору, живут в перегнойной земле (Аманов, 2017).

Тело *O.cinctella* блестяще-черное, сверху без длинных волосков; переднеспинка с тонкой белой боковой каемкой и с 2-мя белыми пятнышками на основании; надкрылья с многочисленными, белыми небольшими пятнами, более крупными вдоль их края, такие же пятна лежат на пигидии, по бокам брюшка и на груди, в боковой вырезке надкрыльев; наличник суженный вперед, на вершине без выемки, переднеспинка без срединного киля, щитик с острой вершиной; надкрылья с тонкими и неполными двойными бороздками, шов их в вершинной части слегка приподнят. Щиток гладкий. Длина 7,6-12,2 мм, ширина 3,8-6,6 мм. Личинка очень похожа на личинку *O. funesta (Аманов, 2017)*. Однако повреждение роз *O.cinctella* в Узбекистане не изучалось. Из выше изложенного **целью исследованиея** явилось определить степень встречаемости вредителя в нашей стране, провести систематический анализ и определить уровни вредоносности.

Место, условия и методика исследования. Исследования проводились в ботаническом саду города Ташкента в весенне-летние месяцы 2021-2022 гг на сортах розы *Черный принц*. Тепмература воздуха в среднем состояло весной $+13C^0$ - $+30C^0$, влажность воздуха 38-56, летом $+22C^0$ -$+36C^0$, влажность воздуха 17-23.

Энтомологические наблюдения и выявление вредителя выполнены методом М.Ю.Калашян (1970), С.И. Медведов (1964), систематический анализ проводилась по методике С.Колов.

Опыты проводили в лаборатории кафедры «Защиты растений» Ташкентского государственного аграрного университета, Ташкентском ботаническом саду, Сельскохозяйственный центр инновации и наук при Ташкентском государственном аграрном университете.

Результаты исследования. По нашим наблюдением на разных полях рябая бронзовка появляется в третей половине марта. Личинки развиваются в земле, где питаются мертвыми растительными остатками. Жуки появляются после перезимовки из почвы в том же коконе, где находилась куколка. Жуки встречаются на цветах разных травянистых, кустарниковых и древесных растений. По наблюдениям в Ботаническом саду города Ташкент, жуки встречались на цветах розы и ириса (рис1,2).

В эксперименте было замечено, если своевременно не применить меры борьбы вредитель наносит серьезный ущерб цветкам розы и ириса.

Рис.-3. Oxythyrea cinctella (Schaum) на цветке ириса

Рис.-4. Oxythyrea cinctella (Schaum) на цветке розы

По рисункам 3 и 4 видно, что вредитель питается пыльцой цветов, затем повреждает их лепестки. Цветы теряют декоративные качества. Для борьбы с вредителем не желательно использовать пестициды, потому что розы используются человеком. Как только вредитель появляется на поле ранней весной, необходимо его собрать или использовать ловушки.

В опытах на разных полях определяли количество вредителей и степень заражения (таблица-1).

Таблица-1. Степень заражения роз *Oxythyrea cinctella* Schaum (Ташкент 2021г.)

Место исследования	Количество вредителя на 10 шт цветков розы, штук	Зараженные цветки розы, (штук)	Степень заражения, %	Применить меры борьбы при повышении количества вредителей на 10 шт розах.
Ботанический сад	68,2	5,9	59	0,6-0,8
С/х центр наук и инновации при ТГАУ	32,1	4,7	47	

В ботаническом саду при сборе 10 шт здоровых роз из них были заражены 5,9 шт и выявлено 68,2 шт *Oxythyrea cinctella* Schaum из зараженных роз, зараженность составила 59%.

По сравнению с ботаническим садом повреждаемость была меньше у образцов роз, взятых с полевых опытных участков Центра наук и инноваций в сельском хозяйстве при Ташкентском государственном аграрном университете. При сборе 10 шт здоровых роз из них были заражены 4,7 шт роз, было обнаружено 32,1 шт *Oxythyrea cinctella* Schaum, степень заражения составила 47%. В обоих случаях рекомендуется применять меры борьбы, когда ущерб достигает 0,6-0,8 шт.

Таблица-2. Встречаемость и степень зараженности *Oxythyrea cicntella* Schaum *(Ташкент, 2021г)*.

Название культуры	Встречаемость вредителя на одном цветке (шт)	Степень зараженности на одном цветке
Ирис	1-3	+
Роза	4-8	+++

Примечание. (+) – малый, (++) – средный, (+++) – сильный заражение

По таблице-2 можно увидить при количестве вредителей 1-3 шт на ирисах ущерб невелик, если количество вредителей превышает 5, то это серьезно повреждает розу, теряет качество и декоративный вид.

Выводы.

Повреждение роз *Oxythyrea cinctella* Schaum в условиях Узбекистана не изучалось. В наших условиях на полях рябая бронзовка появляется в третей декаде марта.

В ходе наших исследований было выявлено - вредитель наносит серьезный ущерб цветкам ириса одновременно как и розам. В эксперименте было замечено, если своевременно не применить меры борьбы вредитель наносит серьезный ущерб цветкам розы и ириса.

Чем больше диаметр роз, тем выше риск поражения рябой бронзовки *Oxythyrea cinctella* Schaum. На одной розе может находиться от одного до восьми рябой бронзовки. Количество вредителей также влияет на уровень поражения роз.

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Issue Article

Polat Jumaniyazovich Oteniyazov
Karakalpak Branch of the Academy of Sciences of the Republic of Uzbekistan
Senior Reseacher of the Karakalpak Research Institute of humanities,
PhD in philology, Nukus city, Republic of Karakalpakstan

MOTIVES AND PLOTS IN KARAKALPAK FOLK TALES

Abstract: *This article discusses the motifs and plots common in Karakalpak folk tales. In particular, such motifs and plots as "three roads", "three children", "three tasks", "three heroes" were analyzed.*

Key words: *folklore, people, fairy tale, composition, motif, plot, element, hero, character, image, magician, king, brave man, poor man, rich man, sage, swordsman, orphan.*

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МОТИВЫ И СЮЖЕТЫ В КАРАКАЛПАКСКИХ НАРОДНЫХ СКАЗКАХ

Аннотация: *В данной статье рассматриваются мотивы и сюжеты, распространенные в каракалпакских народных сказках. В частности, были проанализированы такие мотивы и сюжеты, как «три дороги», «трое детей», «три задания», «три богатыря».*

Ключевые слова: *фольклор, народ, сказка, композиция, мотив, сюжет, элемент, герой, персонаж, образ, волшебник, царь, богатырь, бедняк, богатый, мудрец, мачеха, сирота.*

Введение

Большое место в народных сказках занимают мотивы и сюжеты. Мотив распространен и считается наименьшей частью сказочной композиции.

В композициях сказок мотив создает сюжет. Мотив является основой сюжета.

По мнению ученых, в основе сюжета лежит мотив, и мы изучаем это явление в системе сюжета [1, с. 8]. Мотив – основа сюжета. Возникновение сюжета тесно связано с мотивом, в котором мотив является главным, первичным.

Многие ученые утверждают, что мотивы постоянно меняются. Мотив – это малая часть сюжета, а сам мотив складывается из фрагментов.

«Мотив» означает латинское «moveo» — «движение» [2, с. 180] и французское «motif». – «тон, звук» [3, с.139].

Рассмотрена традиционная схема мотивного сюжета. Например, герой попал в плен. Ему помогает иностранная, чужая девушка. Отношения мачехи и падчерицы, герой идет от сиротства к большому успеху и славе. Герой не знает своего отца, он сталкивается с ним в неожиданных ситуациях. Там будет какая-то странная вещь, например, волшебное зеркало, амулет и другие вещи. Например, есть такие мотивы, как сновидения, разговоры с призраками, хождение инкогнито. Они образуют участки. Традиционные образы: мудрый министр (везир), верный друг, антагонист и др. Сюжеты развиваются по схожим мотивам.

Мотив традиционный, мотив - незавершенный сюжет. При этом сохраняется корень и ядро мотивов. Художественная фантазия и исполнительность рассказчика имеют большое значение. Исполнитель говорит по-разному и содержательно. Именно поэтому сказки выражаются в разных вариантах. Например, в каракалпакских народных сказках «Нуркызарын», «Царь Аккубай», «Мальчик-близнец» присутствует мотив «священных птиц».

Обычно мотивы в сказках называются именами, обозначающими определенную

ситуацию. Например, «Отец-сирота», «Три родственника», «Три брата и сестры», «Три богатыря», «Три волшебные вещи» (волшебное зеркало, волшебная расческа, целительное яблоко и др.), «Три пути», «Герой, посланный на смерть», «Три желания», «Три условия», «Сирота", "Мальчик-сирота», «Мачеха», «Одинокий ребенок», «Чужой, неизвестный зять», «Неверная жена», «Верная жена», «Хорошая жена», «Вор, упавший в сад», «Изгои» и другие.

Мотив «Вор, ограбивший сад» часто встречается в сказках. В фольклоре народов мира много сказок о яблоках или других фруктах в саду, и на них упал неведомый вор. На самом деле неведомые воры считаются чудотворными, волшебными птицами.

Братья пытаются поймать птицу, которая крадет яблоко или другой фрукт из сада. В ней самый младший ребенок или юноша достигает своей цели храбростью, отвагой и умом.

Мотив «птица, укравшая в саду плоды» встречается во многих сказках. Этот мотив входит в каракалпакские народные сказки под названием «Нуркызарын», «Золотой цыпленок», «Мальчик, который нашел в клетке птицу». С одной стороны птица в сказках вредная, а с другой считается волшебным и полезным животным. Птица преподносит герою волшебный дар. Были обсуждены вопросы, связанные с занятиями земледелием и огородничеством каракалпаков. В то же время птица, которая ест плод, считается очень сверхъестественной и волшебной. Герой, который его искал, очень сильный и смелый. В русской народной сказке «Иван-царевич и синий волк» есть птица или зверь, который ест в саду плоды. Храбрый юноша найдет эту птицу. Русский фольклорист В. Аникин мотив этой сказки считал волшебной сказкой тотемистического характера, относящейся к мифу [4, с. 48].

Каракалпакская народная сказка «Золотая курица» [5, с. 148-154] также достойна внимания. В нем рассказывается о трех детях богатого человека. Младший сын будет смелым и умным. Он отправляется на поиски золотой курицы, которая съела виноград в саду. Золотая курица на самом деле считается удивительным животным. Золотая курица — волшебница, удивительное животное. Это животное в конце сказки превращается в девушку-красавицу.

Казахская народная сказка «Золотая птица и серый волк» [6, с. 27-33] повествует о троих детях царя. Дети пытаются поймать золотую птицу, которая должна была ест яблоки в саду. Однажды младший ребенок ловит птицу, но птица выскальзывает из его рук и улетает. Птичье перо падает на землю. Младший мальчик находит птицу с помощью волка. Волк — странное и прекрасное животное. У волка будет магия.

Этот мотив фигурирует и в узбекской народной сказке "Соловей с чудесным голосом" [7, с. 196-211]. В королевском саду растет смоковница. Странная птица ест лист дерева. У короля будет трое сыновей. Они охраняют сад. Как обычно, младший мальчик ищет странную птицу. Он также сначала берет птицу из рук. В конце сказки он находит птицу и живет долго и счастливо.

В сказках трех народов общий мотив и сходное содержание. Но у него есть некоторые уникальные особенности. Например, в народной сказке о дрозде птица ест виноград в саду. В казахской народной сказке птица ест яблоко. В узбекской народной сказке птица ест листья клена. Он имеет свои особенности. Климат и почва, где живут они играют важную роль. Кроме того, золотая курица — загадочное существо в народных сказках. В казахской народной сказке упоминается золотой куш, а в узбекской народной сказке упоминается нежный соловей. Также в узбекских народных сказках царь считается злым правителем. Король приказывает убить своих солдат и двоих детей, которые не смогли найти птицу. Однако интеллигентный везир просит бросить его в темницу. В каракалпакских народных сказках есть богач, а в казахских народных сказках есть царь. Король отправляет своих детей на поиски птицы, но не налагает сурового наказания.

В сказке «Золотой цыпленок» младший ребенок прощает грехи своим братьям. В казахской народной сказке «Золотая птица и серый волк» царь превращает двух своих великанских детей в пастухов. Это означает, что казахский народ имеет прямое отношение к скотоводческой профессии. В «Хушавоз булбул» двух предавших его братьев изгоняют из города. В каракалпакских и казахских сказках те, кто находит птиц, женятся на этих заколдованных девушках, но в узбекских народных сказках это не так. Очаровательный соловей участвует как персонаж, выражающий предательство двух своих братьев. Сказка о трех народах отличается друг от друга в этих аспектах.

По мнению ученых, некоторые сходства в сюжетах сказок восточных народов и разных народов вообще связаны с взаимоотношениями и отношениями между ними [8, с. 40]. Мы, в свою очередь, считаем это правильной и естественной ситуацией. Также подобные мотивы и сюжеты художественно оформлены в национальном колорите у каждого народа и считаются достоянием этого народа.

Кроме того, большое место в сказках занимает мотив «Приговоренные к смерти». Обычно большим праздником становилось замужество дочерей королей, везирей и чиновников, правивших страной. Будущему

жениху ставят всевозможные непростые условия. Также короли отправляли своего зятя на смертельную торговлю, чтобы жениться на красивых женщинах. Этот мотив также широко распространен. Примерами тому могут служить такие сказки, как «Гульзамзе» [5, с. 59-66], «Четыре Абдуллы» [5, с. 24-30], «Хансаят» [5, с. 50-61], «Единственный ребенок Бахауаддин» [5, с. 176-184], «Гульзийба» [9, с. 62-76]. Короли дают главному герою опасные задания и отправляют его на работу, которая заканчивается смертью.

Каракалпакская народная сказка «Гулзийба» повествует о царе и его дочери по имени Гульзийба. Она хочет выйти замуж за сына везиря. Они хотят переехать в дальние страны. Но ребенок везиря засыпает в оговоренный день. Девушка по незнанию гуляет с другим грабителем. Утром он знает, что он грабитель. Тогда Гульзиба убегает от грабителя. Выходит замуж за сына пастуха. Король этой страны влюбляется в Гульзийбу. Затем он отправляет пастуха на опасную работу. Другими словами, пастух отправляется туда, где нет обратной пути. Герой выполняет непростые задания с помощью магических предметов.

Такой мотив можно найти и в узбекской народной сказке «Алмас батыр» [10, с. 34-37]. Затем король отправляет алмазную лодку в Барса Келмес. Батыр должен принести птицу по имени Булбул (Соловей).

Казахская народная сказка «Золотая птица и серый волк [6, с. 27-33]» тоже очень интересна. Сын царя земли отправляется на поиски золотой птицы. Короли других стран посылают его в далекую «Барса келмес», где нет обратной пути.

Главный герой сказки «Гульзийба[1]» — пастух. Главный герой сказки «Золотая птица и серый волк» – царское дитя. Главный герой сказки «Алмас батыр» – богатырь. Все герои отправляются в «Барса келмес»[2]. В каракалпакской народной сказке юноше помогают львы, тигры и семург. В казахской народной сказке бедняк помогает юноше. В узбекской народной сказке героем руководит добрая старуха (есть в сказке и злая старуха).

В каракалпакской народной сказке «Батыр бала» (Храбрый мальчик) [5, с.49-58] говорится, что у старика было трое детей. Младший ребенок вынужден покинуть свой дом. Он покидает свой дом и совершает множество подвигов. Мальчик учится искусству магии у незнакомого старика. Младший ребенок будет королем. Младший ребенок помогает своим двум братьям и братья пожениться. В этой сказке большое место занимает ремесло волшебства.

В народных сказках каракалпаков чувствуется облик древних времен. В литературном наследии каракалпаков с древнейших времен присутствуют различные тотемистические, культовые, древние верования. Черный дрозд кормит оставленного в поле детеныша, олень или олень кормит фруктовое дерево. В сказке «Мальчик-близнец» [5, с.73-75] сказано, что на страну нападут разбойники. Беременную женщину бросают грабители в пустыне. Женщина рожает близнецов и умирает сама. Затем появляется дедушка этих детей и отдает одного близнеца черной птице, а другого фруктовому дереву. Эти случаи имеют тотемистический, антропоморфный и зооморфный, фетишистский характер. Плодовое дерево с черной птицей трактуется как покровитель детей.

В своих исследованиях сказовед З.Расулова упоминала о таких странных вещах в волшебных сказках, призрачных птицах, животных как зооморфных животных. Странное дерево добавило некоторые растения в список странных растительных форм. Черная птица в сказках считается странным существом в зооморфной форме. Плодовое дерево — одна из самых странных форм растений [12, с.93-94].

Каракалпакские народные сказки имеют сходство и общность с образцами устного творчества соседних родственных народов. В частности, каракалпакские народные сказки имеют содержательное родство с родственными им казахскими, узбекскими, киргизскими, туркменскими, татарскими, ногайскими, карачаевскими, башкурдскими и другими тюркоязычными, алтайскими народами, кавказскими, турецкими народными сказками.

Торговля развивалась в Средней Азии и Средней Азии с древних времен. В частности, каракалпаки занимались земледелием, рыболовством и животноводством, а также торговлей. По Великому шелковому пути шли караваны с востока на запад, процветала торговля. Таким образом, несколько народов также имели культурные контакты.

В каракалпакской народной сказке «Купец Опа[3]» [5, с. 200-209] человек по имени Опа грузит верблюдов. Он собирает караваны и отправляется торговать в дальние страны. Он узнает много секретов торговли. В сказках усматриваются связи народов, которые с давних времен были друзьями и родственниками. Сказки у того или иного народа рассказываются на их родном языке. В сказках есть общие сюжеты, мотивы, и этот процесс заставляет задуматься каждого фольклориста.

[1] Гульзийба – женское имя
[2] Барса келмес – в переводе с казахского и каракалпакского означает «если пойдёт - не вернётся»
[3] Опа – мужское имя

Такая близость, схожесть была обусловлена многовековыми культурными и литературными контактами и отношениями между народами.

По словам Н.Давкараева, каракалпаки за свою долгую историю контактировали со многими народами. По его словам, эти народы жили одной и той же политической и исторической жизнью. Поэтому многие каракалпакские народные сказки передавались соседним народам, а их сказки распространялись и среди каракалпаков [12, с.174].

Г.Жалолов писал: «В сюжете большинства сказок есть взаимная близость. Это связано с тем, что народы исторически живут недалеко друг от друга, имеют общее мировоззрение и опыт. Во-вторых, некоторые сюжеты в сказках переходят от одного народа к другому, из одной страны в другую. Конечно, это связано с историческими, природными, экономическими, торговыми, культурными и разнообразными отношениями и связями между народами [8, с. 41].

Мы также полностью согласны с этими мнениями ученых. На какой бы народ мы ни посмотрели, мы увидим, что они находились в литературных, культурных и экономических отношениях с соседними народами. Здесь эти процессы создали сходство мотива и сюжета в сказках нескольких народов. Тем не менее каждый народ считает эти бесценные произведения своим национальным достоянием, и имеет на это полное право.

Как мы уже упоминали выше, сюжеты развиваются из мотивов. На этом этапе мы коснемся термина «сюжет». Термин сюжет происходит от французского языка, что означает «вещь» [13, с. 87].

Сюжет взаимосвязан. Сюжет, суммирование событий, развивающихся последовательно. Сюжет сказок имеет свои аспекты. Например, в каракалпакской народной сказке «Абат батыр» есть такие события:

«В древние времена четверо людей были компаньонами. Первый — тот, кто воскрешает мертвых, второй — мастер-строитель города, третий — передвигатель города, а четвертый — храбрый Абат-батыр. После этого начинаются события. Есть развитие сюжета и конфликт, за которым следует кульминация.

Сюжет – один из элементов художественной формы в устных произведениях. Это целая система. Обсуждаются взаимосвязанные события, поступки героев, взаимоотношения. В сказках персонажи живут в определенном пространстве и времени. Выражено их поведение, описана их психология. Это имеет большое значение в структуре образцов народного творчества. То есть в формировании сюжетов мотивы являются фундаментом, основой. Однако в сюжетах часто видное место занимают национальный колорит, национальные особенности.

Если обратить внимание, сюжеты в сказках тесно связаны друг с другом. Действительно, необходимо углубленно изучать подобные сюжеты в сказках. Особенно сходства и различия между сюжетами следует изучать с научной точки зрения. Поэтому при изучении специфики и поэтики каракалпакских народных сказок следует знать многие области науки, особенно историю.

Если обратиться к истории, то каракалпакский народ имел экономические, торговые и культурные связи с соседними родственными народами. Эти народы разговаривали друг с другом в караванных дворцах и торговых местах. Они поделились устными и художественными произведениями. Такие взаимные культурные и традиционные связи можно увидеть в сказках того или иного народа.

Некоторые события, эпизоды, сюжеты, мотивы и детали каракалпакских народных сказок нашли свое выражение и в сказках других народов. Сказки имеют схожие характеры и содержание в плане сюжета. Такие сходства можно найти в сказках тюрков и других далеких народов. Например, мы можем сравнивать и изучать устные народные произведения тюркоязычных и родственных им народов. Такие народные произведения, как каракалпакский, казахский, узбекский, туркменский, татарский, ногайский, башкурдский, карачаевский, имеют общие черты и сходство. Это связано с длительным проживанием в одних и тех же социально-экономических условиях в близких регионах. Язык, обычаи, традиции чаще встречаются в произведениях близких друг другу народов. Например, каракалпакский, казахский, узбекский, туркменский народы давно находятся в экономических, социальных, литературных и культурных отношениях, и эти процессы продолжаются до сих пор.

Близки по содержанию каракалпакская сказка «Кыран» [5, с.19-26], казахская народная сказка «Кыран-разбойник» [6, с.123-129], узбекская народная сказка «Кыран батыр» [10, с. 53-59]. Хотя мотивы и сюжеты в них одинаковы и близки, эти народы считают эти сказки своими национальными устными произведениями. Хотя содержание сказок близко или одинаково, развитие событий, развязка, образные формы, используемые детали жизни выражены с национальным колоритом.

Принцы упоминаются во всех трех упомянутых выше сказках. Герои влюбляются в прекрасную русалку, отраженную в воде или увиденную во сне. Они отправляются на поиски этой красоты. Конечно же, герою помогают сверхъестественные силы, второстепенные

персонажи. Ребенку короля помогает человек по имени Кыран, обладающий магией и силой. Они помогают мальчику жениться на фее. Когда дитя короля и волшебная девочка в опасности, всегда появляется герой Кыран и спасает их от опасности.

Если обратить внимание, сказки этих трех народов сложены на один и тот же сюжет. В развитии событий в нем, в конце концов, ощущаются уникальные черты. Сходные по содержанию, взаимно значимые сюжеты в сказках строятся на принципах мотива. В каракалпакской сказке царем вместо отца становится сын правителя, Кыран берет богатыря своим везирем. В казахской версии события таковы: царский сын убивает своего отца и заменяет его на царя разбойником Кыраном. В узбекской народной сказке отец становится царем.

Фольклорист К.Мамбетназаров писал: «На формирование и обогащение каракалпакских сказок большое влияние оказывают отношения с соседними родственными народами. Особенно каракалпакские сказки по содержанию и сюжету сходны с родственными узбекскими, казахскими и туркменскими сказками» [14, с.5]. На самом деле очень близкие содержательные сходства в сказках этих родственных народов являются результатом социально-экономических, литературных и культурных контактов.

В сказках большое место занимают мировоззрения древних людей, вера в то, что как одушевленные, так и неодушевленные вещи на земле чудесны и странны. Например, в изучаемых нами каракалпакских народных сказках есть сюжеты, связанные с обращением со «странными животными», в том числе с драконом или змеей, как со странным животным. В сказке «Кудабай мерген» [5, с. 118-119] главный герой спасает дракона от огня. Дракон — заколдованное существо. Он преподносит Годабаю волшебный сундук. Девушка-пиявка появляется из волшебного сундука. Кудабай женится на красивой девушке и достигает своей цели.

Сказка «Ребенок пекаря» [9, с.147-150] также относится к числу волшебных сказок. В дом бездетного пекаря приходит мальчик. Пекарь принимает этого ребенка как своего. Ребенок взрослеет. Это будет мальчик. Молодой человек говорит булочнику: - Иди женихом к царской дочери. Я женюсь на принцессе!

Король несколько раз отбивает пекаря. В следующий раз, когда он идет, он зарезает старика и кладет мясо в мешок. Парень оживляет ее. Он снова спрашивает девушку и отправляет ее в качестве жениха. Царь снова убивает старика, разрезает его, сжигает в огне и кладет пепел в мешок. Затем он загружает его обратно в свою задницу. Молодой человек снова воскрешает старика. Царь сказал старику: Приведи восемьдесят желтых лошадей, девяносто черных лошадей, два клена, одно большое дерево! Мальчик волшебным образом готовит то, что говорит король. Король вынужден отдать свою дочь. Молодой человек говорит жене: - Осторожнее с моей змеиной одеждой, осторожнее!

Однажды к девушке приезжает сестра. Змея пугается, когда видит одежду, и бросает ее в огонь. Молодой человек говорит жене: «А теперь давай отойдем друг от друга!» Затем юноша превращается в птицу и улетает в небо. Девушка делает из железа трость и кавуш (калош) и отправляется в путь. Это указывает на долгое путешествие. Он встречает человека на длинной дороге. Этот человек говорит: - Каждый день птица взбирается на вершину этого тополя и долго плачет! Вылейте чашку меда на птицу. Девушка поливает птицу медом, и птица превращается в юношу. Как мы видим этот сказка содержит эпизоды магии.

Интересна и сказка «Златоголовый дракон» [5, с.157-159]. Старый рыбак идет в море со своими двумя детьми ловить рыбу. Они ударили палкой большую рыбу. Большая рыба затащил их с лодкой за собой. Они оказываются на острове. Соседский ребенок застрял на этом острове. Выходит дракон с золотой головой и уносит этого мальчика на берег. Затем злой дракон нападает на златоголового дракона. Мальчик спасает доброго дракона, совершив доброе дело. Дракон дает ему волшебный камень, оружие, открытый стол и горячий горшок за его добрые дела. Обучает ребенка секретам магии. Мальчик обогащается этими волшебными вещами, ремеслом колдовства. Жизнь мальчика наладится, и он станет королем своей страны. В содержании сказки главное место занимает волшебство, искусство волшебства.

Сказка «Горбатый старик» [5, с.160-161] тоже достойна внимания. В нем рассказывается о бездетном старике и старухе. К ним подходит лиса. Лиса будет их ребенком. Ребенок взрослеет. Это будет мальчик. Молодой человек влюбляется в дочь короля. Он посылает к королю старуху свататься. Король прогоняет старуху. А старуха снова и снова приходит к королю. Тогда король даёт приказ убить старуху. Лисица оживляет её. Тогда король приказывает лисе нагрузить сорок верблюдов золотом и шестьдесят верблюдов серебром для него. Лиса готовит их и женится на дочери короля. Лиса превращается в прекрасного юношу. Однажды дочери деревни бросили в огонь шкуру лисы. Он сказал жене: «Я не принадлежу тебе, ты не принадлежишь мне, носи железные башмаки на ногах и носи железный посох в руке!» Когда посох станет как игла, а башмаки износиться, его можно найти в горе под названием Шийшадаг" и он исчезает из виду. Это означает

очень долгий и трудный путь. После многих страданий она находит своего жениха, и сказка заканчивается на хорошей ноте.

Интересна и сказка «Мальчик в змеиной шкуре и девочка в одеянии ёжика» [5, с.67-69]. Змея подходит к стремне лошади богатого человека. Богатый человек бьет его кнутом. Змея обвивает его шею. Змея — заколдованный юноша. Богатый человек отдаст свою младшую дочь змее. Змея говорит: «Я приду через месяц» и уходит. Младшая дочь носит костюм ежика и с уважением приветствует мальчика из змеиной кожи. Девушка сказала: «Эй, змея-змея, сними змеиную шубку». Тогда змея превращается в чудесного мальчика. Они поженились. Волшебные слова девушки в этом – словесная магия (вербальная магия). Парень со змеиной кожей отправляется на охоту. Сестры девушки боятся змеиной кожи и бросают ее в огонь. Затем мальчик со змеиной кожей становится птицей и улетает. Женщина ищет мужчину в эпическом времени, в эпическом пространстве. Он также убегает от гигантов.

Вообще подобных событий и эпизодов в народных сказках народов мира, в том числе и каракалпакского народа, немало. Исследование сходства и своеобразия этих мотивов и сюжетов является одной из актуальных проблем фольклористики.

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Issue Article

Polina Dmitrievna Barybina
Institute of Service and Entrepreneurship(branch) DSTU
bachelor

Artyom Alexandrovich Tikhonov
Institute of Service and Entrepreneurship(branch) DSTU
bachelor

Vladimir Timofeevich Prokhorov
Institute of Service and Entrepreneurship(branch) DSTU
Doctor of Technical Sciences, Professor,
Shakhty, Russia

Galina Yurievna Volkova
LLC TsPOSN «Orthomoda»
Doctor of Economics, Professor
Moscow, Russia

THE ROLE AND IMPORTANCE OF THE QUALITY MANAGEMENT SYSTEM FOR THE PRODUCTION OF PRIORITY AND DEMANDED PRODUCTS

Abstract: *in the article, the authors, considering. The dynamics of market development in the last decades of the last century and at the beginning of the third millennium confirm the growing interest of consumer demand in the quality of domestic goods. With all the economic, social and political costs, humanity is getting richer, but wealth is distributed unevenly. Finances, as before, are concentrated in certain regions, however, just like the premieres of modern production. Analysts predict the course for the quality of goods confidently and everywhere. The consumer has realized the need to pay for the advantage of quality services and products. The line is behind the manufacturer, who must close the mind "greed" and "mortal sin" in order to burn greed. The most prominent economists unambiguously declare that the improvement in the quality of goods is not causally connected with an increase in prices. Positive changes in the quality of goods require qualitative changes in engineering, technology, organization and management of production. Production must improve, which does not mean becoming more costly in order to guarantee sustainable demand.*

Key words: *quality, priority, preference, demand, competitiveness, market, profit, demand, buyer, manufacturer, financial stability, preference, sustainable TEP, assortment policy, paradigm, economic policy.*

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Introduction

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The criterion basis of human behavior includes those stable characteristics of his personality that determine the choice, decision-making by a person about his behavior. Naturally, these decisions are greatly influenced by the goals that a person pursues, the conditions in which actions unfold, his capabilities, the dynamics of ongoing processes, mood

and a number of other factors. However, with all the variety of factors, the behavior of each individual person has a certain stability and predictability, certain principles of behavior inherent in him, criteria for selection and preference, taboos, and the like. Moreover, in exactly the same situations, if such situations exist at all, different people can make completely different decisions. And this will again be determined by that they have a different criteria base that sets their priorities and assessments of ongoing events. The criterion base of any person's behavior consists of his disposition towards people, events and processes, the totality of values shared by this person, the set of beliefs that a person adheres to, and the principles that he follows in his behavior. All these components of the criterion base of behavior are in close interaction, interpenetration and mutual influence. However, despite their strong interdependence, they can be considered as relatively separate characteristics of a person's personality that affect his behavior. The disposition of a person to people, individual processes, the environment, his work, organization as a whole plays a very important role in establishing normal interaction between the person and the organizational environment. One and the same phenomenon or action, which has exactly the same manifestation and has the same effect on people, can cause a different reaction due to the fact that people have a different disposition towards this phenomenon or action. Reflecting a person's feelings towards a particular object, the location makes his decisions and actions individual. At the same time, it is important to emphasize that usually a person has a certain disposition towards each object or phenomenon that he encounters in life. The location is characterized by the fact that it: that people have a different disposition to this phenomenon or action. Reflecting a person's feelings towards a particular object, the location makes his decisions and actions individual. At the same time, it is important to emphasize that usually a person has a certain disposition towards each object or phenomenon that he encounters in life. The location is characterized by the fact that it: that people have a different disposition to this phenomenon or action. Reflecting a person's feelings towards a particular object, the location makes his decisions and actions individual. At the same time, it is important to emphasize that usually a person has a certain disposition towards each object or phenomenon that he encounters in life. The location is characterized by the fact that it:

firstly, it is invisible, since it is contained in man. On the "surface" only its consequences are visible;

secondly, the location stems from the feelings that a person has for an object;

thirdly, the location is, as it were, a point located on the axis with the poles "like" - "dislike";

fourthly, the location affects the behavior of a person and is manifested in the fact that he behaves in accordance with an a priori positive or negative attitude towards a phenomenon, object, process or person.

Main part

A specific cultural picture is emerging in the market, which is difficult to understand. The state is not seriously interested in the culture of the buyer. The former experience of cultural enlightenment and upbringing was banished. “A holy place is never empty” and instead of the state came organizations from the structure of civil society, which have neither official powers, nor effective mechanisms, nor the required financial resources. Scientists economists convince entrepreneurs that it is necessary to cut off everything that is not directly included in production, reducing costs, increasing profitability. In doing so, entrepreneurs are driving themselves into the trap of spontaneity and the vagaries of the market element, abandoning the levers of demand management.

“Prudent economy”, which is replacing the current irrationally organized mass production, focused on the absolute freedom of choice of goods by the consumer, when the assortment must satisfy the request here and now, otherwise the seller will lose customers and call into question the continuation of his business, is “tied” to knowing the needs of a particular buyer. Of course, such knowledge is specific, it is indicative, relative, conditional, more like knowledge, an assumption, but still knowledge, unlike an abstract attitude like: the buyer came for the goods and he must buy it, but we are obliged to help him. How specifically? We do not know, therefore we initiate his desire with an assortment. There is a certain logic and ethics in such reflections. The price of this logic is holding back from support - the high level of costs and pressure on the natural environment. After all, they will not be written off, they will be distributed among consumers, increasing the purchase price.

“Product priority” can become a magnet that initiates the interest of the buyer. No wonder V.I. Dal interpreted “attractiveness” as “attractiveness”, “magnetism”. The economic system is formed by production relations, there will be no radical transformations of the existing system of the economy, therefore, there will be no restructuring, a reboot that changes not the system, but the order of the system's functioning, the vector evolution of economic policy. The economic system will be optimized by rationalizing costs, minimizing the cost of assortment.

Does the consumer win? Apparently, yes, provided that manufacturers and sellers are not stingy with research work on consumer demand. Here, the simplest research is not enough, it will require a deep analysis and integration of different approaches - economic (marketing), sociological, cultural, ergonomic, sanitary, focusing scientific research on

regional, national characteristics. The prospect of real participation in the process of students of different levels will open, accelerating their qualification formation.

The transition from good to better in any field of activity is associated with an increase in the costs of its implementation, including the financing of risks. In our view, the analyzed transition to the new economic policy should justify the expectations - lead to a reduction in costs, losses, environmental burden, but the result will largely be determined by the construction of scientific, technical and educational policies. Good intentions often end up with worse results due to poor management.

The bad experience of the past is described even in the sacred books. The modification of the economy of mass production in lean production involves the mobilization of a scientific and technical initiative, the maximum involvement of cultural assets and the implementation of the Soviet experience of educational work in the environment of the immediate needs of the final product. It is illogical to improve the principles and forms of organization of production, designed for mass consumption, without appropriate training of consumers. The adjective "mass", regardless of desires, indicates the inclusion of activities in the political process, which also requires a political scale of participation. Change of course within the economic system is a political process with the specificity that it begins in the economy.

The time has come again to temporarily disconnect from the production of goods and, following the example of K. Marx, focus on the cell of the modern economic organism - the product, but, unlike the author of Capital, put the product not into production, but try to fit it into the subsystem of market relations. Capital without circulation is not capital. Capital is a process. The process of reproduction of capital is a characteristic mode of its existence. The market ensures the reproduction of capital, creating conditions for the sale of marketable products. For production, initial capital in financial form is required, for implementation, as a condition for reproduction, the demand for goods is required, which the market must provide - a condition that connects the producer with the consumer. Everything, as we see, rests not even on the characteristics of the goods, but on the organization of the market. Of course and the properties of the product are important here. The Doctor is able to reanimate a dying person, but is unable to revive a corpse. The same can be said about the market.

As for the cultural organization of the market, it is rational to make its core work with the buyer and the producer, the real subject (object) of relations, which is the product, as a set of properties that can satisfy all market participants. The goods will pass from the property of one to the property of another only if there is a consensus. Consensus is designed to ensure the market. Consensus is a measure of market culture.

When the market shifts from the notion of consensus to the understanding of consensus, the market will acquire the status of a "cultural organization". Can this process be accelerated? Undoubtedly. We need to organize work on both fronts. Both the buyer and the seller must be prepared culturally for a meeting in the market. The fulfillment of the real mission of the market is determined by the quality of its information and scientific equipment.

The social function of the market is to satisfy the socio-cultural and natural needs of the mass buyer, thereby contributing to national development and political progress. The economic task of the commodity market is to involve the financial reserves of the country's population in production, and they are considerable, actually comparable to the annual budget of Russia.

It is possible to control the market. Japan and China are economically different, however, despite this, they successfully manage both production and the market. Market management is different from production management. The market is more complex and reacts differently to the desire to restore order. The orders are also not uniform. In the theater there is one order, at the races - another, in the barracks - the third. It is possible (and desirable) to manage the market economically.

The final stage of market relations is the sale of goods, therefore, the market should be managed through the conditions for the sale of goods, creating favorable conditions for the demand for goods. Such management is effective both in relation to the consumer and the producer. Building a market according to the principle: “here and now the buyer must satisfy his request”, saves time and possibly insignificant financial resources of the consumer, but it is unnatural, because it is wasteful for society and nature. This is "foppery" due to political myopia. Do not give it up, society will put the next generations of people in a responsible position, the future of the country, the people will be in question.

The transition to production oriented by the market to the structure of specific consumption can be seen as a way to resolve the growing contradiction between growing socio-cultural needs and natural sources. And in this sense, there are sufficient grounds to speak of an objective regularity in the development of reproduction. The center of concentration of activity is shifting to the territory of the market, its scientific potential is being updated. Question number 1 lean production: is the market ready for an increase in funding for research on the structure of the needs of the mass buyer? Individual examples are not difficult to find. At the end of June 2021, Google conducted a survey of the culinary preferences of Russians in order to rank the basic 20 products and the same number of dishes. The taste of Russian consumers reassured

marketers and horrified nutritionists. Nonetheless, experts are convinced that there will be no changes in two or three years. The production that provides the food market received the necessary information to think about the directions of investment in production. Now it is important to avoid a rush restructuring, to agree on quotas within the relevant unions, associations and other associations of producers.

We were interested in the study of a well-known company in the context of general problems, since it highlighted several characteristic reasons for thinking. The first and, probably, the most important thing leads to the conclusion that the theoretical economists were again late and, instead of forecasting, fixed the real fact of the existing reality. A market that meets the needs of the mass buyer has not been and it is not clear when it will match the models of marketers. It forms itself, adapting to the realities of production.

The domestic buyer put a chicken egg in the first place, sent pork in the middle and milk even further. The production of chicken meat and eggs was established back in the 70s and 80s, lost in the 90s, saving American farmers, later returned to their own farm, quickly restored in the required volumes. The market is reliably provided with this product in assortment. Prices are kept, the manufacturer, sellers cannot overestimate them - there is no shortage, a network of stores has been created by manufacturers. A diverse assortment, its timely replenishment, quality, affordability of products form the buyer's interest in them. Pork production also began to be increased back in the pre-reform period, the originality of growing a pig herd allows solving problems relatively quickly.

The hardest thing is with milk. Market liberalism hit hardest on the weakest link in agricultural production - the dairy herd. Until the nineties, it was in a state of disrepair. Collective farms were abolished, farming, designed to increase production, did not take place as planned. The biology of cattle is such that the required volume of a herd of animals with satisfactory characteristics should be expected for at least 10 years. Huge investment required! The West is not interested in us as a competitor. All of the above are conditions of instability and scarcity. The market oriented itself to the deficit and brought its own price order in cooperation with dairies. Milk, affordable and of high quality in the difficult Soviet years, has become both of poor quality and inaccessible to the average mass buyer. Especially milk products. The market has weaned the consumer away from milk. The question arises. Why? The market must be interested in the buyer. That's right, but not stupid people work in production and in the market. They understand that the herd of cattle will be formed for a long time. An indefinite time to get the result is enough to take the largest margin, and it is not necessary to count on the mass consumer.

Second, natural and socio-cultural needs are formed spontaneously only in the most general, abstract form. They are concretized in the real conditions of national reproduction, on the results of economic policy. The state is able to influence this process through control over production and consumption, of course, in accordance with the laws of the economy.With this in mind, we can try to formulate a definition of what a location is. At the same time, it must be borne in mind that there are several different views on what an arrangement is, and it is impossible to give an unambiguous and completely clear definition of this personality trait. In general terms, location can be defined as an a priori attitude towards a person, a group of people, phenomena, organizations, processes and things, which determines a positive or negative reaction to them. Location has three components:

firstly, this is the part that reflects the feelings of a person in relation to the object: whether he likes it or not. This part is called the influencing part of the arrangement;

secondly, it is knowledge about the object that a person has;

thirdly, it is the intention about how to behave towards the object.

Combining together, these three parts form a person's disposition towards an object, in which they find a dynamic linkage between a person's knowledge of an object, his feelings towards this object, and his intentions towards this object. The location of a person in relation to phenomena, processes and people is formed on the basis of learning based on life experience. Usually, a positive or negative attitude towards an object is formed as a result of whether this object caused satisfaction or not. At the same time, the formation of disposition occurs both by assessing the experience (satisfaction - dissatisfaction) of interaction directly with the object, and by correlating the object with other objects, in relation to which a certain disposition has been formed.

The relationship between behavior and location is ambiguous. From the fact that a person does not like something, it does not follow one hundred percent the fact that he will not accept it completely. However, nevertheless, in most cases, human behavior is influenced by location. In this regard, an important task of management is the formation and change, if necessary, of the location of the members of the organization. Three types of location are important for effective management and good relations in an organization:

- job satisfaction;
- passion for work;
- organization commitment.

The extent to which these dispositions are developed among employees significantly determines the results of their work, the number of absenteeism, staff turnover, etc.Job satisfaction has a very strong

influence on a person's feelings about work, so it can be attributed rather to the influencing component of location. The degree of job satisfaction depends on many factors, both internal and external to the person. However, with a wide variety of factors and different directions of their influence on a person, eight characteristics of work are distinguished, on which the degree of job satisfaction depends quite steadily:

- the nature and content of the work;
- the amount of work performed;
- the state of the workplace and its environment (noise, lighting, comfort, air temperature, etc.);
- colleagues;
- leadership (bosses, leadership style, participation in management);
- payment for work (all forms of compensation);
- job advancement opportunities;
- routine, rules of conduct, etc.

These characteristics are quite general. With regard to each real work, they can be specified or supplemented depending on the nature of the organization's activities, its characteristics, etc. Practice also shows that the priority of these characteristics can also vary significantly both for individual members within the organization and for different organizations. And finally, due to the stable satisfaction with individual job characteristics, new or previously insignificant job characteristics may begin to influence job satisfaction over time. Therefore, in order to successfully manage and create a positive attitude towards the organization, it is necessary to conduct regular surveys to determine the degree of employee satisfaction with the organization with their work. The nature and content of work has a consistently great influence on increasing job satisfaction. Therefore, let us consider in more detail the influence of the individual components of this factor.

A long time of standardization and specialization of work have been considered and in practice acted as strong sources of productivity increase in work. The higher the standardization and specialization, the higher the productivity at work. However, the relationship between satisfaction with it, and its standardization and specialization is of a different nature. If the work is absolutely not standardized, then job satisfaction is low. As specialization and standardization increase, it begins to rise, but up to a certain point, after which it begins to decline rapidly. With complete standardization, satisfaction falls to the same low level as if the work were not standardized at all. Therefore, management should think about how to reduce the negative impact on job satisfaction, generated by excessive specialization and standardization. The two most common ways of doing this are rotation (moving an employee from one job to another) and expanding job responsibilities by assigning additional tasks to the employee.

Clarity of job content, clarity of role (especially regarding the content of other roles), the presence of clear feedback informing the individual about the results of his work in certain circumstances, can lead to increased job satisfaction. This is most evident when there is a clear and formal delineation of roles in the organization. The presence of challenge elements in work, such as creativity, the ability of an individual to use their original or unique abilities, the complexity of tasks, etc., leads to an increase in job satisfaction. At the same time, boring work, as studies show, usually reduces job satisfaction.

Enthusiasm for work is one of the strongest dispositions that determine how a person approaches his work, his participation in the process of collaborative work. Two types of work engagement develop. One type is a love of work in general, with little or no regard for what exactly to do. People with this type of passion are called workaholics. people who work, who love to work and who want to work. This type of disposition is formed by upbringing from childhood, although at a later age there are cases of the development of this disposition. Another type is love for the specific work that a person performs in an organization. Both these types do not necessarily accompany each other, although there is a great interdependence between them. There are three aspects to job satisfaction:

firstly, this is the extent to which work occupies a significant, central place in a person’s life (the importance of work);

secondly, how much the work itself attracts a person (labor force);

thirdly, to what extent a person identifies his personality with the work he performs (work attribution).

Analysis in these three areas allows you to determine the degree of a person's enthusiasm for their work. At the same time, it is necessary to take into account that each of these aspects of the enthusiasm for work is relatively independent and, depending on the personality characteristics of a person, can affect his enthusiasm for work to varying degrees..

Organization Commitment is a disposition that is substantially broader than job engagement or job satisfaction. In modern conditions, when more and more organizations are trying to look at a person not as an employee doing a specific job, but as a member of the organization, striving, together with the rest of its members, to lead the organization to achieve goals, the significance of this location becomes extremely high. The commitment of the organization is made up of the following components:

firstly, a member of the organization shares and owns the goals of the organization and its values;

secondly, a member of the organization strives to remain in the organization and retains this desire even when it may be unprofitable for him;

thirdly, a member of the organization is ready not only to try for the organization, but also, if necessary, to sacrifice his personal interests to organizational interests.

Commitment to the organization is a personal feature of each individual. However, this does not mean that management cannot develop or enhance this disposition. There are a number of ways to help this. And the most successful modern management systems are based to a very large extent on the fact that they develop in employees a strong commitment to the organization and achieve very great success through this.

Values as well as location, have a strong influence on the preferences of a person, on his decisions and behavior in a team. However, there is a huge difference between values and locations. If the latter determine the attitude of a person to an object according to the principle “like - dislike”, “love - do not like” and always refer to a particular object, then values set a person’s preference according to the principle “acceptable – unacceptable”, “good – bad” , “useful - harmful”, etc. At the same time, values are quite abstract and generalizing in nature, they live an “independent” life, regardless of a particular person, they are formulated in the form of commandments, statements, wisdom, general norms and can be shared by large groups of people. Therefore, if the location is always purely personal, then the carriers of values are groups of people (for example, values of the middle class), and each individual person accepts some set of values, which he can change, but which he follows at any particular moment in time. Values can be defined as a set of standards and criteria that a person follows in his life. This is manifested in the fact that through an appropriate assessment of the phenomena, processes and people around him, a person makes decisions and carries out his actions. Values are at the core of a person's personality. They are quite stable over time and there are not so many of them. Usually, values are considered as the normative base of morality and the foundation of human behavior. Values are of two types: Values can be defined as a set of standards and criteria that a person follows in his life. This is manifested in the fact that through an appropriate assessment of the phenomena, processes and people around him, a person makes decisions and carries out his actions. Values are at the core of a person's personality. They are quite stable over time and there are not so many of them. Usually, values are considered as the normative base of morality and the foundation of human behavior. Values are of two types: Values can be defined as a set of standards and criteria that a person follows in his life. This is manifested in the fact that through an appropriate assessment of the phenomena, processes and people around him, a person makes decisions and carries out his actions. Values are at the core of a person's personality. They are quite stable over time and there are not so many of them. Usually, values are considered as the normative base of morality and the foundation of human behavior. Values are of two types: Usually, values are considered as the normative base of morality and the foundation of human behavior. Values are of two types: Usually, values are considered as the normative base of morality and the foundation of human behavior. Values are of two types:

- values related to the purpose of life, desired results, outcome of action, etc.;
- values relating to the means used by a person to achieve goals.

The first type of values includes, for example, values related to the convenience of life, beauty, peace, equality, freedom, justice, pleasure, self-respect, social recognition, friendship, etc.

The second type of values includes values related to ambition, openness, honesty, goodwill, intelligence, commitment, responsibility, self-control, etc.

The set of values that a person follows constitutes his value system, by which others judge what he is as a person. The value system of a person is formed mainly in the process of his upbringing. A person receives many values under the influence of parents and other people close to him. The educational system, religion, literature, cinema, etc. have a great influence. The value system is subject to development and change even in adulthood. The organizational environment plays a big role in this. In organizations that seriously think about the harmony of human values and the values of the organization, serious attention is paid to the combination of these two value systems. In particular, a lot of work is being done to clearly formulate, explain and communicate to all members of the organization the value system, followed by the organization. Considerable attention is also paid to understanding what value orientations the members of the organization have. Very often a person makes decisions based on assessments of phenomena or conclusions about the qualities of these phenomena. If these estimates are stable enough and do not require appropriate evidence, then they turn into beliefs. In general, beliefs can be defined as stable ideas about a phenomenon, process or person that people use in their perception. Beliefs can change over time. However, at the moment when a person has some certain beliefs about an object, he usually perceives and. evaluates the object in accordance with these beliefs. There can be many different beliefs about the same object, since usually beliefs refer to individual characteristics of an object. For example, about the same person there may be the following beliefs:

reliable person;

good specialist;

a person in poor health, etc.

Beliefs are developed on the basis of individual experience, as well as on the basis of information from external sources. Very often, beliefs are in the nature of a generalization of a single experience. Often they arise in a person as a result of the ability of other people to convince of the correctness of their judgment, their beliefs. Therefore, although a person accepts his beliefs as the truth, they do not always fully correspond to reality. Beliefs can be divided into two large groups.

The first group consists of beliefs that describe the absolute and relative characteristics of the object of belief that do not have an evaluative character. For example, a Zhiguli car is a comfortable car, or a Zhiguli car consumes less gasoline than a Volga car.

The second group includes those beliefs that are evaluative in nature. For example, a Zhiguli car is better than a Volga car. Beliefs have a significant impact on the location, especially on the component that is associated with knowledge about the object.

The second group of beliefs has a particularly strong influence. Therefore, given that beliefs do not always correspond to reality, in order not to form an incorrect location in relation to the object, which can adversely affect the interaction of a person with the environment, it is necessary to be critical and skeptical of one's beliefs and perceive the beliefs of others with sufficient caution. Principles play a very important role in the lives of many people, as they systematically regulate their behavior. The principles are embodied in stable norms of behavior, restrictions, taboos, stable forms of reaction to phenomena, processes and people. Principles are formed on the basis of a value system, they are a stable form of manifestation of a value system and the embodiment of beliefs in the form of certain standards of behavior. People do not necessarily realize what values and beliefs are embodied in particular principles. Often the principles are accepted by people as beliefs, and they follow them in their activities without questioning the justification for following these principles and why they follow them. Principles can be developed by people on their own. However, most often they are adopted from the environment along with education and other forms of cognition of the surrounding reality. The influence of a person's individuality on enterprise management for the effectiveness of its activities. However, most often they are adopted from the environment along with education and other forms of cognition of the surrounding reality. The influence of a person's individuality on enterprise management for the effectiveness of its activities. However, most often they are adopted from the environment along with education and other forms of cognition of the surrounding reality. The influence of a person's individuality on enterprise management for the effectiveness of its activities.

All people are alike in some way. And this allows us to talk about a person in general, to talk about his features, behavioral patterns, etc. However, no particular person is an impersonal “man in general”. Everyone carries something that makes him unique, exceptional, i.e. a person with personality. It is such a person who enters the organization, it is such a person who performs a certain job and plays a certain role in the organization, it is such a person that needs to be managed, helping him to discover and use his potential in solving the problems of the organization, creating the necessary conditions for his successful work, interaction with the organizational environment and solving their own life problems. The individuality of a person consists of three principles:

Firstly, each person is somewhat similar to everyone else.

secondly, each person is in some way the same as some other individuals.

thirdly, each person is in some way not like anyone else.

Depending on how these “beginnings” are combined, the individuality of each individual person is reinforced. At the same time, no matter how this combination is built, one must always remember that a person always simultaneously has in common with the rest and is not like the others. Each person has a stable set of traits and characteristics that determine his actions and behavior. These features manifest themselves in a sufficiently long period of time, thanks to which it is possible to fix and feel the individuality of a person. A particular person is fixed by the environment according to his individuality, since the individuality of a person has a certain stability, people recognize each other and maintain a certain attitude towards each other. At the same time, it should be noted that under the influence of experience, communication with other people, upbringing and education there is a change in the individuality of a person, sometimes very significant. The individuality of a person is formed under the influence of three groups of factors.

The first group consists of heredity and physiological characteristics of a person. Heredity preserves and transmits the external features of a person. But not only. Studies conducted with twins show that heredity can also carry the transmission of some behavioral traits. Human physiology suggests that people have a lot in common that determines their behavior. In particular, the general adaptation syndrome, which reflects the physiological response to irritation, is the same for everyone.

The second group of factors that form a person's individuality are factors arising from the person's environment. In general, the influence of these factors can be considered as the influence of the environment on the formation of individuality:

Firstly, a strong influence on the individuality of a person is exerted by the culture in which he is

formed. A person receives norms of behavior from society, assimilates certain values and beliefs under the influence of culture;

secondly, the individuality of a person is strongly determined by the family in which he was brought up. In the family, children learn certain behavioral stereotypes, develop their attitudes towards work, people, their duties, etc.;

thirdly, the individuality of a person is strongly influenced by belonging to certain groups of organizations. A person develops a certain identification that sets for him a certain type of individual with whom he personifies himself, as well as stable forms of behavior and, in particular, reactions to the impact of the environment;

fourthly, the formation of individuality occurs under the influence of life experience, individual circumstances, random events, etc. Sometimes it is this group of factors that can lead to a significant change in a person's personality.

The third group of factors influencing the formation of a person's individuality are the traits and characteristics of a person's character, his individuality.

That is, in this case, the situation with the formation of individuality is as follows: individuality influences its own formation and development. This is due to the fact that a person plays an active role in his own development and is not only a product of heredity and environment.

With all the depth of human individuality and its diversity, some areas of its characteristics can be distinguished, according to which individuality can be described. There are people who prefer to keep their distance from others, and this has a noticeable effect on their behavior in the team. People with an authoritarian character believe that there should be order and distinction in the status and position of people, strive to establish a hierarchy of relations and use forceful methods in decision-making and management, readily recognize power and highly value conservative values. Love and faith in people as an individual character trait have a strong influence on a person's interaction with others. This is especially evident in the willingness to participate in group activities, to promote the development of contacts, interactions and mutual support. Sensitivity to other people is manifested in the ability of people to sympathize with others, to take their problems to heart, in the ability to put oneself in the place of another, etc. People with such personality traits are well perceived in the team and strive to communicate with people.

Stability in behavior a person plays an important role in establishing his relationship with the environment. If a person is stable, responsible and generally predictable, then the environment perceives him positively. If he is constantly unbalanced, capricious and inclined to take unpredictable steps, then the team reacts negatively to such a person.

Self-esteem, those. how people look at their behavior, capabilities, abilities, appearance, etc., has a strong influence on human behavior. People with higher self-esteem tend to achieve more in life as they set higher goals and strive to take on more challenging tasks. At the same time, people with low self-esteem very often put themselves in a dependent position and easily obey people with higher self-esteem.

Risk perception is an important behavioral characteristic that clearly reflects the individuality of a person. Risk-averse people spend less time making decisions and are willing to make decisions with less information. At the same time, the results of the decision are by no means necessarily worse than those who carefully prepare the decision and collect all the necessary information.

Dogmatism is usually a character trait of individuals with a limited view. Dogmatists see the environment as a concentration of threats, refer to authorities as absolutes, and perceive people by how they relate to dogmas and absolute authorities. Usually dogmatists are people with authoritarian traits. Dogmatists are not inclined to search for a large amount of information, they are quite quick in making decisions, but at the same time they demonstrate a very high level of confidence in the accuracy and correctness of the decisions made. It is noted that dogmatists prefer to work in well-structured groups, regardless of their position in the group. It is also noted that dogmatists are poorly aware of how they spend their time when doing work, and that they are poorly coping with managerial work.

Complexity of awareness phenomena as a characteristic of a person's individuality reflects his ability to decompose a cognizable phenomenon into parts and integrate, synthesize general ideas or conclusions about a conscious phenomenon. People with high complexity of awareness exhibit greater information processing abilities, consider more alternatives, and make more complex decisions than people with low complexity of awareness. It is noted that managers with a high complexity of awareness in situations with a large variety of environments cope better with their duties, that this type of leaders is more prone to extensive contacts with people than leaders with a low level of complexity of awareness, and that these leaders tend to use variety of resources for problem solving.

Sphere of Control reflects how the individual looks at the source of the factors that determine his actions. If a person believes that his behavior depends on himself, then in this case he is characterized by the presence of an internal sphere of control (introverts). If he believes that everything depends on the case, external circumstances, the actions of other people, then it is believed that he has an external sphere of control (extroverts). Introverts are more in control of

their actions, more focused on achieving results, more active, more satisfied with their work. They like the informal style of management, they like to influence others, but they do not like to influence themselves, they like to take leadership positions. Extroverts, on the other hand, prefer formal structures, prefer to work under directive guidance. If they are in leadership positions.

There are a large number of tests and other tools that allow you to determine the characteristics of a person's personality. In modern management, these issues and this type of activity are given great attention. And this is primarily due to the fact that the success of an organization directly depends on how successfully it can use all the human potential at its disposal. The need to study the individuality of a person is also caused by the fact that many incorrect conclusions are usually made about people, about their characteristics, their individuality. This is due to the fact that people, when cognizing others, rely on stereotypes, prejudices, unreasonable generalizations. Drawing wrong conclusions about the individuality of people, we create the basis for harmful conflicts, scandals, gossip, difficulties in communication and interaction between people.

The need for a thorough and regular study of the individual characteristics of the members of the organization is beyond doubt. However, recognizing the significance and usefulness of this type of management activity, it is necessary to remember that the individuality of a person's behavior depends not only on his personal traits, but also on the situation in which his actions are carried out. Therefore, the study of man must always be carried out in conjunction with the study of the situation. Finally, when studying the individuality of a person, it is necessary to take into account his age. A person goes through various stages in his life, which correspond to a different state of his individuality. Therefore, when drawing conclusions about the character of a person, his personalities, it is necessary to proceed from the fact that his behavior is very much determined by the age stage he is in. Only taking into account all these factors in the aggregate can give the key to understanding the individuality of a person, and, consequently, to managing a person. As mentioned above, the organization expects a person to perform in a certain way the role for which it accepts him. A person also looks at the organization as a place where he gets a certain job, performs it and receives a corresponding reward from the organization. However, the interaction between a person and an organization is not limited to role interaction. It is much wider. A person performs work in an environment of people, in interaction with them. He is not only the performer of a role in the organization, but also a member of the group within which he operates. At the same time, the group has a huge impact on human behavior. And the behavior of a person, his actions make a certain contribution to the life of the group.

There is no canonized definition of a small group, since this is a rather flexible and subject to the influence of circumstances phenomenon. However, a fairly general, well-established view of a small group (hereinafter, the term “group” will always be used in this sense) is widely accepted as a relatively isolated association of a small number of people (usually no more than ten to twenty-five) who are in fairly stable interaction and carry out joint actions. over a sufficiently long period of time. The interaction of group members is based on a certain common interest and may be associated with the achievement of a common goal. At the same time, the group has a certain group potential or group capabilities that allow it to interact with the environment and adapt to changes taking place in the environment.

firstly, the members of the group identify themselves and their actions with the group as a whole and thus, in external interactions, act as if on behalf of the group. A person does not speak about himself, but about the group as a whole, using the pronouns we, ours, ours, us, etc.;

Secondly, interaction between members of the group is in the nature of direct contacts, personal conversation, observation of each other's behavior, etc. In a group, people communicate directly with each other, giving formal interactions a "human" form;

third, in a group, along with the formal distribution of roles, if any, there is necessarily an informal distribution of roles, usually recognized by the group.

Individual members of the group take on the role of generators of ideas, others tend to coordinate the efforts of group members, others take care of relationships in the group, maintain a good climate in the team, fourth make sure that there is order in work, everything is done on time and brought to end. There are people who play the role of structurizers, they set goals for the group, monitor the influence of the environment on the tasks solved by the group. These and other roles of group behavior are performed by people in accordance with their abilities and inner calling. Therefore, in well-functioning groups, opportunities are usually created for the person to behave in accordance with his abilities for group action and his organically defined role as a member of the group. There are two types of groups: formal and informal.

Formal groups usually stand out as structural units in an organization. They have a formally appointed leader, a formally defined structure of roles, positions and positions within the group, as well as formally assigned functions and tasks. Formal groups may be formed to perform a regular function, such as accounting, or they may be created to solve a specific

task, such as a commission for the development of a project.

informal groups are created not by executive orders and formal regulations, but by members of the organization in accordance with their mutual sympathies, common interests, the same hobbies, habits, etc. These groups exist in all organizations, although they are not represented in the diagrams that reflect the structure of the organization, its structure. Informal groups usually have their own unwritten rules and norms of behavior, people know well who is in their informal group and who is not. In informal groups, a certain distribution of roles and positions is formed. Usually these groups have an explicit or implicit leader. In many cases, informal groups can exert an influence on their members equal to or even greater than formal structures.

Why do groups arise, what makes people form and join groups? These questions are very important for understanding human behavior in an organization. It is obvious that groups arise in an organization and function as separate structural units due to the fact that, as a result of the division of labor, separate specialized functions are distinguished that require for their performance a certain set of people with certain qualifications, having a certain profession and ready to perform in the system of joint activities. a certain job. A similar situation is observed in the formation of groups designed to solve targeted problems.

But this is only one side of the process of the emergence of groups in the organization. It usually leads to the formation of formal groups. Another important reason for the formation of groups is the natural desire of a person to unite with other people, to form stable forms of interaction with people. The group gives a person a sense of security, from the group he expects support, help in solving his problems and warnings. In a group, it is easier for a person to achieve a “reward” in the form of recognition, praise, or material incentives. In a group, a person learns by adopting the experience of others, better aware of his capabilities and potential. The group gives a person more self-confidence in external interactions, contributes to the development of his identity.

Finally, the group provides a person with the opportunity to spend time in a pleasant environment for him, the opportunity to avoid loneliness and the state of loss, uselessness. Each person strives to be loved by someone, needed by someone, belong to someone, and the group can be a source of solution to these problems of a person. Regardless of the type of group, in which organization it is formed and operates, and also who specifically belongs to the group, some general points and factors can be pointed out that characterize the construction of the group, its structure and the process of functioning of the group in its environment. The life of the group, its functioning is influenced by three factors:

- characteristics of group members;
- structural characteristics of the group;
- situational characteristics.

All these factors are not only in interaction, mutual influence, but also experience a strong feedback from the functioning of the group, since as a result of the life of the group, changes in the characteristics of a person occur, the structure of the group changes and changes in its environment are observed. The characteristics of group members that affect its functioning include the personal characteristics of a person, as well as abilities, education and life experience. Above, the personal characteristics of a person were considered in sufficient detail, so we will not dwell on them in this review. As for the other characteristics, it is noted that the ability of a person to perform work has a very large impact on the functioning of the group and on the performance of a person's role. The level of education of a person and his life experience also have a significant impact on the group. Structural characteristics of the group include:

- communication in the group and norms of behavior (who communicates with whom and how);
- status and roles (who occupies what position in the group and what they do);
- personal likes and dislikes between group members (who likes whom and who does not like whom);
- strength and conformity (who influences whom, and who follows whom, who is ready to listen to whom and obey whom).

The first two structural characteristics of the group are more related to the organizational side of the analysis of its functioning, so they will not be considered here. Further, only structural issues of interpersonal interactions in a group will be considered. Sympathy; and antipathies between people are mostly individual coloring and background. However, it has been found that several points have a significant impact on the establishment of friendly relations between people:

firstly, the personal characteristics of the interacting have an exceptionally great influence. People love those who like the same phenomena, things, processes that they like, i.e. people love those who are similar to them, who are close to them in spirit, taste and preferences. Naturally, there are exceptions. However, studies show that people are attracted to those who have the same or close race, nationality, education, system of views on life, and so on. Potentially, people with similar personality characteristics are more likely to form friendships than those with significantly different personality characteristics;

Secondly, the development and establishment of friendly relations between people, the development of mutual sympathy is greatly influenced by the presence of territorial proximity in the location of these people. The closer the workplaces of group members are, the

higher the likelihood that they will establish friendly relations. The same applies to the proximity of their places of residence;

third, the establishment of friendly relations is directly dependent on the frequency of meetings, as well as on the expectation that these meetings will occur often enough in the future;

fourth, the relationship between members of the group, their mutual likes and dislikes, the atmosphere of friendliness in the group depend on how successful the functioning of the group is. In general, success leads to the development of positive attitudes among people to each other to a greater extent than the unsuccessful functioning of the group;

fifth, the development of friendly relations between members of the group contributes to the presence of one goal, which is subject to the actions of all members of the group. It is noted that if the members of the group are divided by the solution of individual problems, mutual sympathy and friendliness develop less often than if they work on the solution of a common problem for all;

At sixth, a positive orientation in relation to each other occurs when the group practices the broad participation of all members of the group in decision-making. The opportunity to influence the general group processes stimulates the development of a positive perception of the group among the members of the group.

Without a doubt, the presence of sympathy in relations between people, the presence of friendly relations between members of the group has a huge impact on the mood of people, on their satisfaction with their work, their membership in the group. However, it cannot be unequivocally said that friendly relations between group members have only a positive impact on the results of their work and the results of the functioning of the group as a whole. If people who have friendly relations with each other have a high motivation to work in a group, then the presence of mutual sympathy and friendship contributes to a significant increase in the results of their work and thus has a positive effect on the functioning of the group as a whole. If these people are poorly motivated to work, then the result will be completely opposite. They will spend a lot of time in useless conversations, smoke breaks, tea parties, etc., constantly being distracted from work and sharply reducing the effectiveness of their work. At the same time, they can distract others from the work, creating an atmosphere of idleness and relaxation in the group.

Mutual support based on sympathy and friendship, contributing to the cohesion of the group, can generate a synergistic effect that significantly increases the effectiveness of the group. Modern management practice more and more confirms the undoubted advantages of a group form of labor organization over an individual one. A clear illustration of this can be, in particular, the so-called Japanese type of management.

However, with an undoubted advantage over other forms of work organization, the group form can also carry a number of negative aspects for the organization. One of these negative manifestations is group action, which develops mainly on the basis of close relations between members of the group, provided that, on the whole, the management of the group is incorrectly set and its functioning in the organization is incorrectly organized. Groupism is manifested in the fact that the group closes in on itself, weakly and incorrectly reacts to external signals, denies criticism, etc. All this translates into:

firstly, in the group there is a tendency to moralize processes, naturally, accompanied by the presentation of oneself and one's actions in the best light from a moral point of view;

secondly, the group begins to feel invulnerable and even invincible in conflict clashes;

thirdly, an atmosphere of conformism develops in the troupe, the desire to force everyone to agree with a single opinion, unwillingness to listen and discuss other opinions and points of view, etc.;

fourthly, unanimity develops in the group. People are starting to think more and more like the rest. And even if they have other opinions, they do not express themselves, because they themselves doubt them, believing that the general opinion is true;

fifthly, the group ceases to perceive and refuses to consider opinions from outside if they do not coincide with the opinion of the group.

Strength and Conformity in the relationship between members of the group are manifested in the form of the so-called social influence on a person. The group puts pressure on a person, demanding from Him to follow group norms, rules, requiring submission to the interests of the group. A person can resist this pressure, or he can give in to the group - to obey, i.e. be a conformist. It is impossible to state unequivocally that one type of relationship between a person and a group is correct and another is not. Obviously, conformism can lead to the fact that a person, even realizing the wrongness of his actions, carries out them, because the group does it. Conformity can turn a person into a wordless appendage of the group. The history of mankind knows a lot of negative examples of how the "herd instinct", or, in other words, unconditional conformism, lay at the basis of terrible crimes against individuals and humanity as a whole. She knows examples of how a group completely erased a person's personality, turning him into a cog in a group mechanism. At the same time, it is obvious that without conformism a cohesive group cannot be created, a balance cannot be established in the relationship between a person and a group. If a person takes rigid non-conformist positions, then he will not be able to become a full-fledged member of the group, and at a certain stage in the development of the

conflict between him and the group he will be forced to leave the group, since conformity in the relationship of a person with a group: that without conformity a cohesive group cannot be created, a balance cannot be established in the relationship between an individual and a group. If a person takes rigid non-conformist positions, then he will not be able to become a full-fledged member of the group, and at a certain stage in the development of the conflict between him and the group he will be forced to leave the group, since conformity in the relationship of a person with a group: that without conformity a cohesive group cannot be created, a balance cannot be established in the relationship between an individual and a group. If a person takes rigid non-conformist positions, then he will not be able to become a full-fledged member of the group, and at a certain stage in the development of the conflict between him and the group he will be forced to leave the group, since conformity in the relationship of a person with a group:

on the one hand, it acts as a condition for the integration of an individual into a group;

on the other hand, it can give rise to negative consequences, both for the environment and for the group as a whole, and for this individual in particular, it is important to find out what factors and to what extent require a member of the group to make concessions to social influence.

The nature of the tasks to be solved has a significant impact on the degree of conformity in human behavior. If the tasks are not clearly defined, if they do not have an unambiguous answer, then they make the person performing them more susceptible to the influence of the group. The degree of conformity also depends on whether the member of the group made public commitments regarding the problem being solved or not, and also on the stage at which he announced his commitments in the decision. Public and early statements make a person more susceptible to public influence. Conformism in human behavior develops payment based on the results of group work.

Group characteristic also has a great influence on the development of conformism in a person in relation to the requirements of the group. Unanimity in group behavior increases the degree of influence of the group on the individual. It is easier for a person to object or disagree if someone else in the group has an opinion that is different from the group. Conformity in human behavior in a group is influenced by the size of the group. If there are five people in the group, then unanimity begins to have a strong influence on the individual. Further growth in the size of the group has little effect on the increase in the influence of the group on the person. The degree of conformity in the behavior of a person in a group also depends on the proximity of the leadership in group activities and the frequency of contacts with the leadership. If the boss is often present and participates in decision-making by a member of the group, then this leads to an increase in conformity in the behavior of the subordinate.

The desire to submit to the influence of the group directly depends on the personal relations between the members of the group, their likes and dislikes, friendship, etc. The better the personal relations between the members of the group, the higher the degree of conformity in their behavior in the group and the higher the possibility of social influence on the members of the group. The situational characteristics of the group depend little on the behavior of the members of the group and the group as a whole. These characteristics are related to the size of the group, its spatial arrangement, the tasks performed by the group, and the reward system used in the group.

In small groups, it is more difficult to reach an agreement, and a lot of time is spent on clarifying relationships and points of view. Finding information is difficult in large groups, as group members tend to be more reserved and concentrated. It was also noted that in groups with an even number of members, although there is more tension with the decision-making than in groups with an odd number of members, there is nevertheless less disagreement and antagonism between group members. Group size also has an impact on job satisfaction. Some studies show that people are more satisfied when they work in a medium-sized group (5-6 people). Small groups generate a lot of tension in the relationship between its members, and in a large group there is not enough time for each member of the group.

Spatial arrangement of members group has a significant influence on their behavior. It is one thing when a person has a permanent location, another thing is when he looks for this place every time. People during work can look at each other, and can be located with their backs to each other. And this will also influence their work and their behavior in the group. There are three important characteristics of the spatial arrangement of the individual, on which the relationship between the individual and the group depends:

firstly, is the presence of a permanent or definite place or territory. A person knows: this is my table, this is my machine, this is my workplace. The lack of clarity in this matter generates many problems and conflicts in interpersonal relationships, and also significantly reduces job satisfaction;

Secondly, this is a personal space, i.e. the space in which the body of only a given person is located. Spatial proximity in the placement of people can give rise to many problems, since people do not perceive the proximity of other people to them, regardless of age, gender, etc.;

third, it is the relative position of the places. It is noted that if the workplaces are fenced off from each other, then this contributes to the development of formal relations. The presence of the workplace of the group leader in a common space contributes to the

activation and consolidation of the group. If a person takes a workplace at the head of the table, then this in the eyes of other members of the group automatically puts him in a leadership position. Management, knowing these and other questions of the location of group members, can achieve a significant effect and increase the effectiveness of the group's work only through the correct placement of jobs.

The influence of the tasks solved by the group on the functioning of the group and on the behavior and interaction of group members is obvious. However, it is very difficult to establish a relationship between the types of tasks and their impact on the life of the group. It is noted that the solution of formal problems, for example, mathematical ones, contributes to the development of relations between group members to a lesser extent than the solution of problems of a humanitarian profile. It is known that the tasks and functions performed by the group affect the style of leadership, as well as the style of communication between people. In the case of loosely structured or unstructured tasks, there is more group pressure on the individual and a greater interdependence of actions than in the case of well-structured tasks. Several characteristics of the task can be pointed out that are important to pay attention to in order to try to determine whether

firstly, it is necessary to determine how many interactions will occur between members of the group in the process of solving the problem and how often they will communicate with each other;

Secondly, it is necessary to find out how the actions performed by individuals are interdependent and have mutual influence;

third, it is important to establish how the problem being solved is structured.

reward systems, Considered in isolation from the nature of relationships in the group, they cannot in themselves give an answer to the question of the extent to which this or that system influences relationships in the group, the behavior of group members, and the functioning of the group as a whole. For example, it is not possible to estimate the impact on a group of individual piecework pay, collective piecework pay, or pay based on a fixed group budget, unless the nature of the group's activities is known. When analyzing the impact of payment, it is important to take into account two sets of factors at the same time:

how interdependent are the actions of group members;

How big is the difference in pay?

Four combinations of these factors are possible:

- low interdependence - low differentiation in pay;
- low interdependence - high differentiation in pay;
- high interdependence - low differentiation in pay;
- high interdependence - high differentiation in pay.

The first and fourth cases give rise to many problems in the relationship between the members of the group. On the contrary, the second and third cases can contribute to the successful functioning of the group and the development of favorable relations between group members.

The interaction of a person and a group is always two-way; a person through his work, his actions contributes to the solution of group problems, but the group also has a great influence on a person, helping him to satisfy his needs of security, love, respect, self-expression, personality formation, elimination of worries, etc. It is noted that in groups with good relationships, with an active intra-group life, people have better health and. better morals, they are better protected from external influences and work more efficiently than people who are in an isolated state or in "sick" groups, affected by insoluble conflicts and instability. The group protects the individual, supports him and teaches him both the ability to perform tasks and the norms and rules of behavior in the group.

But the group not only helps a person to survive and improve his professional qualities. It changes his behavior, making the person often significantly different from what he was when he was outside the group. These influences of a group on a person have many manifestations. Let us point out some significant changes in human behavior that occur under the influence of the group:

firstly, under public influence, changes occur in such characteristics of a person as perception, motivation, sphere of attention, rating system, etc. A person expands the scope of his attention by increasing attention to the interests of other members of the group. His life is dependent on the actions of his colleagues, and this significantly changes his view of himself, his place in the environment and others;

Secondly, in a group a person receives a certain relative "weight". The group not only distributes tasks and roles, but also determines the relative position of each. Group members can do exactly the same job, but have a different "weight" in the group. And this will be an additional essential characteristic for the individual, which he did not and could not have, being outside the group. For many members of the group, this characteristic may be no less important than their formal position;

third, the group helps the individual gain a new vision of his "I". A person begins to identify himself with the group, and this leads to significant changes in his worldview, in understanding his place in the world and his destiny;

fourthly Being in a group, participating in discussions and developing solutions, a person can also give out suggestions and ideas that he would never give out if he thought about the problem alone.

The effect of brainstorming on a person significantly increases the creative potential of a person;

fifth, It has been noted that in a group a person is much more inclined to accept risk than in a situation where he acts alone. In some cases, this feature of changing human behavior is the source of more effective and active behavior of people in a group environment than if they acted alone.

It is wrong to think that the group changes the person as it wants. Often a person resists many influences from the group for a long time, he perceives many influences only partially, he denies some completely. The processes of adaptation of a person to a group and adjustment of a group to a person are ambiguous, complex and often quite lengthy. Entering a group, interacting with the group environment, a person not only changes himself, but has an impact on the group, on its other members.

Being in interaction with the group, a person tries in various ways to influence it, to make changes in its functioning so that it is acceptable for him, convenient for him and allows him to cope with his duties. Naturally, both the form of influence and the degree of influence of a person on a group essentially depend both on his personal characteristics, his ability to influence, and on the characteristics of the group. A person usually expresses his attitude towards a group in terms of what he thinks. At the same time, his reasoning always depends on the position that he occupies in the group, on the role he performs, on the task assigned to him and, accordingly, on what goals and interests he personally pursues.

The interaction of a person with a group can be either in the nature of cooperation, or merger, or conflict. For each form of interaction, a different degree of manifestation can be observed. That is, for example, we can talk about a hidden conflict, a weak conflict, or an unresolvable conflict.

In case of cooperation a trusting and benevolent relationship is established between the member of the group and the group. A person considers the goals of the group as not contradicting his goals, he is ready to find ways to improve interaction, positively, albeit with a rethinking of his own positions, perceives the decisions of the group and is ready to find ways to maintain relations with the group on a mutually beneficial basis.

*At the confluence of man*with the group, there is an establishment of such relations between the person and the rest of the group, when each of the parties considers the other as an integral part of the whole with it, which is the group. A person builds his goals based on the goals of the group, to a large extent subordinates his interests to the interests of the group and identifies himself with the group. The group, in turn, also tries to look at the individual not as a performer of a certain role, but as a person completely devoted to the group. In this case, the group takes care of the person, considering his problems and difficulties as his own, and tries to assist him in solving not only production problems, but also in solving his personal problems.

In case of conflict there is a juxtaposition of the interests of the individual and the group and the struggle between them to resolve this contradiction in their favor.

Conflicts can be generated by two groups of factors:

- organizational factors,
- emotional factors.

The first group of factors is associated with a difference in views on goals, structure, relationships, distribution of roles in the group, and the so-called. If the conflict is generated by these factors, then it is relatively easy to resolve.

The second group of factors includes factors such as distrust of a person, a sense of threat, fear, envy, hatred, anger, etc. The conflicts generated by these factors are hardly amenable to complete elimination.

The conflict between a member of a group and the group is wrong to consider only as an unfavorable, negative state of relations in the group. Evaluation of the conflict fundamentally depends on what consequences it leads to for the person and the group. If the conflict turns into an antagonistic contradiction, the resolution of which is destructive for a person or for a group, then such a conflict should be classified as undesirable.and negative forms of relationship between a person and a group.

But very often the conflict in relations within the group is positive. And this is due to the fact that conflict can lead to favorable consequences:

First, conflict can increase motivation to achieve goals. It can cause additional energy to act, bring the group out of a stable passive state;

secondly, the conflict can lead to a better understanding of relations and positions in the group * to the members' understanding of their role and place in the group, to a clearer understanding of the tasks and nature of the group's activities;

thirdly, the conflict can play a creative role in the search for new ways of functioning of the group, the search for new approaches to solving the problems of the group, in generating new ideas and considerations on how to build relationships between members of the group, etc.;

fourthly, the conflict can lead to the manifestation of interpersonal relations, to the identification of relations between individual members of the group, which in turn can prevent a possible negative aggravation of relations in the future.

One of the main results of the interaction between a person and an organization is that a person, analyzing and evaluating the results of his work in an organization, revealing the reasons for success and failure in interaction with the organizational

environment, analyzing the experience and behavior of his colleagues, thinking about the advice and recommendations of superiors and colleagues, makes certain conclusions for himself, which in one way or another affect his behavior, lead to a change in his behavior in order to adapt to the organization, in order to achieve better interaction with the organizational environment. Obviously, the perception and evaluation of one's experience, as well as the process of adaptation to the conditions and requirements of the organizational environment, are largely individual in nature. In the same environment, people behave differently. A person, as it were, has two degrees of freedom in constructing his behavior in an organization. On the one hand, he has the freedom to choose forms of behavior: to accept or not to accept the forms and norms of behavior existing in the organization, on the other hand, he may or may not accept the values of the organization, share or not share its goals and philosophy. Depending on the combination in which these fundamental components of behavior are combined, four extreme types of human behavior in an organization can be distinguished:

first type: Values and norms of behavior are fully accepted. In this case, a person tries to behave in such a way that his actions do not conflict with the interests of the organization. He sincerely tries to be disciplined, to fulfill his role completely in accordance with the norms and forms of behavior accepted in the organization. Therefore, the results of the actions of such a person mainly depend on his personal capabilities and abilities and on how correctly the content of his role is determined. This type of behavior can be characterized as the behavior of a dedicated and disciplined member of the organization;

second type: a person does not accept the values of the organization, but tries to behave, fully following the norms and forms of behavior adopted in the organization. Such a person can be described as an opportunist. He does everything correctly and according to the rules, but he cannot be considered a reliable member of the organization, since, although he is a good and diligent employee, he can nevertheless leave the organization at any time or take actions that may be contrary to the interests of the organization, but comply his own interests. For example, such a person will readily go on strike in order to get a pay rise;

third type: a person accepts the values of the organization, but does not accept the norms of behavior existing in it. In this case, a person can generate many difficulties in relationships with colleagues and management, he looks like an original. However, if an organization can afford to abandon the established norms of behavior in relation to its individual members and create a state of freedom of choice in the forms of behavior for such members, they can find their place in the organization and benefit it;

fourth type: the individual does not accept either the norms of behavior or the values of the organization. This is an open rebel who constantly comes into conflict with the organizational environment and creates conflict situations. It would be wrong to think that this type of behavior is absolutely unacceptable in the organization and people who behave in this way are not needed by the organization. However, in most cases, "rebels" give rise to many problems that significantly complicate the life of the organization and even cause great damage to it.

Naturally, the organization is interested in its members behaving in a certain way. A possible approach to solving this problem is the selection of people with certain qualities that can guarantee the behavior of its members that is desired for the organization. However, it should be recognized that this approach is of limited use, since:

firstly, it is not always possible to find people with the necessary characteristics;

secondly, there is no absolute guarantee that they will behave in the way the organization expects;

thirdly, the requirements for the behavior of members of the organization from the organizational environment can change over time, entering into conflict with the criteria by which people were selected into the organization.

Second approach, which in principle does not exclude the first, is that the organization influences a person, forcing him to modify his behavior in the direction necessary for her. This approach is possible and is based on the fact that a person has the ability to learn behavior, change his behavior based on the awareness of his previous behavioral experience and the requirements imposed on his behavior by the environment. Behavioral learning can be defined as the process of changing a person's behavior over time, based on experience that reflects the actions of a person and the reaction of the environment to these actions. Behavior learning is characterized by the presence of several points:

firstly, learning can go both from one's own experience and from the experience of other people;

Secondly, behavioral learning does not necessarily concern only actual behavior itself. It may refer to potential behavior, i.e. such behavior that can be carried out by a person, but which is not carried out by him in his practice of behavior;

third, learning behavior is always expressed in changing a person. Even in the case when the immediate behavior has not changed, the person is already becoming different, as his behavioral potential changes;

There are three types of behavioral learning.

First type associated with the reflex behavior of a person, with what is called in the teachings of I.

Pavlov a conditioned and unconditioned reflex. If, for example, the boss comes to his subordinates when he is dissatisfied with something, irritated and intends to reprimand them, then any appearance of the boss can cause fear in the subordinates, a desire to avoid this meeting, regardless of why he came to them. That is, the appearance of the boss develops a conditioned reflex of the desire to hide from his eyes.

The second type of learning behavior It is based on the fact that a person draws conclusions from the consequences of his previous experience, consciously corrects and changes his behavior. The theoretical description of this type of learning is primarily based on the research of B. Skinner, who created the foundations of the theory of engagement of implemented behavior depending on its consequences. The essence of this theory is that if a person sees that his behavior leads to favorable consequences, then he seeks to repeat this behavior, but if the consequences turn out to be negative, then the desire to behave in the same way will be significantly reduced, that is, human behavior is set conscious comprehension of the results of previous behavior.

Third type Behavioral learning is learning from observation of behavior. Usually it is the observation of someone else's behavior. A person, regularly observing how the people around him behave, automatically begins to adjust his own behavior to their behavior. He adopts their style and mannerisms, their operational skills, and so on. Often purposeful observation of someone else's behavior is carried out in order to learn something useful for oneself. With the development of means of video recording of an object, the possibilities of observation are expanding, and, in particular, the object of observation is expanding. Now a person can view records of his own behavior, which can also significantly influence the correction of behavior. Obviously, all three types of behavioral learning must be taken into account by the leadership of the organization in its attempts to correct and shape the behavior of the members of the organization.

What does a person learn in an organization, what aspects of his behavior are corrected or changed in the process of learning?

firstly Having come to the organization and further carrying out his activities in it, a person studies his functional role: what he should do to do his job better, how to work more efficiently, how and with whom to communicate in the process of work. At the same time, he learns to place emphasis in the work he does in terms of what is considered more important in the organization and what is less important in his activities, for which there is remuneration, which is included in the assessment of the quality of his work;

Secondly, in an organization, a person learns to perform formal and procedural actions, such as filling out various questionnaires and forms, filling out applications, arranging and holding meetings, transmitting, receiving and responding to information received, temporarily leaving the workplace, coming and going from work, parking car, wearing a certain type of clothing, etc.;

third, a person learns to correctly understand and take his place in the organization. He learns the norms, values and informal groups and relations that have developed on their basis in the organization, learns to behave correctly with colleagues and management, determines for himself with whom to have close relations and from whom to stay away, whom to trust, whom to rely on and whom to be afraid of. ;

fourth, a person learns how to solve his own problems in the organization, how to achieve his goals. So, for example, he learns how to make a career in the organization. Or how to achieve certain incentives and rewards. A person can also learn how to use the capabilities of the organization or the capabilities of its individual members in order to solve their personal problems that are not related to the activities of the organization. The worker can learn how to avoid difficult and risky tasks, and even how to pretend that he is working hard by doing nothing.

In order to describe the process of conscious learning by a person to behave in an organization and indicate the connection of this process with the management of a person in an organization, we will consider in the most general terms several basic elements that determine human behavior in an organization. These elements will be considered in more detail when considering the issue of motivation.

Human activity is always connected and initiated by the presence of certain motivating principles in him. They force him to start doing something, to make some effort, i.e. carry out actions. Stimuli, which are external influences on a person, direct his activity in a certain direction, give this activity a certain orientation and boundaries. The behavioral reaction of a person is manifested in the fact that he chooses what and how to do it, and carries out specific actions that lead to a specific result. His reaction is strongly related to stimuli. However, it has an individual character, as it reflects the different degree of influence of incentives on the behavior of different people. A person's reaction can manifest itself both in the form of his specific actions, and in the form of developing a certain disposition by him. Depending on the consequences for a person, his behavioral reaction is fixed in order to strengthen it and make it stable, or it is abandoned. The consolidation of the implemented behavior or the rejection of it play a very important role in shaping a person's behavior, since it is through this that a conscious adjustment or even a change in a person's behavior in the direction desired for the organization takes place.

Thus, the change in human behavior can be seen as a consequence of learning behavior. In itself, learning to behave is a function of the consequences

for a person of his actions, a function of the consequences of his behavior. The presence of such a relationship between behavior, learning behavior and the consequences for a person of his behavior makes it possible for the organization to correct and shape the behavior of its members. This is primarily due to the fact that the management and the organizational environment can determine and purposefully shape the consequences of their behavior for the members of their organization, being actively involved in the process of learning behavior at the stage when a person receives certain consequences of the actions taken. Obviously, the consequences of actions depend on how the person behaved, what he did. However, they directly depend on who, evaluating the action of a person, compensates for his actions and efforts. In this case, compensation is understood in the broadest sense as an external reaction to a person's behavior, expressed in the fact that a person either gains something or loses something, achieves something or does not achieve something as a result of his actions. in the form of a certain behavior of actions. Compensation can be made in various forms - from material reward or punishment, to verbal approval or condemnation. Compensation plays an extremely important role in the learning of behavior, since it has a fundamental influence on whether the implemented behavior is consolidated or whether it is abandoned. If there is no compensation that causes a person to imagine the consequences of his actions, then in fact there is no noticeable modification of behavior, since there is no learning of behavior. Therefore, compensation in the management of people plays not only the role of remuneration for the work done or the role of a means of meeting the needs of workers, but also the role of a means of modifying human behavior.

Looking at compensation from the standpoint of behavior learning and behavior modification, we can distinguish four different types of compensation that lead to the consolidation or abandonment of the implemented behavior:

first type is a positive compensation. The essence of this type is that a reward is carried out, leading to pleasant consequences for a person. The form of remuneration can be completely different. Positive compensation can be used by management to reinforce desired employee behavior. At the same time, it is important to take into account that the reward should be clearly tied to the desired behavior, i.e. a person should know for what he received encouragement. The reward should follow the desired behavior carried out and, finally, the reward should be in the interests of the person being rewarded;

second type -this is negative compensation. The essence of this type is that the desired behavior immediately leads to the elimination of circumstances or stimuli that are not desirable for the person. For example, a person who does not behave properly is boycotted by others. As soon as he begins to behave correctly, from the point of view of the environment, they stop the boycott. With the second type of compensation, as well as with the first, it is important that the reaction of the environment or management to a change in behavior occurs as quickly as possible and, of course, is of an individual character;

third type compensation is punishment. In this case, unlike the first two types, compensation occurs as a reaction to "wrong", undesirable behavior for management or organizations.

If the desired behavior is fixed in the first two types, then in this case the undesirable behavior is eliminated. Compensation in the form of punishment consists in the fact that a person receives negative, unpleasant consequences of behavior for him. For example, he may be fined, lose his bonus or promotion, be reprimanded, and so on. The task of punishment is to narrow or eliminate the behavior of its members that is undesirable for the organization. Although punishment outwardly looks like the complete opposite of positive compensation - there they reward, here they take away - from the point of view of teaching human behavior, this is not so. This type of compensation is less effective than positive compensation. This is due to the fact that punishment has a less predictable and sustainable effect than reward, often leading to indirect negative consequences, such as as a personal insult to the punished leader, loss of interest in work, a change in attitude towards one's activities, etc. Therefore, punishment as a way of compensation in order to teach behavior should be treated very carefully by management and carefully monitor its possible side negative manifestations;

fourth type of compensation is the suppression of unwanted behavior; The essence of this type of compensation is as follows. A person who performs some undesirable actions that previously received a positive reaction stops them after a while, if a positive reaction ceases to come to these actions, i.e., in other words, if you stop responding positively to some actions, then after a while they will start to shrink. For example, a young person who successfully studied at the university and received praise from teachers for active speaking in the classroom and for comments on the speeches of his colleagues, having come to work in an organization, will also try to intervene in all discussions and conversations and give his comments and assessments to the statements of others. . However, if this is ignored, then after a while he will begin to get rid of this bad habit. The choice of the type and specific form of compensation plays a very important role in the successful modification of human behavior in the direction desired by the organization.

However, the choice of compensation frequency also plays an equally important role. For directed behavioral learning. In general, there can be two approaches to timing compensation.

one approach is compensation after each case of human action. This approach is called continuous compensation.

Another, a fundamentally different approach to the timing and frequency of compensation is that compensation does not occur after every action taken. This is periodic compensation.

Although there is a fundamental difference between these two approaches, it is impossible to say which one is more effective, because their effectiveness depends significantly on the situation in which they are applied. At the same time, it is noted that the first approach works better when it is applied to a new employee who is learning his role in the organization. The second approach is better to apply when the organization wants to make certain behavior of its member stable. There are four different types of periodic compensation.

First type is compensation at a fixed time interval. This approach suffers from the disadvantage that the desired behavior of workers manifests itself unevenly, increasing at those moments when fixation or compensation is carried out, and decreasing in the intervals between them.

Second type– compensation after a variable time interval. In this case, the interval between possible compensation and the frequency of compensation are not fixed. This approach is not applicable to all forms of compensation. However, it gives better results, since the indefinite moment of compensation keeps you in suspense and makes you work and behave better. Although after the onset of compensation, there may be a sharp decline in the behavior of its members that is desirable for the organization.

Third type unlike the first and second, it is based not on the time interval, but on the volume of actions. This type is called fixed rate compensation. With this approach, compensation occurs after some fixed number of actions have been completed. Practice shows that this type of compensation gives better results in shaping behavior than the first and second types of periodic compensation.

Fourth type (last), the basis also has compensation in | depending on the amount of activity. However, this is a compensation depending on the variable rate. This approach is considered to be highly effective, since compensation can occur after any single action, which encourages employees to constantly perform the “right” actions. In order for this approach to give a truly high result in behavior modification, it is important that the time intervals between compensation are not very large. At the same time, it is necessary to know that this approach has limited use. For example, it is hardly applicable to such a form of compensation as wages.

The considered issues of learning behavior suggest that a person, based on his experience, adapts to the organizational environment, changing his behavior. The organization and its leadership can actively influence the modification of human behavior. However, the means used to influence the process of learning behavior, and the frequency of their use depend on the situation in which the person is located, and must be selected by the manager, taking into account the whole variety of factors influencing human behavior. First of all, taking into account the needs and motives of a person for activity. The process of motivation is characterized by four theories that form the basis for motivation.Expectation theory: Expectation in the chain of "execution effort"; waiting in the chain "execution - result"; result valency. Theory of goal setting. Four target characteristics:

complexity,
specificity,
acceptability,
commitment.

Equality theory: comparing one's results of actions with the results of others.

The most general concept of the motivation process is reduced to the following provisions. A person, having realized the tasks and the possible reward for their solution, correlates this information with his needs, motivational structure and capabilities, adjusts himself to a certain behavior, develops a certain disposition and performs actions that lead to a specific result, characterized by certain qualitative and quantitative characteristics.

This scheme does not yet reveal either the reward mechanism, or the actual content of the reward, the essence and content of the assessment, or the transformation of the assessment into a decision. In modern management thought and practice, there are a number of theoriesriy, which describe the process of motivation in sufficient detail and at the operational level. The most famous of them are -

expectancy theory;
goal setting theory;
the theory of equality;
theory of participatory management.

They try to explainwhy people are ready to carry out certain actions, spending more or less effort. And by explaining this, they give managers the key to building an effective system of motivating people, that is, how to influence people in order to encourage them to work effectively. Human behavior is constantly associated with a choice of two or more alternatives. From what a person gives this or that preference depends on what and how he does, how he behaves and what results he achieves. Expectancy theory is designed to answer the question of why a person makes a particular choice when faced with several alternatives, and how motivated he is to achieve an outcome in accordance with the choice made. In its most generalized form, expectancy theory can be formulated as the doctrine describing the dependence of motivation on two points: how much a person would like to receive and how much it is possible for him to get what he would like to receive, in particular,

how much effort he is willing to spend for this. For example, a start-up businessman from the province comes to negotiate the start of a joint business with representatives of large firms located in a city that is a recognized center of business activity. To maintain his reputation, he will not stay in a hotel that has a reputation for being second-rate, although being cheap. At the same time, he does not have the means to stay in a luxury hotel. Therefore, apparently, he will stay in a hotel that is quite prestigious and for which he has enough money to stay.

efforts;

execution;

result.

Expectancy theory studies and describes the interaction of these three blocks. At the same time, efforts are considered as a consequence, and even the result of motivation. Performance is considered as a consequence of the interaction of efforts, personal capabilities and the state of the environment, and the result is considered as a function that depends on performance and on the degree of desire to obtain results of a certain type. The expectation theory explains how the process of motivating a person to activity is built, based on linking into a single whole a person's ideas about the efforts necessary to complete the work, its practical performance and the results expected in response to the work performed. At the same time, the key points of focus of the theory are:

expectations along the chain of "effort - performance";

expectations along the chain "execution - results of the secondth level;

valence of results.

According to the expectation theory, a person's motivation to performThe perception of work depends on how much he is interested or not interested in doing it, how much the work is attractive to him. When deciding what to do and how much effort to expend, a person usually answers himself the question of how much he needs to do it. That is, when choosing an alternative, a person thinks about whether he will behave in an appropriate way, will perform the work accordingly, whether this will lead to a certain result of the first level. In this case, he has formed the expectation of the result of the first level. In addition, the person answers the question of what he will receive as a result of the successful completion of the work. This is already the development of expectations for the results of the second level. And, finally, he decides for himself how valuable this result will be for him, i.e. it evaluates the valency of the second level result. Depending on what final assessment a person comes to, his motivation to do the work will be formed. The main tenets of expectancy theory are as follows:

firstly, since this theory is subject to the idea of finding an answer to the question of how motivation affects the performance of work, the initial postulate is that performance is determined by the product of the values of two factors: a person's capabilities and his motivation;

Secondly, it is argued that motivation is given by the product of ledreasons for waiting for the results of the first level by the value of the valency of the results of the first level;

third, the valency of the results of the first level is given by the product of the value of the valency of the results of the second level by the expectations of individual results of the second level. A person chooses the alternative where the motivation will be higher.

Using various techniques, the manager for successful managementsubordinates must build the management of the organization in such a way that the employee is sure that, working to achieve organizational goals, he thereby creates the conditions for the best achievement of second-level results. In expectation theory, it is believed that in order for the motivation process to take place, a number of preconditions must be met. These conditions are:

- the employees have a sufficiently high degree of expectation of the results of the first level;

- the presence of a sufficiently high degree of expectation of results second level and

- total non-negative valency of the results of the second level.

In practice, this means that the employee must have a firm understanding that the results of his work depend on his efforts, that certain consequences follow for him from the results of his work, and that the results he receives ultimately have for its value. In the absence of one of theseconditions, the process of motivation becomes extremely difficult or even impossible. Drawing a general conclusion about the theory of expectation, it should be noted that it proceeds from the fact that people carry out their actions in accordance with the possible consequences for them these actions can lead to. Based on the information available to them, people make a choice of one of the alternatives of action, based on what they will get as a result and what efforts they will have to expend in order to achieve this result. That is, according to the theory of expectation, a person behaves in accordance with what, in his opinion, will happen in the future if he makes a certain amount of effort.

Goal setting theory assumes that human behavioris determined by the goals that he sets for himself, since it is for the sake of achieving the goals set for himself that he carries out certain actions. At the same time, it is assumed that goal setting is a conscious process, and conscious goals and intentions are what underlies the definition of human behavior. In general, the basic model describing the process of setting goals is as follows. A person, taking into account the emotional reaction, realizes and evaluates the events taking place in the environment. Based on this, he determines for himself the goals to which he intends to strive, and, based on the goals set, carries out certain actions -

performs certain work. That is, he behaves in a certain way, achieves a certain result and receives satisfaction from this. Goal setting theory states that

- *complexity;*
- *specificity;*
- *acceptability;*
- *commitment.*

These four characteristics of the goal affect both the goal itself and the efforts that a person is willing to expend in order to achieve the goal set for him.The complexity of the goal reflects the degree of professionalism and the level of performance required to achieve it. There is a direct relationship between the complexity of the goal and the performance of the work. The more complex goals a person sets for himself, the better results he achieves. The exception is the case when unrealistically high goals are set, which, in principle, cannot be achieved. In this case, as the theory of goal setting states, the result of actions does not exceed the result achieved by those who set moderate but achievable goals. Therefore, raising goals, although justified, can lead to an increase in performance only if there is still a chance of achieving goals. The specificity of the goal reflects the quantitative clarity of the goal, its accuracy and certainty. Experimental studies have found that that more specific and specific goals lead to better results, to better performance than goals that are broad in meaning, with vaguely defined content and boundaries. A person who has goals that are too broad in meaning and content demonstrates the same performance of work as someone who has no goals at all. At the same time, too much narrowing of goals can lead to the fact that important aspects of the activity carried out by a person may be left out of consideration. It will also negatively affect the performance of their work. who has absolutely no purpose. At the same time, too much narrowing of goals can lead to the fact that important aspects of the activity carried out by a person may be left out of consideration. It will also negatively affect the performance of their work. who has absolutely no purpose. At the same time, too much narrowing of goals can lead to the fact that important aspects of the activity carried out by a person may be left out of consideration. It will also negatively affect the performance of their work.

Purpose acceptability reflects the extent to which a person perceives the goal as his own. Acceptability of purposeThere is no significant impact on how the complexity and specificity of the goal affect the performance of the work. If a person does not accept the goal, then both the complexity and specificity of the goal will have very little effect on the performance of the work. The acceptability of a goal by a person directly depends on whether it is perceived by him as achievable, and on what benefits he can receive when achieving the goal. If the benefits are not clear, then the goal may not be accepted. Therefore, in the management of the organization there should be a clear awareness of the significance, the importance of taking actions that would make the goal achievable, profitable, fair and safe in the view of the employee.

Goal Commitment reflects willingness to expend effortcertain level to achieve the goal. This is very important for the level; and the quality of execution is a characteristic of the goal, since it can play a decisive role at the stage of execution, if the reality, the difficulties of performing the work will differ significantly from what they seemed at the stage of setting the goal. Commitment to the goal may increase as the work is performed, or it may decrease. Therefore, management must constantly monitor the level of commitment to the goal on the part of employees and take the necessary measures to maintain it at the proper level.

In the theory of goal setting, when considering the dependence of performance on goals, it is emphasized that the quality of performance depends not only on the efforts of the employee determined by the goal, but also on two groups of factors:

organizational factors;

employee's abilities.

At the same time, these groups of factors can affect not only the quality and content of performance, but also goals, thereby indirectly influencing motivation and, therefore, an additional impact on performance. So, for example, if there is little feedback from the results of work in the work, then this can reduce the degree of influence of the goal on the employee's efforts to complete the work. The last step in the motivation process in goal setting theory is employee satisfaction with the result. The special significance of this step is that it not only completes the chain of the motivation process, but is also the starting point for the implementation of the next cycle of motivation. In theory, it is stated that if as a result of actions a positive result is obtained for the subject, then he receives satisfaction, if negative - then frustration. Wherein, goal setting theory states that satisfaction or dissatisfaction is determined by two processes: an internal process in relation to a person and an external one. Internal processes leading to satisfaction are mainly related to how a person evaluates the result he has received in terms of correlating it with the goal. If the goal is achieved, the task taken on is completed, then the person experiences a feeling of satisfaction. If not, then it causes dissatisfaction. This circumstance gives rise to a certain contradiction in goal setting. As already mentioned, the higher and more complex the goal, the higher the level of performance. At the same time, a high goal may more likely lead to the fact that it will not be achieved, and, consequently, the person will feel a sense of dissatisfaction, frustration. This, in turn, can lead to striving - to take lower goals, to refuse to set or accept difficult goals. Therefore, it is

important at the stage of goal setting to approach this problem very seriously.

External processes, affecting the satisfaction or dissatisfaction of a person with the achieved results, areall processes of reaction to the results of labor from the side of the environment, evaluation by the environment of performance. If the environment reacts positively (management gratitude, promotion, pay increase, praise of colleagues, etc.), then this causes satisfaction, if not, then it leads to dissatisfaction. External processes also contain some contradictory beginning, which has a dual effect on maintaining the motivational process in an effective state in terms of quality and level of performance. The essence of this contradiction is that a person behaves in accordance with the set goals, and the assessment of his actions is most often based on the results of performance. Therefore, if a person achieves his goals, but at the same time demonstrates a low level of performance, a moderate or even negative external evaluation can lead to very strong frustration and a sharp drop in motivation to continue the action. A positive external assessment of successful performance can also negatively affect the motivational process, provided that the person failed to achieve his goals. This leads to a decrease in the commitment to the goal and, ultimately, negatively affects the quality and level of work performance in the future. If the external assessment is based on whether the goal was achieved or not, then in this case there are also moments that can weaken the motivational process of a person, for guaranteed achievement he will set simpler goals, which will necessarily negatively affect the quality and level of performance. General recommendations for implementing the goal setting process can be summarized as follows: A positive external assessment of successful performance can also negatively affect the motivational process, provided that the person failed to achieve his goals. This leads to a decrease in the commitment to the goal and, ultimately, negatively affects the quality and level of work performance in the future. If the external assessment is based on whether the goal was achieved or not, then in this case there are also moments that can weaken the motivational process of a person, for guaranteed achievement he will set simpler goals, which will necessarily negatively affect the quality and level of performance. . General recommendations for implementing the goal setting process can be summarized as follows: A positive external assessment of successful performance can also negatively affect the motivational process, provided that the person failed to achieve his goals. This leads to a decrease in the commitment to the goal and, ultimately, negatively affects the quality and level of work performance in the future. If the external assessment is based on whether the goal was achieved or not, then in this case there are also moments that can weaken the motivational process of a person, for guaranteed achievement he will set simpler goals, which will necessarily negatively affect the quality and level of performance. . General recommendations for implementing the goal setting process can be summarized as follows: This leads to a decrease in the commitment to the goal and, ultimately, negatively affects the quality and level of work performance in the future. If the external assessment is based on whether the goal was achieved or not, then in this case there are also moments that can weaken the motivational process of a person, for guaranteed achievement he will set simpler goals, which will necessarily negatively affect the quality and level of performance. . General recommendations for implementing the goal setting process can be summarized as follows: This leads to a decrease in the commitment to the goal and, ultimately, negatively affects the quality and level of work performance in the future. If the external assessment is based on whether the goal was achieved or not, then in this case there are also moments that can weaken the motivational process of a person, for guaranteed achievement he will set simpler goals, which will necessarily negatively affect the quality and level of performance. . General recommendations for implementing the goal setting process can be summarized as follows: for guaranteed achievement, it will set itself simpler goals, which will necessarily negatively affect the quality and level of performance. General recommendations for implementing the goal setting process can be summarized as follows: for guaranteed achievement, it will set itself simpler goals, which will necessarily negatively affect the quality and level of performance. General recommendations for implementing the goal setting process can be summarized as follows:

first, it is necessary to determineto what extent the organization and the people working in it are ready for the implementation of the goal setting process;

second, if the organization haspotential readiness, it is necessary to carry out a number of activities for the practical preparation of the introduction of the goal-setting process;

third, goal setting should be carried out with an emphasis on their complexity and specificity, and taking into account the acceptability of goals and commitment to them;

fourth, it is necessary to conduct an intermediate analysis of the goals and their adjustment;

fifth, necessary It is important to analyze the achievement of goals, summarize the results of the previous stages and develop recommendations for the further implementation of the goal setting process.

Conclusion

One of the constant aspirations of people is the desire to receive a fair assessment of their actions. People, although not to the same extent, desire to be treated fairly.

At the same time, justice is associated with equality, in comparison with the attitude towards others and the evaluation of their actions. If a person believes that they approach him in the same way as others, without discrimination, evaluate his actions from the same positions as the actions of others, then he feels the fairness of the attitude towards himself and feels satisfied. EUIf equality is violated, if individual members of the organization receive undeservedly high marks and rewards, then the person feels offended, and this leads to frustration and dissatisfaction. At the same time, dissatisfaction can occur even when a person receives a high remuneration in relation to the costs of his labor. The influence of this moment on the relationship of a person with an organization is the basis of one of the theories of the motivational process - the theory of equality. The theory of equality proceeds from the fact that in the process of comparison, although objective information is used, for example, the amount of wages, the comparison is carried out by a person on the basis of his personal perception and his actions, and the actions of the people with whom he makes comparisons.

Norma - the ratio of perceived costs to perceived rewards. There are two types of norms.

Norm of the first type reflects the ratio of the individual's perceived reward to the individual's perceived cost.

Norm of the second type reflects the ratio of the perceived reward of others to the perceived cost of others.

The theory of equality says that it is very important for a person how his norm relates to the norm of others. If the norms are equal, then the person, even with less remuneration, feels justice, since in this case there is equality. If his rate is lower, then he believes that he is not being rewarded enough. If his norm is higher, then he believes that he is being unduly rewarded.

The notion that takes place in management practice that inequality pushes people to increase performance results, that the state of equality demotivates people to achieve great results, is fundamentally wrong. As stated in the theory of equality based on empirical research, a person experiences a sense of satisfaction if equality is observed. Therefore, he strives to maintain this state.

Equality is bad when the overall level of performance is low. In this case, equality will lead to the preservation of this level. If the overall level of performance is high, equality is an important motivating factor for the success of members.organizations.

In the event that an individual believes that he is not rewarded enoughexactly or unnecessarily, he has a feeling of dissatisfaction (in the second case, this feeling is less pronounced). Considering an unfair and unequal assessment of his work, a person loses motivation for active creative actions, in terms of the goals of the organization, which leads to many negative consequences. The theory of equality allows us to draw several very important conclusions for the practice of managing people in an organization. Since perception is subjective, it is very important that information be available about who, how, for what and how much is rewarded. It is especially important that there is a clear system of payment that answers the question of what factors determine the amount of payment. An important conclusion from the theory of equality is that people are guided by a complex assessment of remuneration. Wages play an important role in this comprehensive assessment, but far from being the only and not necessarily decisive. Therefore, managers should take this into account if they are trying to create an atmosphere of equality in the team.

As repeatedly emphasized, the perception of equality and fairness is highly subjective. To successfully manage people, a manager must not only strive to be fair, create an atmosphere of equality, but alsoit is good to know whether employees believe that remuneration is based on an equal and fair basis. To do this, management should regularly conduct research to find out how employees evaluate remuneration, whether they consider it equal or not. A person in an organization manifests himself not only as a performer of a certain job or a certain function. He shows interest in how his work is organized, in what conditions he works, in how his work affects the activities of the organization. That is, he has a natural desire to participate in the processes taking place in the organization that are related to his activities in the organization, but at the same time, go beyond his competence, beyond the scope of his work and the tasks he solves.

The concept of participatory management comes from the fact thatif a person in an organization takes an interested part in various intra-organizational activities, he thereby, receiving satisfaction from this, works with greater efficiency, better, more efficiently and productively:

firstly, it is believed that participatory management, opening the employee access to decision-making about issues related to his functioning in the organization, motivates a person to do his job better;

Secondly, participatory management not only contributes to the fact that the employee is better at his job, but also leads to greater returns, a greater contribution of the individual employee to the life of the organization, i.e. there is a fuller use of the potential of the human resources of the organization.

Initially, the spread of participatory management was associated only with improving the motivation of workers. Recently, participatory management is increasingly associated with improving the use of the full potential of the organization's human resources. Therefore, the concept of participatory management can no longer be associated only with the process of motivation, but should be considered as one of the general approaches to managing a person in an

organization. Participatory management can be implemented in the following areas:

firstly, workers are empowered to make their own decisions about how theyits activities. Autonomy may concern, for example, such aspects of their activities as the mode of operation or the choice of means for carrying out work;

Secondly, workers may be involved in making decisions about the work they perform. In this case, the manager consults with the employee about what heto do and how to carry out the tasks assigned to him. That is, in other words, the employee is involved in setting goals that he has to achieve, determining the tasks that he will have to solve;

third, employees are given the right to control the quality and quantity of their work and, accordingly, responsibility for the final result is established;

fourth, participatory management involves the broad participation of employees in rationalization activities, in making proposals for improving their own work and the work of the organization as a whole, as well as its individual divisions;

fifth, WHOA possible direction for the implementation of participatory management is to give employees the right to form working groups from those members of the organization with whom they would like to work together. In this case, the right to make a decision is given not only about the member's own work, but also about with whom to cooperate in group activities.

In real practice, all these areas of participatory management are usually used in a certain combination, since they are very closely related to each other and complement each other very well. Moreover, it is precisely in combination with each other that these individual directions can effectivelymanifest itself, and it is the individual well-established combinations of these areas that are used as specific forms of participatory management. The most obvious example of this is the quality circles widely used in the management of Japanese firms.

A person performs certain actions in accordance with the pressure on him of a combination of internal and external forces in relation to him. The totality of these forces, called motivation, evokes far from the same reaction in people. Therefore, it is impossiblethe process of motivation can be unambiguously described. At the same time, on the basis of empirical research, several concepts have been developed that describe the factors influencing motivation and the content of the motivation process.

So-called content theories of motivation focus on how different groups of needs affect human behavior. The widely recognized concepts of this group are Maslow's hierarchy of needs theory, Alderfer's ERG theory, Herzberg's two-factor theory, andMcClelland's newfound needs. Despite the fundamental differences between these concepts, they nevertheless have something in common at their core, which reflects a certain commonality in the motivation of a person to act.

The process of motivation is revealed in theories that try to explainwhy people are ready to carry out certain actions, spending more or less effort. Expectancy theory, goal setting theory, equality theory, and participatory management theory, explaining how people should be influenced in order to encourage them to perform effectively, give managers the key to building an effective system of motivating people.

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Issue Article

Polina Dmitrievna Barybina
Institute of Service and Entrepreneurship(branch) DSTU
bachelor

Artyom Alexandrovich Tikhonov
Institute of Service and Entrepreneurship(branch) DSTU
bachelor

Vladimir Timofeevich Prokhorov
Institute of Service and Entrepreneurship(branch) DSTU
Doctor of Technical Sciences, Professor,
Shakhty, Russia

Galina Yurievna Volkova
LLC TsPOSN «Orthomoda»
Doctor of Economics, Professor
Moscow, Russia

ON THE IMPORTANCE OF THE UNION OF SUBJECTIVE AND OBJECTIVE FACTORS TO ENSURE THE QUALITY OF MANUFACTURED PRODUCTS AND ITS PRIORITY AND DEMAND AMONG CONSUMERS OF RUSSIAN REGIONS

Abstract: *in the article, the authors analyzing the role of the market as an intermediary between the producer and the consumer, which forms the production of products that, being in demand and in demand, provide the producer himself with stable TEP and a stable financial condition, and the consumer the opportunity to satisfy his preferences, taking into account his social status. In this regard, the authors justifiably believe that the market is the subject of the development of efficient production of products that will always be in demand and competitive.*

Key words: *quality, preference, demand, competitiveness, market, profit, demand, buyer, manufacturer, financial stability, sustainable TEP, priority, assortment policy, implementation, relevance, economic policy.*

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Introduction

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There is not a single enterprise that would not have an external environment and would not be in a state of constant interaction with it. To ensure its vital activity, any enterprise needs to regularly receive raw materials from the external environment. At the same time, every enterprise must give something to the external environment as compensation for its existence. As soon as communication with the external environment is broken, the company dies. In recent years, due to increased and more complex competition, as well as a sharp acceleration in the processes of changing the external environment, enterprises are increasingly forced to pay attention to

issues of interaction with the environment, as well as to increasingly develop the ability to adapt to changes in the external environment. Management, especially at the top level, plays a key role in the development and implementation of a company's environmental policy. Issues of long-term strategy of interaction between the enterprise and the environment become the main focus of all management processes. The management no longer deals only with the internal issues of the company. In the same way, and maybe more, his gaze is fixed outside the Enterprise. Management is trying to build an effective interaction of the enterprise with the environment, not only by influencing the processes taking place at the enterprise, but also by influencing the environment. Strategic management, which solves these problems, comes to the fore in the complex of enterprise management processes. The external environment of the enterprise, the state of interaction with which is mainly determined by the quality of its management, can be represented as two areas. The first area is the general external environment of the enterprise. This external environment reflects the state of society, its economy, natural environment and is not directly related to a particular enterprise. The general external environment is more or less the same for the vast majority of enterprises. The second area is the so-called immediate business environment of the enterprise. This environment is formed by such environmental entities that are directly related to the activities of this particular enterprise or directly affect it. At the same time, it is important to emphasize that the company, in turn, can directly influence them. The general external environment is formed under the influence of political, legal, socio-cultural, economic, technological, national and international processes, as well as processes of nature management. The immediate business environment of an enterprise is created by customers, suppliers, competitors, business partners, as well as regulatory authorities and organizations such as administrative bodies, business associations, trade unions, etc. Managing the processes of interaction between the enterprise and the environment, management faces a number of serious problems caused by uncertainty in the state of the environment. In this regard, one of the most difficult tasks facing management is to reduce the uncertainty of the company's position in the environment. This is achieved through the development of its adaptability to the external environment and the establishment of broad links with the environment, allowing the enterprise to organically fit into the environment. The best-known teachings of this group include: scientific management, behavioral teachings and organizational theories. The founder and main developer of the ideas of scientific management is Frederick Taylor. Taylor was an engineer, so it was perfectly natural for him (within the paradigm of his time) to view the control of a person as the control of a machine. Based on a mechanistic understanding of the essence of human labor, its place in the enterprise, Taylor saw the solution to the problem of enterprise success in the rationalization of labor operations. Therefore, the initial task for him was to study this problem. At the same time, he believed that workers were inherently lazy and could work well, at best, with economic incentives. Therefore, managers must think and employees must work. The main principles of Taylor's scientific management are the following principles: therefore, it was quite natural for him (within the framework of the paradigm of his time) to consider the control of a person as the control of a machine. Based on a mechanistic understanding of the essence of human labor, its place in the enterprise, Taylor saw the solution to the problem of enterprise success in the rationalization of labor operations. Therefore, the initial task for him was to study this problem. At the same time, he believed that workers were inherently lazy and could work well, at best, with economic incentives. Therefore, managers must think and employees must work. The main principles of Taylor's scientific management are the following principles: therefore, it was quite natural for him (within the framework of the paradigm of his time) to consider the control of a person as the control of a machine. 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- development of optimal methods and techniques for performing work on the basis of a scientific study of the time spent on individual operations;

* absolute observance of scientifically based standards and norms;

• selection, training and placement of workers in those jobs and tasks where they, realizing their abilities, can give the greatest return;

* remuneration based on the results of labor (the greater the specific result, the greater the payment);

• the use of functional administrators exercising normative control in specialized areas;

* maintaining friendly relations between employees and managers in order to implement scientific management.

Without losing attention to the scientific organization of labor, in the 20-30s of the last century, attention was drawn to the fact that labor productivity significantly depends on the social conditions at the enterprise and can be significantly increased if working groups create special relationships in the process of joint activities - with signs of collectivism. The shift in the center of gravity in management from tasks to people has led to the development of various behavioral management theories. Situational theories provide guidance on how to manage specific situations. In this case, it is recommended to use a step-by-step problem solving algorithm:

firstly, it is necessary to carefully analyze the specific situation, highlighting what requirements the situation imposes on the enterprise and what is typical for this situation;

secondly, an appropriate approach to control should be chosen;

thirdly, management must create the capacity in the enterprise and the necessary flexibility in order to move to a new management style that matches the current situation;

Fourth, the department must make appropriate changes to adapt to the current situation.

One of the most popular system management concepts is the "7-s" theory, developed in the 80s (USA). It was noted that an effective enterprise is usually formed on the basis of seven interrelated components, a change in each of which necessarily requires a corresponding change in the other six. These key components are as follows:

* strategy - plans and directions of action that determine the distribution of resources, fixing the conditions for the implementation of certain actions in time to achieve the goals;

* structure - the internal composition of the enterprise, reflecting the mutual position of organizational units, the hierarchical subordination of these units and the distribution of powers between them;

* systems-procedures and routine processes occurring at the enterprise;

* personnel - key groups of personnel that exist in the enterprise and are characterized by age, gender, education, etc.;

* style - how managers manage the enterprise, including organizational culture;

* qualification - distinctive abilities of key employees of the company;

* common values - the meaning and content of the main activities that the company brings to its members.

This means that we must regularly and consistently develop them in the most reasonable and balanced way. Spending time on self-renewal requires initiative. Effective skills are well-learned principles and behaviors. To turn something in your life into a skill, you need three components: knowledge, skill, and desire. Knowledge is a theoretical paradigm that defines what to do and why. Skill determines how to do it. And desire is motivation - I want to do this in order to guarantee the efficiency of the company's employees in the production of import-substituting products. Currently, companies pay great attention to the motivation of employees, because depending on how motivated an employee is, the results of his activities will be visible. The main task of managers is their full involvement in the work of the full potential of employees. Moreover, managers understand that financial incentives do not increase the loyalty and commitment of the company, but effective management solves this problem. The essence of such management is that the company's employees are involved in the management process, participate in the company's activities, make decisions on a number of issues. Moreover, if an employee of the company has the right to vote, takes part in the activities of the company, receiving remuneration for this, then he will work more efficiently and effectively. An employee whose opinion is taken into account and whose ideas are implemented will feel better about his place of work and work with full dedication. In co-management, employees can discuss goals and objectives with the manager, which they will need to complete. Employees of the company can form working groups from those employees with whom they would be happy and ready to work. In addition, company employees can put forward their ideas and proposals for improving the work of the enterprise as a whole. In addition, there should be a reward for putting forward ideas. Good governance has a number of benefits. The participation of employees in management leads to an increase in the quality of decisions made, since employees may have information that is not known to the manager. With such management, employees can fully express themselves, show their knowledge and skills, feel their importance in the enterprise, thereby increasing motivation. Motivation is usually based not only on the personal achievements of the employee, but also on the overall result of the company's work. Combining employees into working groups can best reflect on the corporate spirit of the enterprise. Having considered the features of effective management, we

can conclude that such management is not a salvation for business development, but it allows you to see the problems of the enterprise from the inside and try to solve them; they are created not by the efforts of one person, but by a group of people where everyone can prove themselves for the benefit of the enterprise. Despite the fact that an effective method of enterprise personnel management is getting more and more approved every year in most countries with developed and developing economies, Russian enterprises are not yet ready to implement and fully realize the benefits of this method. All this happens because the personnel management departments prefer to work according to the established traditional scheme. Not all HR managers can achieve and skillfully use the consistency of their goals with the capabilities of the enterprise and the interests of employees. Another very important factor that does not allow to fully adopt an effective method of personnel management in Russian enterprises is the influence of the national culture of Russia on this department, since it is this influence that determines the choice of a human resource management strategy in the practical activities of an enterprise. Self-regulation in this case is most effectively carried out through the development and establishment of non-state industry rules and standards, as well as control over their observance by all enterprises specializing in this market area. On the basis of a new methodological approach, a conceptual apparatus should be formed. The crisis management matrix is a scheme for determining the most important aspects (performance parameters) that can be used to improve the efficiency of managing such organizational and managerial partnerships. The first dimension (horizontal) of this matrix defines the variables that characterize the enterprise as a whole: objects; functions; processes; resources; environment. And the second dimension (vertical) determines the indicators that characterize the integrated management system: revenue; profit; profitability; market share; equity; capitalization; assets; anti-crisis strategy. The main advantage of such a partnership is the opportunity to form a cluster of enterprises around the advanced technology of a new class, where it will be implemented. The main difficulty in building such partnerships lies in the complex system of coordination of scientific-technical, financial-organizational and production-organizational decisions. The history of the market has evolved as a relationship between two movements. One of them caused the expansion of the market, the other - its development. Both acted in the same direction - they gave stability to the market, ensuring the progress of production through the stability of the market. Market growth was the result of a division of labor and an increase in labor productivity, which led to lower costs, prices and opened up access to goods for consumers. The development of the market was determined by the quality of the manufactured products and eventually found its continuation in the policy of production quality management through the improvement of organization and standardization. financial and organizational and production and organizational decisions. The history of the market has evolved as a relationship between two movements. One of them caused the expansion of the market, the other - its development. Both acted in the same direction - they gave stability to the market, ensuring the progress of production through the stability of the market. 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After the salvation of capitalism, economic science abandoned its political function, reduced its methodological and anthological base and tried to get out of it by activating the mathematical apparatus, the fundamental concepts that support scientific knowledge ended up in the economic archive.

Main part

The modern history of economics began in the minds of well-known thinkers of a philosophical type. Classical political economy was developed not so much by economists as by philosophers: Sismondi, Smith, Ricardo, Hume, Marx, Mill. They adhered to different philosophical concepts, but were unanimous in understanding that the birth of science and the quality of scientific knowledge are determined, first of all, by the methodology - general scientific and specific - for each science due to its anthological originality.

The rejection of the political component in economic theory is explained by the need to achieve true freedom in cognition, independence of scientific thinking. The truth is that through political analysis, and only in this way, it is possible to give economic analysis a systemic-historical character. History shows that social progress has been carried out on an economic basis, thanks to a natural change in the methods of production.

When the time came for the bourgeois method to replace the feudal one, and for the permanent market to replace the seasonal fairs and make them their private form, the freedom fighters began to glorify democracy and prove the historical legitimacy of the coming of a new economic, social and political order. Now, the natural process of changing economic orders is silently silent. On the contrary, attempts are being made to turn the historicism of development back to the past, presenting the recognition of its truth as limited in time, valid only until the period of the formation of capitalism. The reserves of capitalism are quite sufficient to overcome the time limits.

In order to perpetuate capitalism, it was divided into a special basis - the industrial form of production. Even under capitalism, history is part of a post-industrial formation that will remain forever, and all other manipulations with its definitions will not go beyond the post-industrial stage of history, no matter how you call it - technotronic society, information society, general welfare, digital society.

We specifically focused on the analysis of bourgeois philosophical thought, designed to identify the history of the future with the history of bourgeois society, in order to reveal the nature of the substitution of statistical probabilistic calculations by the methodology of economic analysis, the economic science of financial analysis, and show what this substitution leads to. Particular scientific methodology is the most important component of scientific knowledge and creativity, but its meaning is revealed in a more general context developed by epistemology. Scientific and technical creativity is subordinated to the system of philosophical knowledge and design. This is the concretization of the ascent of knowledge from the abstract to the concrete, the process of filling the movement of thought with content that reflects the subject specifics of scientific and engineering thinking. This kind of thinking is associated with the concept of quality.

The development of production, the improvement of the market, the organization of distribution and disposal - all this is subject to the solution of the problem of quality. Entering the world market in the 1970-80s and striving to win a worthy place there for the next ascent, Japanese scientists and engineers relied on the system-wide value of quality. They considered quality as a system of the most essential properties of production, requiring the mobilization of the national potential of spirituality: education, upbringing, citizenship, concentration of scientific and engineering thought. Quality has become a symbol of Japan's return to the community of world powers. The Japanese did not look for symbols among historical figures, monuments, nature or creative achievements, they were not tormented by the search for a national idea. They closed their future on quality and won for a decade and a half, squeezing the most technologically sophisticated sectors of the market - automotive, electronics and, to some extent, textiles. Japanese managers understood quality in two ways:

first, as the quality of the production of goods;

secondly, as a qualitative organization of their implementation, including the functional provision of durable goods.

In Japan, in pursuit of competitors, the end of the two millennium was associated with a national movement for the quality of everything created in the country.

Correctly understanding that the problem of quality is the least technical, so one should start with the philosophy of quality, moving steadily towards the scientific development of the concept of quality, then to its technical Express, and then to the consumption and use of a quality product, Japanese scientists won the competition from the world's giants. Standardization and technical regulation in Japan

were defined not instead of or next to quality, but after quality, as products of the development of the doctrine of production quality and the importance of a quality economy for improving the structure of national consumption and achieving the authority of Japanese manufacturers in the world.

"Quality", as well as "quantity", "measure", are universal philosophical categories for characterizing the objective world, its knowledge by science and transformation in the practice of industrial, scientific, technical and social creativity. All other concepts used are derived from the understanding of the above categories developed in philosophy. It is wrong to identify them with the original concepts or present them as equivalent. They are the product of their concretization, so all derived concepts must meet certain requirements. There are two main ones: to be developed in the context of philosophical doctrine and to be concrete-subject-specific - in relation to basic concepts. Special concepts derived from such philosophical categories as "standard", "regulation", "technical measure", "technical task", etc., are appropriate as a necessary simplification of universal concepts, "binding" them to practical specifics. Their essential importance for the organization of industrial policy should not be in doubt. From the point of view of solving emerging problems directly at the workplace, they are the most effective tools. This, in particular, is taught by domestic experience - successful and not very successful - import substitution. However, one should always keep in mind the requirement of a systematic approach: particular problems are successfully solved in the light of the general context. There is no need to hope for the general as God, and it is impossible to replace the general with concrete experience. The texts of the Bible are indicative. They are written, first of all, not as an edification and an indication of a single solution, but as information for reflection in a certain direction. This standard should be a quality standard. There is a popular saying in the East: "No matter how much you hide donkey ears, they will still come out." Its meaning perfectly characterizes economic science. All attempts to separate economic theory from politics and replace political economy with "pure" economic theory are designed for the simple-minded citizen who is satisfied with his achievements and confident in his future. Academic economists, acting out of conviction or in accordance with political trends, are concerned with one thing - over time, the number of people satisfied with their recommendations decreases, and the mass of critical attitude increases. There is nothing non-political in economic theory; there is only something indirectly connected with politics and openly serving politics. Even the very course of economic thought is built in a political direction.

Take, for example, such an urgent and seemingly completely neutral problem as quality management. Everyone is interested in its optimal solution, with one invariant edit - everyone pulls the "blanket over himself", hoping to get the maximum. Therefore, in the foreseeable future, this problem will continue, and its relevance will only increase with the advent of high-quality products. All the real forces involved in production are concentrated in the quality of the product, and it has been and will remain a "bone of contention", just like the new "quality standardization" promised by economists. The most impressive thing is that it is unfair to blame the political regulators for the current situation, unless, of course, they act with an obvious steady shift in someone's direction, that is, unprofessionally. The goal of production is a product that makes a profit. Without profit, scientists and politicians teach, production cannot be sustainable, developing reproduction. And indeed it is. Only those who teach and manage with varying degrees of skill hide the quantitative certainty of quality. As a rule, qualitative certainty is obtained in the values of a given range of values. And now this measure is already beginning to work. Knowing the measure, a sense of proportion is the most important condition for effective management. There is also a certain freedom of variation within the measure, that is, the possibility of a certain expenditure of funds depending on the financial contribution. who teach and manage with varying degrees of skill, hide the quantitative certainty of quality. As a rule, qualitative certainty is obtained in the values of a given range of values. And now this measure is already beginning to work. Knowing the measure, a sense of proportion is the most important condition for effective management. There is also a certain freedom of variation within the measure, that is, the possibility of a certain expenditure of funds depending on the financial contribution. who teach and manage with varying degrees of skill, hide the quantitative certainty of quality. As a rule, qualitative certainty is obtained in the values of a given range of values. And now this measure is already beginning to work. Knowing the measure, a sense of proportion is the most important condition for effective management. There is also a certain freedom of variation within the measure, that is, the possibility of a certain expenditure of funds depending on the financial contribution.

Technical regulation, OST, GOST, ISO and all other systems, born of the desire to control the quality of goods, already raise questions about their diversity. The effect is calculated on the effect of the name, it is designed to inspire respect, especially when the name contains the authority of an industry, state, international organizations of specialists that are protected by the interests of consumers. The history of improving methods of product quality control is analyzed and advertised. Unfortunately, the well thought-out facade of quality control policy hides a slightly different content, due to the priority of political interests. When the rich invariably get richer

and the poor get poorer during the frequent crises of various etiologies and the stagnation that accompanies the recovery from the crisis, the middle class, which is a social pillar, is reduced.

It is considered bad manners to talk about the class character of economic policy, which is not modern. Modern history is an era of social partnership and globalization that requires mutual understanding. The world is tired of wars, revolutions and violence. Mankind deserves a way of life that corresponds to its reasonable status and the social orientation that has developed historically. Do not underestimate the psychological need for a better life and the hope of becoming a part of it not once, but in the real future. The psychological attitude can reduce the critical reaction of thinking, block the analytical approach. How much objective information is contained in advertising products? The question is clearly rhetorical. A business will be successful if the interests of business success are under the fifth margin. So it was at the dawn of capitalism and will continue until then. until the position of business in society and its reflection in the public consciousness change. K. Marx put forward and substantiated the idea of the basic position of the economy in social progress. Then everything was the same as always: Karl Marx did not leave his brain, but just an idea, a thought in a more or less systematic presentation. If he had added the same amount to the four volumes of "capital", then essentially nothing would have changed. Everyone has their own thinking head. The recognition of Karl Marx as right in the analysis of capitalism and the understanding of capitalism, as was the case with Karl Marx himself, are two very big differences. thought in a more or less systematic way. If he had added the same amount to the four volumes of "capital", then essentially nothing would have changed. Everyone has their own thinking head. The recognition of Karl Marx as right in the analysis of capitalism and the understanding of capitalism, as was the case with Karl Marx himself, are two very big differences. thought in a more or less systematic way. If he had added the same amount to the four volumes of "capital", then essentially nothing would have changed. Everyone has their own thinking head. The recognition of Karl Marx as right in the analysis of capitalism and the understanding of capitalism, as was the case with Karl Marx himself, are two very big differences.

The most serious error, noted by his ideological and closest friend F. Engels, to whom the world is indebted for deciphering the projects and texts of "capital" and preparing them for publication, is the so-called "economic materialism". It looks simplistic in the absolutization of the importance of the economic factor in social development. Society does not build its structure freely, guided by needs and in accordance with an abstract meaning. Real social creativity is determined by economic opportunities, which means that the reality of social reforms is of a concrete historical nature.

You can dream about anything and everything, but only those plans have a chance to come true that are able to withstand the economic foundation. However, we are not talking about a rigid and one-dimensional program of social transformations. There is a historical backlash in development and the possibility of realizing one of the social dominants - the social orientation of sustainable development (1) and betting on economic development, coupled with a focus on maximizing profits, allegedly necessary to create an acceleration of subsequent social progress. K. Marx wrote about the economic basis, and not about the economic foundation. The economic base, unlike the economic base, is mobile, and its mobility can be exploited. Question: in whose interests?

99.9 percent of the time of its existence, mankind did not think about any socially significant systems for controlling the quality of goods. There were no goods themselves, production and consumption were connected within the boundaries of a single whole. I ate, dressed and put on what I had prepared. The quality control was in perfect shape, it was limited to the manufacturer who had the maximum family scale. During this time, decisive events took place in the fate of man: the ascent to the top of homo sapiens; proof of viability in the process of natural selection; Creation of a cultural environment and cultural self-development; finding the stability of social progress. Human history can be compared to weaving. It also combines two types of movement - warp and duck. The warp is the structure, the weft is the forward resistance. Only knowing the history of mankind as a complex and contradictory process, an individual can become an optimist. Our misfortune, like donkey's ears, came out in the 1990s and, to some extent, in subsequent decades. Its essence is that we snatch individual periods from history and take upon ourselves the right to judge everything by them. No one can judge history, and it is perfectly reasonable to draw historical lessons from history in the form of "information for thought."

Progress in agricultural production was due to the knowledge and improvement of technical means. The success of the use of technology in the processing of agricultural products, the growing need for construction, transport and the arrangement of everyday culture stimulated handicraft activities. Someone could do a great job on their own, like X. Huygens, who developed the pendulum clock, because he was both a great mechanic and an outstanding mathematician. In the Renaissance, there were many lonely masters, and they moved the technical side of production progress, relying on scientific knowledge. However, they could not move production, they needed those who, with intelligence and production ingenuity, turned unique things into series.

The objective regularity of the development of production splits the Creator and the master, raising the issue of ensuring the quality of product reproduction. There is a version of the conversation between Huygens and the King of France, to whom he presented the constructed watch. The king asked the mechanical scientist: "How long will he enjoy the gift and how accurately will the clock show the time?": "This watch will serve your successors. - What kind of public quality control could you judge if it was about your professional reputation The mark of the craftsman meant at the level to be a master or not to be.The quality was identical to the business, and the craftsmen put everything they could into the product.

The problem of product quality and the need to control product quality in the interests of consumers began to appear at the end of the late Middle Ages, closer to the XII-XIII centuries. The number of masters grew, and with the increase in the mass of marketable products, the difference between the masters also became more and more relevant. A person is unique in everything - in feelings, skills, needs, interests, attitude to his mentality. Differences between people are reflected in activities and their products. In addition, the growth of production in connection with the formation of a stable market with transnational, trans-regional elements implies a comparison of products in terms of their quality. It was necessary to develop general mandatory requirements for manufacturers. In turn, manufacturers have realized the benefits of combined actions.

In the most economically developed countries of Western Europe - Italy, France, England, Germany in the XII century there were associations of artisans by profession - workshops. Workshops mainly worked where there was a demand for their products - in cities, some of which had state status. It was convenient for everyone. Some had the opportunity to learn from experience, to bring their work to perfection, others received control over the activities of organizations that produce goods, and still others received certain guarantees that they would purchase a quality product. Guilds quickly multiplied and strengthened their positions, both in the market and in society.

In most European cities there were workshops of blacksmiths, gunsmiths, weavers, cloth makers, bakers, and carpenters. Later they were joined by guild organizations of brewers, winemakers and manufacturers of leather goods. Each store had to have a charter agreed with the city authorities, a coat of arms, a seal and a cash receipt. The charters prescribed the working conditions of masters, apprentices, requirements for the quality of raw materials, production technology, conditions for the acquisition of raw materials, organization of marketing of products, and even apprenticeship conditions. In fact, it is from the organization of workshops that the time of public control over the quality of the production of public goods can be counted.

The transformation of seasonal fairs into sustainable markets has led to an increase in demand, and demand has led to growth and diversification of supply. The increase in the number of manufacturers required greater control over the quality of manufactured products. Local authorities have taken control of a number of key parameters of store operations, and the state has also joined the local authorities. History has not yet matured to state standards, And the Gostov story, one might say, began with the charters of workshops. Technical regulation began with the organization of workshop production, and at that time it was really effective, as it coincided with the main interests of all market participants, including local governments. Ordering in the store was the best guarantee of quality, so self-control could then be counted on. Employees watched each other and each of them began with himself, realizing the high cost of violating the rules of work defined by the Charter. Of course, the knowledge of the late Middle Ages, the Renaissance and the Modern Age, which replaced the Renaissance, is difficult to compare with the achievements of the 20th and 21st centuries. In those eras, the birth of modern scientific knowledge began, scientific knowledge was intertwined with religious dogmas, myths and ordinary knowledge of "common sense". The statutory canons of the guilds reflected the peculiarities of that time, the prevailing worldview, they were, as we now believe, imperfect. At the same time, they were not pressured by the specifics of the capitalism of the developed period, sharpened by margin at any cost. They included a sincere desire by the manufacturer and the regulator to secure the consumer's legal rights to a quality product at its real price. The consumer was protected from the arbitrariness of the producer to the maximum extent possible, cognitive, technological, hygienic, aesthetic. And in this regard, objectivity dominated market relations. Apparently, even then there were some attempts to deceive, but they only confirmed the assessment of the possibility of quality control by determining technical and technological regulations.

The history of standardization was a continuation of the policy of regulation of shop activities. The initial technical regulation fully corresponded to the level of development of economic institutions. The workshop workers were not organized into associations to combine the production and release of the same product. Product standardization was carried out with an eye on the quality of the product. The basis of production still remained "secrets of the company", "know-how" developed in the depths of family histories, carefully guarded technological recipes.

In Western Europe, the guild organization of production activity has long sunk into oblivion, and popular consumer goods, in particular beer, wine,

tobacco, some types of shoes, clothes, some fruits and vegetables, retain the stamp of those guild times. Consumers give preference to them, regardless of the volume of supply in the market.

The market masquerade might have surprised us Russians at the end of the 20th century, when consumer goods from the West and the East flooded the country; they carried everything that was not in demand locally. Who then remembered quality and quality control tools, and if they did, their memory and brains would have been beaten out by brisk reformers. During the period of "shock therapy" it is appropriate to think not about quality, but about how to survive with the hope that life will be better in the future. Europeans and Ropatis do not respond well to various goods, most of them are conservative, educated and traditional family preferences. Conservatism has a healthy start; conservatives do not risk being tempted by innovation. They believe in experience, and experience justifies their choice due to the time-tested quality of the product. Naturally, being a conservative is not cheap, but European conservatives are also not from the poor part of society. In this discussion, we are more interested not in the moral side of the issue, but in the organizational side, in particular, the question of the possibilities and limits of norms in the regulation of production. Specialists who think and are aware of the measure of their own responsibility for the invention understand that standardization, no matter how perfect it may be, will remain conditional, expressing the objective and subjective circumstances of the action - a specific historical reality. Standardization is a systemic phenomenon, and at the same time, it is an integral part of the overall political and economic system. It must have an air conditioning system, both internal and external. It is naive to believe that standardization develops in the interests of all in the same way, namely: In this discussion, we are more interested not in the moral side of the issue, but in the organizational side, in particular, the question of the possibilities and limits of norms in the regulation of production. Specialists who think and are aware of the measure of their own responsibility for the invention understand that standardization, no matter how perfect it may be, will remain conditional, expressing the objective and subjective circumstances of the action - a specific historical reality. Standardization is a systemic phenomenon, and at the same time, it is an integral part of the overall political and economic system. It must have an air conditioning system, both internal and external. 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It must have an air conditioning system, both internal and external. It is naive to believe that standardization develops in the interests of all in the same way, namely:

First, anyone who has sufficient financial resources for freedom of choice does not need to standardize most of the required products. They are in direct contact with reliable manufacturers;

secondly, the standards have long been defined by non-manufacturers, which does not mean objectivity, as we want to convince us.

The most democratic government and the most impartial organizations empowered to develop

standards are not as objective as they might seem. This policy will lose its effectiveness if it refuses to participate in such a case without its own interest. Politics is driven by the economy and serves the economy.

In standard systems, the objectivity of the calculation bases is determined by the minimum values. Otherwise, production will sag and a crisis will set in, or prices on the market will so much exceed the real possibilities of chasing buyers due to increased costs for producers that the market will freeze.

In domestic elite supermarkets, the fabulous wealth of the assortment is not at all explained by the whims of gourmets. The reason for this is directly opposite to the low level of solvent demand of the mass buyer. By and large, with their wallet there is nothing to choose from. A set of mass buyers does not yet require an assortment. At the same time, refer to standard sets of products made to minimum standards to make it cheaper. SanPiNs are a wonderful thing, but they are not only because of the dangers of excess for health. They contain the time of action, socio-cultural, economic and political factors. Let those who do not believe in this monitor SanPiNs, compare and see the results of their use.

The high values of subjectivity in the definition of standards can be judged by the standardization of time. "Standard time" is the official local time for a country or region. A region can be part of a country, and conversely, a number of countries can form a common region. There is one invariant feature in the definition of standard time: it must be the same for all points on the same meridian. Local mean solar time depends on longitude; it increases towards the east with every degree by 4 minutes. The earth is divided into 24 standard time zones, each of which is ≈15° longitude. It is here that the administrative initiative of local authorities is manifested. The boundaries of the zones are determined by them and in many cases deviate significantly from the standard 15°, which should not be qualified as arbitrary. These costs are associated with administrative departments and production activities. Time in different (adjacent) zones is divided into 1 hour, and minutes and seconds do not change. Standardization is associated with limitations, therefore, personal and public perception of standards is formed against a worldview background, which is very important for the functioning of standards. The worldview that dominates historical time serves in different ways. It can be "black soil", fertile soil - stick a branch and have no doubt - it will take root, but the worldview can also slow down when, rolled under the absolutization of freedoms by liberals, it forms a militant attitude towards any restrictions. Standardization is associated with limitations, therefore, personal and public perception of standards is formed against a worldview background, which is very important for the functioning of standards. The worldview that dominates historical time serves in different ways. It can be "black soil", fertile soil - stick a branch and have no doubt - it will take root, but the worldview can also slow down when, rolled under the absolutization of freedoms by liberals, it forms a militant attitude towards any restrictions.

The easiest way to implement standards in practice was in the Middle Ages. Mythology and religion are reflected in various kinds of prohibitions and taboos. The medieval mind was calm about restrictions and understood their necessity. Restrictions were introduced into the statutory norms of handicraft workshops not so much to simplify technology and make production more manufacturable, but to preserve the developed concept of production, preserve it and promote continuity in the development of production.

The store was primarily interested in the quality of its products. The regulator tried more to ensure that innovations were not introduced into production that could worsen the result under various pretexts. This became especially relevant with the growth of production and the division of labor. Increased labor productivity often threatened the quality of the product. The negative scenario in the development of production was held back by the traditions of shop activities. The history of the store emphasized its socio-economic position - "Association, company". At the beginning of the seminar, class associations were presented, emphasizing the special position in society of the persons who are members of the seminar. The development of the Middle Ages was expressed in a change in the social status of the store.

We have a general simplified idea of master classes. In fact, due to their social origins, shopkeepers tended to be culturally shaped individuals with relevant knowledge and skills. The conditions for organizing the workshop required a high level of creative attitude to work. Becoming a member of the Guild Association was not easy. For example, artists were included in the doctors and pharmacists shop as junior members because they used paints that were prepared as medicines in pharmacies. Sculptors worked in a common workshop with masons, masons, and carpenters. Under the terms of the Charter, which regulated relations, the master could be a member of only one workshop, but most of the masters sought to master different crafts. The owner of a large workshop, Florentine L. Ghiberti, fulfilling orders for

bronze casting, chasing and jewelry, was a sculptor, jeweler, foundry worker, draftsman and painter. Outstanding representatives of the Italian Renaissance studied in his Bottega (workshop): Donatello, Michelozzo, Uccello, Filarete, Finichuerra. To receive the title of master, apprentices had to complete their own training in an approved pattern at the end of the training period. The fact that the name of the work for the title of master was "masterpiece" can be judged by the qualifications of the performer. apprentices were required to complete their own training in an approved pattern at the end of the training period. The fact that the name of the work for the title of master was "masterpiece" can be judged by the qualifications of the performer. apprentices were required to complete their own training in an approved pattern at the end of the training period. The fact that the name of the work for the title of master was "masterpiece" can be judged by the qualifications of the performer.

On the one hand, it was not easy to standardize workshop production, since it was about high performing skills and traditions that were formed on the basis of respect for the cause you serve. On the other hand, it is not difficult, because the standards were produced by shop workers, there could not be any random people in the shop, the organization did not allow this.

In the bowels of the standardization of workshop production, two trends have developed: the first is the deepening, tightening of requirements for the organization of production and the quality of goods; the second is the expansion of requirements, which ultimately led to a change in the workshop organization of production to large-scale production of marketable products. Factories have replaced workshops. The main reasons for the decline of the guild organization of production and the change from guilds to manufactories are to be found in politics and economics. In the 16th and 17th centuries, centripetal processes intensified in Europe, the main states were formed in their modern form, wealth was concentrated. Along with capital, the needs of those in power also grew.

Huge incomes were provided by the colonies, which also provided unique materials for construction and decoration. Luxury has become a symbol of power. The workshops guaranteed the highest quality and, in turn, did not require much effort and money to control the quality of the work. However, in the new scale of the number of goods, the desire to have everything as quickly as possible, the stores were clearly losing. It's time to modernize the organization of economic activity.

Production, from a technical and technological point of view, did not differ significantly from workshops, but quantity is associated with a change in quality - this is the law of development. Quantity in itself, of course, does not pass into quality; it creates, by increasing or decreasing, the conditions under which an existing quality loses its qualitative status. Additional measures are needed to maintain the quality characteristics of the product.

The size of the workshops, despite the variety of work performed, remained limited. And only on this scale did they satisfy the demand. However, such a clear increase in demand, as happened at the very beginning of the new time, the workshops could not provide. At the same time, at the end of the 16th and beginning of the 17th centuries, the technical prerequisites for the industrial revolution had not yet taken shape. The most painful was the question of the source of energy for production work. They did not know how to use the energy of the sun, and the strength of wind and water did not differ significantly. You couldn't command the wind, and the water, especially in Central and Northern Europe, was icy. The interest of science and technology in steam power, which began long before the New Age, did not yet promise the desired results.

The manufactory had to provide the necessary volume of assortment as quickly as possible without technical and technological re-equipment. It is not surprising that the formation of manufactories took place not only on the basis of shop production, but also with the preservation of basically the same working conditions. Perhaps someone understood the auxiliary role of manufacture, its historical uselessness, but such an understanding of actual history was of little help. When a society does not have a fundamental recipe for solving a problem, it always looks for a solution in what is already there, trying to stay in motion until the desired solution is found.

Manufactory emerged as a new dimension to old factories. The workshop has ceased to be quantitative - but in terms of performers, technical and technological equipment, the quantity of products produced, their inherent internal mechanisms for organizing quality activities have lost their strength. Workshops have exhausted their quality reserves, focusing on the limited demand for manufactured goods. Manufactories, of course, for a certain time retained their quality thanks to the achievements of workshop practice, but the growth in the production of goods inevitably reduced the quality of the products. The solution to the problem has come: divide the quality into ranks. It was a kind of knightly move. Preferred customers could expect high quality, while others received inferior quality products. And here the need for intervention in the affairs of producers by an external regulator became actual. It's time to standardize the new order. The standardization function has evolved.

Public standardization duplicated the main one, which is spelled out in shop charters. The artificial form of production has outgrown the potential for self-regulation and necessitated the intervention of quality control by external production, not formally, but in fact. The workshops regulated production cycles,

established production rules, work schedules and distributed orders, controlling the quality of products. Manufactories in terms of production could no longer rely on the internal system of organization.

Large manufactories originated in the south of Europe, first in Italy, then in France. They arose on the initiative of the ducal courts located in the same places, in the neighborhood. Mostly manufactories produced expensive products: tapestries, furniture, dishes, jewelry. The products of manufactories were basically akin to works of art. An example of this is the first European furniture factories in Vicomte (1658) and Paris (1662), which served the needs of the Bourbons. At the turn of the 17th-18th centuries tapestry, bronze casting and phase manufactories were added to them. In 1710, a manufactory was built in Meissen, which produced the famous Meissen porcelain. The absence of machines and conveyors in factories made the quantity and quality of products dependent on the quality and quantity of manual labor.

As for quality, it was not difficult to gather qualified shop workers in one place. Quantity was more difficult. There were few such masters, and orders had to be followed. The order of workshop training of craftsmen was violated. As a result, it was necessary to strengthen the control function on the part of state institutions, taking into account the highest state status of consumers of products. The quality had to match their position.

Workshops and manufactories had a common essence, but the scale of its expression in the phenomenon distinguished them from each other. Both in the workshops and in the manufactories, masters of their craft worked; the work was mostly manual, but providing manual labor; the performer knew the fate of his product and it is unlikely that he was upset. The products of workshops and manufactories adorned the best buildings and their interiors, causing constant public delight. The time of expressiveness of alienation in the work of the performer's personality has not yet come, although the process of alienation with the growth of production went on as usual. In order for the essence of alienation to become obvious, it was necessary to carry out the division of labor within production at the microeconomic level. Under the pressure of technology, manual labor has become obsolete. At the same time, the master's attitude to work changed.

"Skill", like any concept, evolves. In the workshop, the master created a masterpiece, a unique work, and realized that he objectified his feelings, thoughts and skills in it. In manufactories, the attitude of the master to the product has changed. They retained the creative principle, but it was with the expansion of the scale of production that it became dependent on the quantity of products produced. Quantity burdened quality and reduced interest in creativity. Creativity turned out to be subordinate to production plans. The responsibility of the artist, the creator has retreated from its former dominant position.

The original idea of standardization was formed during the period of the latent form of the Aliencia phenomenon in the creative abilities of the performer of works. The art of the master still felt free, and the continuity of creative work removed the contradictions of production. The master alienated the product, but among the feelings that accompanied this alienation, there was no sense of social injustice. The product was created for consumption by others, for which the master received a reward, part of which was the opportunity to further reveal his creative potential by working in a workshop or factory.

The standards were not intended to unify the product, its parts, production conditions and technical structure. Their goal was to preserve the achieved creative results. In the standards of the period of shop and factory organization of production, the interests of producers, consumers and regulators coincided, which led to the effectiveness of their actions and insignificant maintenance costs.

Authoritative reference publications omit the presented part of the history of standardization, clearly believing that it has nothing to do with standardization. This interpretation can only be accepted if we return to the Aristotelian approach to concepts. After Hegel established the historicism of concepts, such a retreat looks like a very unfortunate step into the past. In the theory of art, the "standard" is identified with the "stereotype" - a form that is repeated without changes, regardless of conditions (the English standard is "accepted", "approved"). "A stereotype," writes V. Vlasov, "is an artificial entity, therefore it differs both from the archetype and from creative thinking.By restricting creative participation in production, the statutes of workshops and manufactories did not infringe on creativity as a creative force. The regulation was aimed at protecting the quality of products that conform to this model. The problem of reference samples was solved organically. In those areas where it was necessary to improve the quality of products already recognized as quality, it was allowed to develop new standards.

The organizers were forced to turn in the literal sense of the word in search of a rational solution to the contradiction between conservatism in production and the need to move on. The brewers had more conservatism, and the craftsmen who made shoes, harnesses and saddles had less. No matter how slowly life flowed in the Middle Ages, along with it there was movement and change. There are new materials that have different flavors. All significant changes in public attitudes and views had to be tracked and reflected in the products of production.

The fact that until the 18th century a slightly different idea was put into the content of the concepts "standard", "standardization" is not a sufficient reason for conducting an audit aimed at denying the relevant

policy. Standardization has its roots in the medieval period by the time I learned the history of the mobile teams of artisans. The form acquired a fixed appearance, was expanded and eventually converted into shops. The workshops strengthened the position of the creative component of production in the commodity market and thus made it necessary to exercise control over creativity so that the desire for the new did not damage the traditions of quality production.

Genius and control are incompatible, but workshops, like manufactory, were forms of relatively mass production, for which the stability of the assortment and the quality of the products were especially important. Workshops and manufactories were part of public life and in this status required constant monitoring of their activities. Control, taking into account the specifics of workshop and manufactory production. The skill does not need special care. Folk wisdom says: "to teach the master, only to harm the cause", but in the production of approved samples, a strict order is required, which was subject to the standard approach. The certificate has been received, please act in accordance with the regulations. Standardization was more like regulation, but it was not something that did not fit into the understanding of standardization.

We have a classic demonstration, on the one hand, of the connection between essence and phenomenon, and on the other hand, a misunderstanding of the historicity of the phenomena of social development. "... Nowhere: neither in heaven, nor on earth, nor in the spiritual world, nor in the world of nature is there that abstract "either or" that is affirmed by reason," explained Hegel. Everything that exists anywhere is something concrete and therefore something in itself different and opposite. The finiteness of things consists in the fact that their immediate existence does not correspond to what they are in themselves.

Homo sapiens have two types of thinking: rational and irrational. This division is introduced by Hegel in his own linguistic manner. F. Engels translated Hegel's thoughts and expressed them in a language understandable to non-philosophers who prefer to choose and use simpler and more practical thinking, referring to "common sense", which serves as a navigator in knowledge. “A sound human mind,” wrote Engels, a very respectable comrade within the four walls of his home, “experiences the most amazing adventures as soon as he ventures into the wide expanses of research. The metaphysical (common sense) way of understanding, although it is legitimate and even necessary in certain areas, more or less extensive, depending on the nature of the subject, but sooner or later each time reaches the limit.

To make our thinking clear, we refer to another authoritative source, the Encyclopedia Britannica: "Standardization, in industry, the development and application of standards that allow the production of a large number of interchangeable parts. Standardization can be focused on design standards such as material properties, their conformity and tolerances, requirements for the implementation of drawings or product standards that detail the properties of manufactured products and are embodied in formulas, descriptions, images or models ... ". We turned to Britannice because its materials are actively used by other information publications.

The author of an article in Britannice magazine summarizes the understanding of standardization in our time. When reissued, Britannica will be modernized. Without much mental effort, you can highlight the basic concepts: the essence and purpose of standardization. We have already written about the essence of standardization, that is, about its social significance. Standards and control over their observance are the most important conditions for the socialization of production. Production exists as a way to satisfy social needs. The function of the state, no matter how liberal economists demand absolute freedom of producers from political control, has always been to stimulate production, to act not only in their own interests.

The class nature of power does not mean that it openly and directly defends the interests of the ruling class in the economy. Democracy is a historically polished mechanism of the political activity of the state, creating the impression of its neutrality. Politics is the art of lobbying for certain economic interests. Standardization is one of the technologies of such a policy. British founders of modern European democracy. They have long mastered the technology of political participation in public life. Representing standardization from a purely industrial side, the British experts are clearly disingenuous. All that can be learned by reading the article by Britanis is the truth, there is no guile here. It stands behind the text, it was simply not included, either because it was considered unnecessary or inappropriate.

"Standard" is the basic concept of standardization, a concept not so much of a technical and technological order as of political economy. Having abandoned political economy, replacing political economy with macro- and microeconomics, descending to economics, one should try to recall the history of economic science and its philosophical roots as little as possible. Saint-Simon, G. Spencer, J. Saint-Mille, economic theory developed in a broad socio-political and historical context. Before becoming a technical and technological concept, the concept of "standard" was intended to regulate a certain level of product quality. And then he had technical characteristics, but they also had an auxiliary value. Without historical analysis it is impossible to understand the essence of the main categories.

The tools for managing economic phenomena, depending on their scale and pre-metric certainty, may

be within the limits of economic and industrial competence or have a socio-economic scale of action. The second option requires their analysis already within the boundaries of social development, as a factor of social progress.

Standardization from the very beginning belongs to the second type of management. Moreover, it was in the early days that his social goal was especially noticeable and manifested itself both as a class and as a general one. Norms for brewing beer, making wine, household items, clothes and shoes were calculated for public consumption and were a kind of protection of the interests of the general population. The production of furniture, jewelry was mainly addressed to the upper class.

In both cases, we see the participation of state and municipal authorities in protecting the interests of consumers by forcing manufacturers to do their job effectively. The standard was taken as a quality criterion. However, in the initial standardization, it is easy to discern the lack of petty concern for manufacturers, which is explained not by the sentimental approach of the regulator, but by the quality of craftsmanship and professional responsibility of manufacturers. Recall that even in factories, production has not yet reached the level of mass action. The essence of standardization was determined from the very beginning of its history - to develop a mechanism for neutralizing the opposing interests of the manufacturer and consumer. There was a spontaneous search for means to extinguish the growing process of alienation of the individual in work. Hegel is right when he says that essence is abstract and manifests itself in experience not by itself, but through phenomena conditioned by a specific historical environment. During its inception, standardization was directly related to the qualitative certainty of the result of the labor product. In the absence of an internal division of labor, the greatest efficiency was achieved in the final expression of the process. Standardization partially regulated the production process itself, but preference was given to centripetal forces - it was necessary to guarantee the quality of the result. The qualitative side of measuring production efficiency was relegated to the background, given at the mercy of the manufacturer himself. The controller regulated the quality of the result obtained through the quality of the products. During its inception, standardization was directly related to the qualitative certainty of the result of the labor product. In the absence of an internal division of labor, the greatest efficiency was achieved in the final expression of the process. Standardization partially regulated the production process itself, but preference was given to centripetal forces - it was necessary to guarantee the quality of the result. The qualitative side of measuring production efficiency was relegated to the background, given at the mercy of the manufacturer himself. The controller regulated the quality of the result obtained through the quality of the products. During its inception, standardization was directly related to the qualitative certainty of the result of the labor product. In the absence of an internal division of labor, the greatest efficiency was achieved in the final expression of the process. Standardization partially regulated the production process itself, but preference was given to centripetal forces - it was necessary to guarantee the quality of the result. The qualitative side of measuring production efficiency was relegated to the background, given at the mercy of the manufacturer himself. The controller regulated the quality of the result obtained through the quality of the products. In the absence of an internal division of labor, the greatest efficiency was achieved in the final expression of the process. Standardization partially regulated the production process itself, but preference was given to centripetal forces - it was necessary to guarantee the quality of the result. The qualitative side of measuring production efficiency was relegated to the background, given at the mercy of the manufacturer himself. The controller regulated the quality of the result obtained through the quality of the products. In the absence of an internal division of labor, the greatest efficiency was achieved in the final expression of the process. Standardization partially regulated the production process itself, but preference was given to centripetal forces - it was necessary to guarantee the quality of the result. The qualitative side of measuring production efficiency was relegated to the background, given at the mercy of the manufacturer himself. The controller regulated the quality of the result obtained through the quality of the products.

The interpretation of production efficiency also corresponded to the historical and economic situation. Such a concept did not yet exist, it only matured. Efficiency became vital to many of the same postures as production progressed to mass production of goods. Competition for product quality has been replaced by competition for production costs. Manufactories did not increase the quantity of goods produced so much that the cost of production came to the fore. As for the competition of technologies, they are unlikely to be meaningful. Differences in technology naturally took place, but within the boundaries of a common manual form of production, where advantages could be obtained through higher skills and better organization, time savings, perhaps somewhere through the successful use of logistical alignment.

Manufacturers temporarily solved the problem of meeting the increased demand for products, but production has not yet grown to the level of efficiency measurement. Product quality remained relevant, and quality guaranteed high rewards. Since in most cases the goods were made to order, the competition was latent.

The need for standardization, potentially inherent in the development of production, was

revealed gradually, in proportion to the state of production. Its abstract form was filled with concrete content. The process of becoming a standard was similar to the work of a master tailor, who first took measurements in the absence of any material signs of a future product, made the first adjustment of something that was not very clear to the customer, and only at the end showed a product that embodied the specificity of the image. It was also the process of ascending the original goal of standardization to its concreteness, which is recorded by modern scientific and information sources. The functions of standardization have changed, and its content as a tool for managing economic activity has also changed.

Standardization as one of the main methods of economic policy has moved from the quality of the final product to the production of a product that ensures its quality. The wind in the sails of standardization blew from another important concept of political economy—the efficiency of production. While efficiency was determined by customer satisfaction with quality and price, standardization drove quality. Standardization was based on the regulation of the parameters of its production technology. The ball was ruled by product samples, agreed upon by manufacturers' associations with regulators. The situation was quite balanced, but its stability was determined by the technological specifics of production.

Progress allows stagnation within certain limits. Just as there are vast territories in the mountains, so in the history of production - areas of active professional activity - there is a lull in motion. They are natural, as they correspond to the social condition as a whole. The Middle Ages was not a sleepy kingdom, as it is portrayed in school textbooks, it simply reproduced itself equidistant, without jumps. At that time, mankind was gaining energy of action, creating approaches to obtaining critical values of impulse energy in various fields of activity. The peculiarity was that in the public life of Europe and not only religion prevailed, but in the political - absolute monarchies, carefully protecting the movement from any restructuring. The public consciousness was dominated by a sense of satisfaction with the success achieved, forced to endure troublemakers within the incremental vector created by religion. No faith can become an insurmountable barrier to social progress. However, when this happened, changes occurred in the religion itself. Christianity entered the Middle Ages as a single faith and came out like an unfolded fan.

The peculiarity of the Middle Ages also affected the subsequent development of history. New Time (XVII-XIX) could not come immediately after the Middle Ages. It was a transitional historical stage - "Renaissance". It was necessary to clear the socio-cultural and political conditions for the free and independent movement of scientific knowledge, the methodology of scientific knowledge, education and technological progress.

In the XVII-XVIII centuries, the development of scientific knowledge got out of the control of the church. By this time, the formation of science as an independent field of culture is being completed. In Europe, there are associations of scientists, science management bodies. Scientific knowledge is transformed into technical creativity on a new scale. The engineer becomes a "scientific builder". Technological progress is the displacement of manual labor. The factory replaces the manufactory - it is a new way of organizing production and labor. Production becomes mass, so it becomes more affordable. Availability requires a different quality. The quality of the mass product comes to the fore. It should be and be inexpensive. The place of the named consumer is replaced by X with the consumer, which can be anyone. Old quality control capabilities are being squeezed by new tasks.

In Russia, there was a saying: "cheap and cheerful." Young people are unlikely to understand its essence, so let's explain: a product does not have to be expensive to be in demand, but not every product will be in demand, but only one that has signs of quality product. In our time, the saying has been given a modern form of expression: "a quality product - at a reasonable price."

The change in the nature of production has led to a change in the philosophy of standardization. The standardization of product quality by result has been replaced by the standardization of producing a quality product. The "synthetic idea" of sample control has disappeared, the "analytical idea" has come: all products and the product itself are decomposed into components - nodes, parts, operations to the last screw, seam, nut, forced movement and take everything under control. Minimize differences and maximize versatility. Such for masters of workshops and manufactories could not dream even in the most terrible dream.

Craftsmanship is closed to originality, it is unique. Even the master himself cannot fully decompose the process of making his product. Creativity begins only with a common set of tools, actions and order, but it manifests itself in the fact that it is impossible to build a "constructor" from a set. The mind operates according to logic, so there is a possibility and need for rationalization. The innovator does not invent, his thought is aimed at bringing the invention to its latent perfection. The mind, and only the mind, jumps from the known to the unknown. It contains the creative power of man. Hence the name of the species - "sapiens". Both production and factory production combine creativity with rationality, but they do it in different ways. Workshops were created first. The master was the creator, the student, and the disciples provided the conditions for the manifestation of the inspiration of the master. At the manufacturing

plant, the foreman is the organizer of the work on the manufacture of the approved sample, essentially the head of the assembly operation of the product or, if it is especially complex, of its individual parts. Creativity and production are separated so that there is no temptation to deviate from the planned and controlled order. And in this order, you do not need to use unreason, on the contrary, only by following a rationally divided and fixed order can you maintain the pace of production when it is massive. The power of mass production lies in the availability of goods to a wide range of consumers. And not a single state will deviate from the philosophy of meeting mass needs. Quality here is the price for mass production, which all participants in the process have to pay.

The history of mass production shows how a solution to the problem of quantitative quality was sought. This history is not a series of events and actions, but, above all, the logic of resolving contradictions, inscribed in the historical process, in the history of economic policy, which should be perceived as the highest school of economics. By going through the historical experience in your mind, you can avoid both romanticism and liberal illusions in the management of economic activity.

The beginning of the studied history confirmed the natural nature of the development of economic progress. History began where production was more mature, the importance of science and technical creativity was more in demand, and the political situation in England was more democratic. In this regard, we once again call on the help of Britain: the "industrial revolution", the process of transition from an agrarian economy to an industrial one based on machine production. It started in England in the 18th century. Technical changes included the use of iron and steel, new energy resources, the invention of new machines to increase output, including the Jenny spinning machine, the development of the factory system, and important inventions in transportation and communications, including the steam engine and the telegraph)... The Industrial Revolution mainly took place in England from 1760 to 1830, then spread to Belgium and France. Other countries fell behind temporarily, but as Germany, the United States, and Japan built up a powerful industrial base, they surpassed England's initial success. The countries of Eastern Europe lagged behind in their development until the beginning of the 20th century.

Description of the industrial revolution, apparently, was prepared with the mass consumer of information services in mind and is perceived, from a professional point of view, critically. There is no significant assessment of economic development, and the beginning - the transformation of England from an agrarian country into an industrial one - looks somewhat strange. England for a long time relied on her own agrarian foundation, in which the transition to industrial foundations did not occur without complications, as in industrial production, it is enough to recall the well-known test movement of the "Ludites". At the same time, we can trace the historical path of the industrial revolution in Europe and beyond.

We are only interested in what the author did not say, relying on professional logic and authenticity. The Industrial Revolution led to the massive scale of production and the need for a division of labor in the depth of technological progress. Mastery was replaced by performing discipline, and the internal motivation of the master gave way to external motivation. The Industrial Revolution led to an economic revolution. The mode of production has changed, from the source of strength and intrinsic motivation in achieving product quality to the priority in the new mode of production of the technical division of labor. The organization of production is steadily becoming a leader in economic theory and practice of business management. The art of the master was replaced by the art of the dispatcher, the importance of technological discipline, the ability to count and read.

The period of economic history following the Industrial Revolution is usually divided into two phases. At the first stage, the mass production of the classic model began. We call it classicism to emphasize the uniqueness of the stage of maturity. Maturity as a stage of development, regardless of what exactly has reached it, is characterized by the transparency of the essence. The essence emerges from the shadow of the phenomena that hide it, reveals itself almost as it really is. All the most perfect, the best is presented at the stage of maturity. At the same time, the disadvantages and costs of development look more contrasting.

At the zenith of the classics of mass production, his philosophy was formulated quite clearly and enticingly for the consumer: the buyer should save time on making a purchase, the store is not the best place for a responsible person to live, so this is how it is necessary to concentrate the assortment in one place as much as possible. We don't know who was the philosopher who helped economists define shopping because its anonymity is carefully guarded, but exclusivity was not a modern philosopher. The trade mission was presented methodologically flawed, without a systematic approach. The bait looked like a bait.

Economics can be separated from politics, but even the advocates of turning it into economics assume that it is about economics, not wastefulness. The implementation of the philosophy of product availability in one place involves unjustified either economically or environmentally huge costs. It was not possible to write them off, and they weighed heavily on the cost of goods, significantly raising the price and undermining the possibility of mass entry into the market.

The foundations of the philosophy of mass production were laid by the end of the 19th century by well-known specialists in the field of management: F. Taylor, A. Fayol, A. Sloan, Mr. Ford Jr. They also have initial experience in developing the theory of production management, in particular, the idea of the systemic value of quality management through the standardization process. In the 19th and the first half of the 20th century, the issues of humanizing the economy and protecting the natural conditions of social development were not included in the first line of relevance, therefore, they were usually ignored when solving production problems.

By the end of the second millennium, the situation had changed dramatically. Economic planning and design became dependent on higher level relationships. Solve the question of how to live on? Without an answer to the question: will there be life? It's illogical. Managers have thought about the historical logic of providing consumers with a "here and now" formula. B. S. Aleshin, L. N. Aleksandrovskaya, V. I. Kruglov, A. M. Sholom and many others opposed mass production with the type of production called "lean production" - lean, expensive production. Having decided that it will not be so massive, since the focus on marketing research can still remove an unnecessary burden on production, he will make production purposeful. It is not clear why they came to the conclusion.

Mass production did not initially become a brand, it merged with the essence of production. In the foreseeable future, production cannot be otherwise. Naturally, in parallel with mass production, handicraft and individual coexist - the heirs of workshops and manufactories, however, unlike their ancestors, who are not limited to hand tools in technology, but actively use scientific and technical products. "Smarter production" is a really good trend for a more adequate form of continuing mass production.

In its former form, mass production looks decidedly outdated in the twenty-first century. Among the global challenges: "energy saving", "resource saving", "concern for the state of the natural environment", "global warming", "protection from the destruction of the ozone layer", an economic philosophical strategy is being independently developed. What kind of humanism is this? The very participation of science and philosophy in the development of mass production, which, as has been repeatedly noted, was of paramount importance in social progress, made it possible to create hundreds of millions of jobs, increase purchasing power, force people to study, improve their skills, enjoy civilizational achievements, gain freedom in the national and transnational space, etc., this is undoubtedly was an important factor. But we should not forget that science and philosophy are initially perfect in comparison with existing knowledge - mythological, everyday. Their strength lies not in what they have already done, but in what they can do if they are not allowed to. Pythagoras also explained that he is not a sage and is not omnipotent, his goal is to understand how wisdom works. The origins of economic science were outstanding representatives of philosophical thought, who were able to understand the essence of the issue and give a forecast of development within the limits of historical concreteness. They thoroughly understood the present, determined the nature of the future movement, developed scientific methodology and the philosophical foundations of scientific knowledge as a private search within the framework of the general. Their strength lies not in what they have already done, but in what they can do if they are not allowed to. Pythagoras also explained that he is not a sage and is not omnipotent, his goal is to understand how wisdom works. The origins of economic science were outstanding representatives of philosophical thought, who were able to understand the essence of the issue and give a forecast of development within the limits of historical concreteness. They thoroughly understood the present, determined the nature of the future movement, developed scientific methodology and the philosophical foundations of scientific knowledge as a private search within the framework of the general. Their strength lies not in what they have already done, but in what they can do if they are not allowed to. Pythagoras also explained that he is not a sage and is not omnipotent, his goal is to understand how wisdom works. The origins of economic science were outstanding representatives of philosophical thought, who were able to understand the essence of the issue and give a forecast of development within the limits of historical concreteness. They thoroughly understood the present, determined the nature of the future movement, developed scientific methodology and the philosophical foundations of scientific knowledge as a private search within the framework of the general. who managed to understand the essence of the issue and give a forecast of development within the limits of historical concreteness. They thoroughly understood the present, determined the nature of the future movement, developed scientific methodology and the philosophical foundations of scientific knowledge as a private search within the framework of the general. who managed to understand the essence of the issue and give a forecast of development within the limits of historical concreteness. They thoroughly understood the present, determined the nature of the future movement, developed scientific methodology and the philosophical foundations of scientific knowledge as a private search within the framework of the general.

Science and philosophy have no right to guess and seek the truth in the Holy Scriptures. Their job is to analyze what has grown. Much has grown in the nineteenth and twentieth centuries, but more has just

begun to grow. These sprouts have not been properly rated. The natural environment seemed like an endless repository for reflection. Dialectic could not be completed in time with a systematic approach.

"Zena production" is not an alternative to mass production, but only its next stage of improvement. The essence of a successful transition will remain the same, and the costs associated with excess will be reduced. Understanding the real essence of a "prudent, forgiving" economy is important for developing a sound economic policy.

The effectiveness of economic policy is primarily determined by how well the quality of existing production is assessed. It would seem that there is no need to update the apparent dependence, when everything should be clear to everyone without it. Let's be clear: evidence is a dangerous state of mind. In it, the essence of what is happening is often seen as a rod immersed in water. Even a mirror shows its character in the reflection, so what is the mind to do that thinks in the reflection?

Physical reflection is devoid of intention, and reflection in consciousness is a way of understanding, therefore, along with the object of reflection, the state of consciousness-experience, interest actively participates in reflection. An example is the categorical rejection of the bourgeois economic thought of the twentieth century from the political essence and even from the bourgeois orientation. At the dawn of capitalism, the term "bourgeois" was honorary. It reflected the revolutionary restructuring of the economy, social relations and the transition to democratic freedoms. Everything was clear - the time of the feudal social structure had exhausted its historical resource and was obliged, according to social progress, to give way to capitalism, a more perfect social structure. The concept of "bourgeois" has historically been included in the definition of the most effective "Great French bourgeois revolution". Then why, in the 21st century, do Russian liberals shamefully hide the term "bourgeois" in relation to determining the state of the economy and its reflection in economic science? The reference to the objectivity of scientific knowledge is inappropriate, since it is not science that is defined, but its object. Scientific knowledge and scientific methodology in this context strictly retain their objectivity. Science is applied to a historically concrete object and gives it a scientific understanding.

No one anywhere officially announced the end of bourgeois history. If this happened, then it would be necessary to open a new chapter of social progress, which was undertaken in 1917. This attempt was regarded as a historical arbitrariness, an illegal violation of the history of capitalism, which required the total nature of the social structure, the violation of individual rights, freedom of speech, etc. on.in a word, capitalism survived and did not go away. But try to find the term "bourgeois" in the democratic media and modern scientific journals in relation to the economy. What prevents this phenomenon from being named adequately? - Historical Logic.

History is a naturally developing process of changing phases (stages, formations, civilizations, eras, etc.). Capitalism replaced the feudal structure of society, the basis of which was the agricultural and handicraft type of economy, built on manual labor, a non-stationary commodity market, shop and factory organization of production. Management went through standardization, focused on the certification of the final product, and not on the production process. However perfect capitalism may be, its perfection is historically regulated. Sooner or later, contradictions will "eat up" his perfection, and he will give up his place.

And what will happen next? This still remains a mystery to science, but it is quite clear that for the bourgeoisie and those who support it, it is vital to reclassify the historical status of capitalism from concrete historical to non-historical, i.e., remove the problem of the future society, transfer it to the technical level of regulation including through standardization.

Betting on lean manufacturing is a knight's move. It is designed to show the humanitarian and environmental reserves of the bourgeois economy and draw attention to the need for a new development paradigm within the existing economic platform - the bourgeois mode of production. We cannot share the satisfaction with the transition to "rational production" by a number of authors of the late 20th and early 21st centuries, when research was carried out on various grants, including the Soros Foundation, and the products of science were presented in a technical spectrum free from ideological influence. In political economy there can be no freedom from politics. Dependence was in the period of socialist history, and it continues after. Self-determination of the state of the domestic economy as the most convenient course. What we are moving away from has become clear since 1991. Try to find out where we are moving, but we are going exactly there - into the bourgeois mode of production, without calling it technological industrialization, the digital economy. And we will be there in the end, so we must clearly understand that all technical decisions are of a political nature, it's just that in some cases it sticks out like donkey's ears, and somewhere it is hidden for mediation.

The bourgeois economy was born as an alternative to handicraft, industrial production, which could not be mass, but was technologically of very high quality. The quantitative leap was supposed to affect the quality, which forced the management to take a course to ensure acceptable product quality. The only possible vector here is the creation of standard conditions for obtaining high-quality products in bulk. The heterogeneity of mass demand has led to a wide

range of product quality, which is reflected even in the scale of national and transnational planning.

In Western European countries, products are labeled for consumers from the eastern part of the continent and specifically for Russia. Quality, as well as quality and standards, is largely determined by the political map. Standardization as a technique is indeed necessary and reasonable as an instrument of economic policy, but only outside the systemic understanding. From a systematic point of view, he has political ears that, like donkey ears, no matter how hard you hide, will come out.

Let's go back to the "efficient manufacturing" paradigm. At first glance, writes B. S. Aleshin and co-authors, it may seem that the whole point is the widespread introduction of the so-called "just in time" system, in which products are released only when they are needed for the next stage of the production process, and only in the amount needed for this. However, a closer look shows that it is not only about the organization of production within this system. It is necessary to rethink the logic and technology of production, which inevitably leads to a change in mentality or, as they often say now, to a change in the culture of the organization. In the first approximation, it seems that the metamorphosis of standardization is inevitable in the context of the development of efficient production. While RP exists only as a project.

If you think strictly logically, then the concept of "quality" is a specific philosophical category. In philosophy, it is the second in order, following the concept of being, and reveals the essence of being. In all non-philosophical reasoning, the quality changes, acquires a concrete-objective, very often sensuous-concrete certainty. Economics and industrial practice are no exception. The difference can be felt by comparing the understanding of quality in philosophy and beyond, focusing on the human explanation of what quality is. Quality, according to the famous German philosopher, is "what is lost, the object ceases to be combat." The philosopher is entitled to define quality in this way because he takes the object in its abstract form. In an abstract form, an object exists conditionally, therefore, the object also ceases to exist conditionally, taken in the system of philosophical abstractions. A product ceases to be a product only for the philosopher when it is devoid of consumer value. But who will organize the production of what no one needs? This can only happen in a lunatic asylum, not in a real production.

The definition of the quality of philosophical phenomena admits of a human formulation. Cause has one quality, effect another. Losing its quality, the consequence can become the cause of new changes. It does not disappear, but only transforms in accordance with the natural order of movement. Chance, devoid of quality, becomes a necessity; possibility becomes reality or impossibility. The product assumes, as a necessity, the absence of the producer's own needs in it. It is produced for sale in the market; and as an add-on (if you are preparing it for sale), it should have something that someone really needs, that's why they came to the market. A product really ceases to be a product when it doesn't have what someone else needs but the manufacturer. Only such a "product" is not a benchmark for commercial production. In products intended for the market, the philosophical concept of quality is concretized in terms of the reality of the product and looks like a standard. This explains the fact that the entire history of quality management in the 20th and 21st centuries has developed in the form of standardization of mass production.

The modern history of production management is focused on managing the quality of manufactured products and is carried out through the improvement of standardization. This is what should guide the evaluation of the economic efficiency of management. And we must start by clarifying the concept of economic efficiency. The reason for this is that there is a growing tendency to separate economic efficiency from the systematic functioning of the economic block of social life.

Scientific economists have linked the methodology of cognition and management with mathematical software, trying to realize Comte's failed idea in the 19th century to make every science a philosophy at the same time. Karl Marx called one such attempt "the poverty of philosophy", for which the bourgeoisie is not destined to pay, and not those who serve it, pay a certain amount to consumers. Therefore, the dynamics of growth looks stable: the rich get richer even in a crisis, while the rest float on the real waves of economic movement. Just as those stranded in a hot air balloon try to drop the ballast to get to the right place, so the current economic theorists of the movement seek to break away from the economy, believing that not market, but infrastructural activity is aimed directly at the development of human capital.

It's amazing how experts who are fascinated by the term "humanization of production" read the statistics. "Learning is becoming the norm of life," the authors of the textbook "Philosophical and social aspects of quality" enthusiastically state. The average cost of training in American companies is about 1.5% of the payroll. Once upon a time, this one and a half percent was an indicator of special attention to something. There is only a division of profit by residual value.

So, let's highlight the essence of our thesis: from the very first steps of its history, standardization was aimed at determining and stabilizing quality. At first, the product itself, since there was little chance of influencing the technology and organization of production, but with the transition to mass production, when the value of the organization of production increased significantly as a result of activities, the direction shifted towards the production process. The

standardization of production came to the fore. It was believed that if the organization of production meets the requirements of the developed standard, then the result will be of high quality.

The transition to the standardization of production from the outside seems to be a completely justified action. In fact, where to get not the quality of the product, when there are only quality actions around. Naive people are convinced that it is enough to combine high-quality alcohol with high-quality water, and you will get high-quality vodka. Chemists are of a different opinion. They argue that in order to obtain a quality alcohol-containing drink, it is still necessary to follow the order of combining water with alcohol in order to correctly start the reaction.

Shop and partially industrial products were subordinated to the quality of products. Manual labor was unproductive but highly mobile within a range of skills. That's why creativity is always linked to the product. The quality of manufactured products completely subordinated the technology and organization of production. It is pointless to fantasize about this topic: would Stradivari or Amati change the sample if they had difficulty making it? They will not deviate a single step from the idea of its material objectification, they will look for a solution in production and will find it. The nature of mass production of any type is completely different - wasteful. If a product recommended for mass production cannot be prepared without a serious restructuring of production and requires serious costs, then it is easier to attract innovators in order to".

The Soviet experience can serve as an illustration. Consumers knew that initial deliveries would be perfect, but the further they went, the worse it got. German automakers are among the most qualified, but they also falsified engine specifications, confessed and were roughly fined. Similar cases have been repeatedly noted in the practice of Japanese manufacturers. Unfortunately, in the Russian Federation it is even worse. The main reason for the rise of corruption.

We must understand the double function of standardization. It combines technology and politics. Its significance for improving production is objectively the only main way for the economy to move forward, but at the same time it is also the main means of objectifying economic policy, therefore the objectivity of standardization has been and will be oriented by political interests. Standardization can be managed (and should be managed!), and therefore can be manipulated.

When the US president came to power, Trump took steps to withdraw the country from the Paris Accords on environmental policy, despite the complexity of relations with European partners, especially sensitive to the consequences of environmental changes - the continent is small, the population is crowded, and production is large. Trump is a business man, and business politics for him is the essence of politics. Everything else should be subordinate. Trump has taken on the task of reshaping the economic life of his country, and he will build standards based on purely American interests without straining the Infrastructural Processes that Trump attributes to the state of the natural environment. Through the technical form of confrontation, its political essence is manifested. And the last argument in favor of the dialectical perception of standardization - the President of the Russian Federation proclaimed the creation of digital production as the Central economic task. Since the time of the Pythagoreans, numbers have been a symbol of absolute abstraction. The number loses its objectivity and is replaced by a number, but not randomly, but quite definitely. One single number is meaningless. Another suggested a certain combination of numbers, he, with the help of a certain code, recreates the object in its most accurate expression, which opens up almost unlimited possibilities of identification and control. Thanks to the transfer of actions to a sphere independent of the subjective factor, the emotional and motivational component of subjective activity, the costs of professional readiness of a specialist, are removed from management. As they say: nothing personal, only in the interests of the cause.

Production management, including standardization, must be carefully prepared with maximum reliance on the reserves of the professional culture of specialists, but it is advisable to entrust the dynamics of running production to technical programs and tools. That way everything will be safer. In June 2018, the Russian icebreaking fleet was replenished with the most modern arctic-class diesel-powered vessel for carrying out caravans along the Northern Sea Route as part of the annual reprint. The height is from a five-story building, the power of the main engine is 45,000 liters. With. The vessel is operated by 19 people, which may be more convincing in favor of the benefits of technical production management. But technical management has its weaknesses. Among them: a high level of energy dependence, computer security is not absolute, and the requirements for the personal abilities of specialists in conditions of personal and team responsibility are increased, sometimes even exceptional. Problems in production are usually caused by people, but it is in the absence of qualified specialists that the most serious problems arise. Technical standardized management is not a panacea.

Let's try to formulate the rules of standardization. In our opinion, there are two main ones:

firstly, standardization should be carried out in three directions, linking them into a complex: determine the standard of the product within its functional purpose, taking into account a broad

understanding of the safety of use; regulate the production process and form a consumer attitude to the product. The consumer is a full participant in standardization. Without proper consumer interest in the product, the product will not be in demand on the scale necessary for its sustainable production;

secondly, the standardization of production is based on a conceptual understanding of its position in the system of specific historical conditions, since it is determined by the quality of the stage of economic development. Regardless of how it is perceived by the mind, we must put up with it. The product must be in demand not exclusively, but on a massive scale, otherwise the production will be massive and will lose its quality.

The range of serial products in the USSR was small, but the quality of the consumer product satisfied and allowed the manufacturer to solve his problems. The departure from the production standards developed in the USSR allowed us to significantly expand the range of products by improving the quality. Increasingly, Soviet brands appear in stores and advertising, which did not exist in the USSR at all, being ordinary goods.

Concepts are expressed only in words, they cannot be translated into numbers, unlike products. Once again, we note that the concepts of "quality" and "standard" are correlated as general and particular in the description of this phenomenon. It is possible to really manage the quality only with the help of words, and the word, by definition, generalizes the reflected phenomenon and removes its semantic and object specificity, making practical impact difficult, reducing efficiency. Determining the quality of a product, we only limit it and refine the management by setting the vector of management and goals. In order for management to become practical, it is necessary to have not the image of the subject, but its objective expression. What is needed here is an object or an adequate sensory, digitized sample, which, after technical processing, takes the form of a program of practical actions. Digital production is based on the physical impact on the object and requires a standardized quality reality. The history known as the history of quality management is essentially the history of the standardization of production, the specification of quality in the production model.

The first experience of managing intervention in the production process in order to give it stability and a certain increment can be found in the activities of workshops, individual industries, and schools of masters. Most of the famous Renaissance sculptors tried to work in the masons' offices, directly in the places where the material was mined. They searched the quarries looking for the right texture to create the image. It was then that the joke appeared: a masterpiece is easy to make - you need to remove everything superfluous, superfluous, but first you need to find the basis. In the workshops, in the interests of high-quality handicrafts, products were carefully checked, the work of apprentices was observed during the production, they actively talked with the secrets of the students, selecting the most capable of them. Despite the fact that each product was individual, made by a master, it passed through internal control, and then external control by the city's guild organizations. In the future, this work will be defined as the phase of rejection.

It was much richer in content, more synthetic, more like a "selection" than a "culling". Creativity moved the masters, the masters learned no less than the students. They were looking for paints, grounds, foundations, ideal images, but they were wrong. Creativity spares no one, not great, not beginners. I had to work for everyone, especially for the masters, sticking. The concept of "marriage" is not as simple as it seems from the outside. Marriage is not always in plain sight, the masters have received its hidden forms, which appear over time. "Culling" was not an act, as in mass production, but a technology. Today it is difficult for us to look beyond the achieved horizon in the development of mass production. It is only clear that its "rational" form is still more a direction of development than a phase. However, the logic of progress built on continuity does not exclude a return to some part characteristic of the shop organization. Mass participation should not be a hindrance to creativity. This will eventually show diversity under the common "roof" of multiple results. Therefore, it is necessary to carefully study the production process, which has been perfected in the workshop form.

Modern culling as an act of standardization dates back to the last quarter of the 19th century. The beginning confirms the experience of the S. Colt factories that there is an idea of a "quality standard". If we evaluate the system of our "quality-standard" version, then it was a subconscious embodiment of Hegel's conclusion about the dialectic of the ascent of knowledge from the abstract concept of quality to the specific concept of the "standard" of product quality.

Colt was assembled without prior fitting of parts. Specially trained inspectors performed a preliminary calibration and rejected the fault, thereby speeding up the main assembly part of production. The experience of S. Colt at the beginning of the next century was developed in the automotive industry by G. Ford and G. Leland ("Cadillac"). G. Ford, having introduced a conveyor assembly, removed the control of components from the conveyor, logically believing that such work should be done earlier. As a result, the "internal control" of compliance with standard calibers was replaced by "output control" at an adjacent production, which cleared the main production of defects and made it qualitatively cleaner. Further, the process of standardization followed the path of improving what was achieved, it included theorists F. Taylor, A. Fayol. And M. Weber. In alliance with managers, they determined the basic

principles of a scientific approach to the organization of mass production: a systematic approach to management; personnel Management; delegation of responsibility; scientific regulation of labor. The developed production management system went down in history as the Ford-Taylor production system. Possessing undeniable advantages, the Ford-Taylor system also contained serious defects that "dormant" in its potential for a long time. The development of production in the new socio-political conditions of the activation of social democratic interests inevitably drove the Ford-Taylor system into a dead end. This was also facilitated by technological progress, the process of turning scientific knowledge into a direct productive force.

This was also caused by a lack of a clear understanding of quality and management standards. They have been changed instead of being considered during development. The most visible and sensitive was the identification of quality and standard in the field of mass consumer goods production, where the concept of product quality reflects the dualistic nature of the product.

A product intended for subjective, more precisely, subjective use by a person or social group must be of objective quality - physically and subjectively, in order to satisfy the consumer with its physical quality. It is naive to believe that only by advertising the physical perfection of the product, you can make the consumer fall in love with it. Such a consumer must be subjectively non-existent. Interest in the physical quality of a product may be generated by a demonstration of its capabilities, but this is not enough to generate interest in the need to purchase it. The product must capture the feelings of the consumer, and this process is irrational, deeply intimate, putting pressure on the individuality of the consumer. Especially if the consumer is attached to a significant range and picky.

The quality of consumer goods is not reduced to a system of physical parameters, but exists as a kind of core in their quality. And just as an atom is not limited by the presence of a nucleus, so the quality of such a product is not limited by a system of physical characteristics. In contrast, the standard is a purely physical phenomenon and requires a clear description in physical units. The concept of "product quality" should go through the market, and "product standard" should be defined in terms of scientific and technical creativity.

When the desire for a total organization of quality control came into conflict with the general goal of increasing production efficiency and it became clear that the conflict could not be resolved by any other method, W. Schuchert, who worked in the technical control department of the American company Western Electric, suggested shifting the focus of management quality on the organization of the dynamics of the production process. Innovation inside. W. Schuchert's point of view was that he considered production and product quality as movement and in this context understood the main thing as movement:

first, achieving stability;

secondly, the inevitability of deviation from the direction of movement.

Translating the features of movement through tasks into a quantitative result, we got two conclusions: the desired quality can only be achieved under conditions of sustainable movement of production, therefore, it is necessary to stabilize the production of certain qualitative parameters (1), and quality is a generalized process that is really a variation . Variations must be contained within certain limits (2).

The task of achieving product quality acquired a technical aspect and meaning from V. Schukhert: it is impossible to avoid variations in the parameters of the resulting product quality, one must try to reduce variations. The criterion of quality is the stability of production in a static sense, that is, the convergence of variations with the central line. One of the most important factors in solving the problem, V. Schuchert called the restructuring of personal interaction - cooperation, organization of the team.

W. Shewhart for the first time approached the interpretation of the standard in mass production, presenting the quality of products and goods in a statistical form, implying a certain fluctuation, which is called tolerance. W. Shewhart did not introduce the concept of a statistical standard model, but it was she who formed the basis of his innovative ideas. B. S. Aleshin and co-authors compared the quality management systems of Taylor and W. Shukhert in a table (Figure 1), which clearly shows how far managerial thought has advanced.

W. Shewhart tried to give quality management a human face. He emphasized the importance of internal, including personal, motivation. But he did not seek to radically change the position of the worker in production. The alienation of the individual remained essentially the same, so the motivation was supported mainly by the financial evaluation of the activity. The researchers of the experience of V. Shukhert clearly overestimated its content, introducing into the description such a reaction of employees as "joy from getting a result"; "the pleasure of working together, recognition of merit by colleagues and the management of the enterprise", "a sense of significance", etc. It would be adequate to say that the method of V. Shewhart forced managers to study what is called humanitarian-state knowledge.

System Comparison	
Taylor system	*Shewhart system*
• *Establishment of requirements for product quality* • *Production of products* • *Product control* * *Administrative impact on the performer (fines, dismissal)* • *process quality planning*	• *Work execution (process)* • *Control of technological characteristics, use and analysis of control charts* *Exception for special reasons*
Each element is performed by different people, which is accompanied by a conflict of interest.	*Each element is performed by a team that has a common goal of reducing variation.*

Figure 1. Comparison of Taylor Shewhart systems

The restructuring of the quality management organization has become more significant. The technical control departments have been replaced by a quality audit service, which is focused on checking the effectiveness of the quality assurance system by randomly inspecting individual small samples from a total production batch.

The next step in improving the standardization of production was the concept of "quality management" by E. Deming. It was formed and optimized for almost half a century, from 1950 to 1992. Based on the ideas of W. Shewhart, E. Deming formulated three main "pragmatic axioms":

• all production activities are reduced to a standard technical process and contain improvement reserves that need to be identified and mobilized;

* production has two typical forms of existence: stable and unstable, so the solution of specific (current) tasks is ineffective, it is necessary to direct the vector of managerial activity towards fundamental changes;

* the main responsibility for the failure in the development of production should be taken by top management.

The doctrine of E. Deming is well known, it has received wide practical application. We would like to pay attention not so much to the structural units that make up the concept, but to emphasize the question: To what does Deming owe his resounding success, which contributed to the effectiveness of the application of the provisions he developed in the real economy?

E. Deming's creative years coincided with two fateful events in the world economy. First of all, the project, calculated on the omnipotence of technological progress, turned out to be a myth. The history of science repeated itself in the Age of Enlightenment, when it seemed that humanity had found in the person of science a full-fledged replacement for religion. Science is universal knowledge, it will solve all problems. It is only necessary to expand the consciousness of the masses towards science, to make education scientific and universal. E. Deming for the first time realized and warned that the opinion that mechanization, automation and computerization will make a breakthrough in the field of sustainability of product quality belongs to the sphere of difficulties in solving the problem of effective quality management, as well as the attitude to achieve positive results in the shortest possible time. E. Deming proposed his philosophy in the form of a "chain reaction".

Comparing the management philosophy of W. Schuchert and E. Deming, one can see how economics and economic theory depend on the trends of social development. V. Schuchert reflected in his concept the socio-political and cultural moods that developed after the crisis caused by the First World War. Europe, the United States, and Canada were struggling to come to their senses because the war of annihilation had cast doubt on the dignity of democracy. At the same time, a certain part of thinking humanity tried to rethink the current situation and preserve the image of democratic transformations, believing in the power of the creative principle of homo sapiens.

Economists of the first half of the 20th century felt the decisive role in the development of the production of the human factor, questioned the rate of Taylor, Ford, Fayol on the technical factor. Before the concretization of the human factor in human capital, there was still half a century left, but, as in nature, in society, cataclysms are more harmful than useful. Revolutions are indeed locomotives in history, adjusted for the fact that it is not the time factor that forms the core of the revolution. Revolutions, whether in industry, technology, science, culture or social organization, take place, first of all, in general, the process of changing the old quality to a new one. Revolution is identical with the quality of transformation; it turns ideals into standards of practical life. The time factor of revolutionary transformations is secondary and is determined by the specificity of historical reality. But one thing is important in history - the decisive power of man as the

primary historical factor. History is a process of human creativity, although not always successful. But even then there is no one to correct, except for the person himself.

The merit of V. Schuchert and E. Deming was that they stood on the platform of classical political economy, did not succumb to numerous "temptations" - technical, statistical and others. Their logic was characterized by a belief in the historical power of human subjectivity as a person. Weighing on the "scales" of history the technique and creativity of an individual, they confirmed that the growth of capital is carried out by the person himself. Technology is both existentially and functionally dependent on the individual.

And here time worked on the side of E. Deming. It's time for the rebirth of Japan.

The war destroyed the country's economy, but did not undermine the samurai spirit. Japanese nature has taught them to withstand the blows of fate. The national will was ready to return the country to its former greatness in the Pacific region, and the inhabitants of the State of the "Rising Sun" were well aware that the path of revival lies through the industrialization of the destroyed production potential. They just didn't know how to do it. At the very end of the 1940s, leading Japanese experts united in the Japanese Union of Scientists and Engineers - JUSE. Within the framework of the Union, a group arose whose purpose was to study the industrial experience of the United States. She established the relationship between progress in quality management and increased productivity. We tried to understand the mechanism of established communication.

The informal leader of this group was K. Ishikawa, the future initiator of the "Japanese miracle". Juse in 1950 invited E. Deming to become more familiar with the technology of American industrial development, but, unlike the Russian reformers of the 1990s and 2000s, the Japanese themselves were well prepared. They expected from the Americans not a miracle, but "information for reflection."

Ishikawa focused his thoughts on three conclusions:

• All experimental engineering work must be statistically adequate. In order to increase the level of knowledge of statistical methods of analysis, under the initiative of JUSE, a compulsory course "How to use experimental data" was introduced at the Faculty of Industry of the University of Tokyo;

* dependence on imports of raw materials and food can only be overcome by increasing and expanding the range of exports, and it is necessary to clearly focus on the production of high-quality products so as not to waste resources;

• it is necessary to reorient the minds of specialists and society as a whole to the management of high-quality high-tech products. Japan had no alternative to this particular path, since financial reserves did not allow planning a total modernization of production. E. Deming was asked to go to the goal not in the American way, but in the Japanese way, moving not from big finances, but from the national mentality, in which the culture of work occupied the most important place.

Domestic democrats failed together, because they knew what to get rid of, but did not know how to do it in a civilized manner and, most importantly, how to replace it, based on the Russian specifics of reality. The Japanese have already decided what they will do. They only needed a specific roadmap, so they turned to E. Deming as a navigator or pilot. E. Deming was paid for lectures by the Japanese, and our "foreman". The Japanese saved national prestige, while our people cut down national historical roots and stole wherever they could. It is not surprising that the Japanese, 30 years later (by the early 1980s), produced 40% of the world's production of color televisions, 75% of transistor receivers and 95% of VCRs. Russia thirty years later still cannot restore the destroyed potential.

The ideas of Deming, Ishikawa, and Juran were realized, reaffirming the importance of the crossroads of the national interest movement and the innovative, creative thinking of open-minded, honest professionals. The "Japanese miracle" is a product of the interaction of scientific thought, a critical analysis of the production experience of developed economies and the peculiarities of the Japanese national identity. Ishikawa, E. Deming, and Juran happily met in the very place and at the time when the situation was ripe and objectively - it was necessary to save and return the country's economic potential, and subjectively, the Japanese nation bears a high and sole responsibility for its image. Only the Japanese team that lost the 2018 World Cup match in the last seconds. I tidied up my dressing room and left a note in Russian with one word: "Thank you."

Stations are decision stages in which certain actions are performed in a sequence given by the traffic organization. Components of the problem at the stages of development Juran called them "main phases." T. Juran's scheme is still relevant as "information for thought." Let's bring it (figure 2.).

Problem solving stage. Components of the problem (phases)

Development of the main provisions of the project

1. Drawing up a list of problems and identifying priorities.

2. Determination of the composition, responsibility and powers of the working groups.

Diagnosis 3. Analysis of symptoms

4. Formulation of versions

5. Verification of versions

6. Identification of causes

Finding a Solution

7. Search for optimal solutions
8. Development of necessary measures
9. Overcoming resistance
10. Implementation of solutions

Retention of the achieved results 11. Checking the effectiveness of the implementation results. Regular comparison of achieved results with planned ones.

Problem Solving Stage	*Components of the problem (phases)*
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Figure 2. The main phases of problem solving (author Yu. Yuran)

The philosophical concept is revealed in the verbal form of definition. This word has a special meaning here. There should be few and many words, even so many, so that they convey the essence of quality. The essence of quality is not what is indicated in the manuals, not a list of essential features, but their systematic compliance. The quality of the product plays - indirectly through the identity of the physical substrate - the nature of the market as a structure of two entities - the producer of goods and the consumer of goods (sellers are in the frame and are not considered). A product is only what someone else, not the manufacturer, needs, therefore, along with the physical component, there is a consumer interest in the quality of the product as an add-on to the physical basis of the phenomenon.

It is impossible to manage a philosophical category; it is used to develop a route for practical action, as a navigator of movement from an idea to a substantive (organizational) result.

The quality of the product, after a weighted determination, must be translated into a form corresponding to the production process, expressed in terms of technical production management and turned into a standard. Then the history of standardization begins. The concept of "quality" is revealed in dialectics and is controlled by dialectics. The concept of "standard" implies management at the production level. It is described physically, chemically, biologically, ecologically, hygienically and, finally, mathematically. At the level of the standard, a physical-mathematical model is formed, and a systematic approach prevails. The future of standardization management is in a systematic approach. Let's illustrate this with the example of a product produced by light industry enterprises. The range of manufactured products is so diverse and significant.

Let's start with quality as the highest form of abstraction in product definition. Quality is that, the absence of which makes an object meaningless from the point of view of its existence. For those who are in the places of sale of light industry products, at exhibition demonstrations, there is a feeling that there is only one vector of creativity - to create something different, unlike. The fan has limits, but creativity has no limits. This feeling is false, the limit is hidden in diversity, as Thales said: "all in one." We must always remember this and preserve the quality in creativity in the form of a collecting orientation. Shoes, socks, stockings, tights do not resemble each other in appearance, but they are all of the same quality - they serve as clothing for the legs and arms, that is, they are clothing in the broad sense of their quality. Head, separate parts of the head, faces and torsos have their own clothing. There are different levels of clothing - inner and outer. Light industry protects a person and ennobles his appearance. It so happened that the evolution of man, having deprived him of most of his natural defenses, forced him to solve the problem artificially.

Manufacturers in search of a new product should be guided by the requirements of typical product quality, due to the quality of the product itself. Clothing should contribute to the preservation of natural forces (health), protect against harmful factors, be, if possible, light, elastic, not restrict movements in their natural expression, breathe with the skin, minimize physical development deficiencies and be widely accessible.

Then the second level of the concept of product quality is formed, which ensures its consumer appearance. This "quality" has a subjective basis, represents the spiritual development of the consumer, his personal status. The subjective side of the quality of the product complements the objective quality of the substrate, it tells him without which the product

would lose its consumer significance. Combined into a common image, the objective and subjective aspects of product quality represent the subject specificity of quality. In this capacity, the philosophical interpretation of quality is combined with an economic and technical presentation. Quality, loaded with product specifics, is transformed into a production standard, which receives a technical and mathematical expression in the form of a quality model. The circle of movement of quality from an abstract expression to a concrete one is completed exactly halfway. The second part of the history of product quality begins: comparing the product with the ideal, improving the standard (model) in accordance with the requirements for product quality.

B. S. Aleshin restored the "road map" for the revival of the Japanese economy as one of the world leaders in the quality organization of production. We are more interested in the lessons of the movement of Japanese specialists towards the goal. There are quite enough of them not to pass by, but this is a feature of our lovers to steer the economy along American sailing directions after Gaidar and his students. They do not like it when something does not want to move in line with liberal economic theory, weaning the state from production. So, what does the Japanese experience teach (it teaches, that is, directs thought, and does not write prescriptions):

* quality is time, years of consistent, hard work, coupled with the need to collect and analyze creative approaches;

* quality is a product of interaction with the consumer, based on partnerships of mutual respect. The consumer is understood very broadly, including all participants in production;

• the totality of participation in the achievement of qualitative results;

systemically established audit control;

* a key role in ensuring the sustainability of the quality of work of foremen and foremen, their continuous retraining in various forms, including in special programs of republican and regional television;

* special attention to the mobilization of the physical, moral and creative abilities of employees;

* promotion of quality and its key importance for the development of production;

finally, liberal managers are infuriated by the need for a consistent state economic policy, especially in the production of export products; mandatory state certification of products for other countries.

Attempts to sell uncertified goods outside the state are considered smuggling. State support for exports, assistance in promoting goods on the world market. As a final touch in the Japanese quality management program, it is advisable to consider the idea of dividing problems into sudden and chronic, proposed by Yu. Yuran. It is impossible to foresee all possible problems in planning, and therefore it is not necessary. It is enough to have mobilization reserves that ensure the stability of the movement. The goal should be chronic problems that have become part of the organization - in fact, the disorganization-production. Chronic problems are often latent, as if they are being adapted during production. It's no secret that zero-waste technology does not exist, therefore, tolerances are the natural state of quality management. Orders, resolutions, appeals, slogans are powerless here. Once chronic problems have become part of the organization of production, then their overcoming must be carried out within the framework of the established procedure. Yu. Juran presented the process of solving chronic problems as a kind of "road map" of movement with four junction stations. Stations are decision stages in which certain actions are performed in a sequence given by the traffic organization. movement with four junction stations. Stations are decision stages in which certain actions are performed in a sequence given by the traffic organization. movement with four junction stations. Stations are decision stages in which certain actions are performed in a sequence given by the traffic organization.

In the 1970s, Japan's expansion into world markets reached such proportions that the "Japanese miracle" appeared to the United States as a "Japanese threat." Japan's success in producing high-quality and relatively (together with the Americans and Western Europeans) inexpensive high-tech products has necessitated a renewed focus on quality management theory. It's time for the author of the program "Zero defects" F. Crosby. Taking Deming's experience as a basis, Crosby developed his "thirteen points". The development of Crosby's ideas was the program of A. Feigenbaum. As a result, total quality control (TQC) was formed, from which all subsequent quality standardization systems grew. Have you finally managed to build a single basic model of quality management based on the standardization of organizational and managerial actions? Yes, a comprehensive program has been developed and tested by international practice. As for its systematic evaluation, here we would refrain from a positive conclusion. There is still a lack of clarity in the interpretation of the concepts of "quality" and "standard".

International standards ISO 9000-2000, domestic GOST R 57189 - 2016 / ISO / TS 9002-2016 are a linear continuation, that is, in fact, a rationalization of what has been achieved. It is necessary to clarify the methodological foundations of the theory of quality and standardization in accordance with the new requirements that have emerged at the stage of the post-non-classical development of science. First of all, separate the concepts of "quality" and "standard" in order to clarify the hierarchy of their relationship and combine them in a new approach to solving the problem of quality

management. For clarity, let's rephrase: "quality" is a philosophical category, its use in a non-philosophical context - scientific, scientific-practical, practical - is a logically legitimate phenomenon with the clarification that it will not bring direct pragmatic benefits. It is necessary to descend from the height of philosophical generalization to the level of practical action, to transform the concept of quality, filling it with specific content, reflecting the specifics of objective activity, in our case, the production of commercial products in mass production. The philosophical concept is revealed in the verbal form of definition. This word has a special meaning here. There should be few and many words, even so many, so that they convey the essence of quality. The essence of quality lies not in what is indicated in the manuals, not in the list of essential features, but in their systematic coexistence. The quality of the product plays - indirectly through the identity of the physical substrate - the nature of the market as a structure of two entities - the producer of goods and the consumer of goods (sellers are the infrastructure and are not considered).

It is impossible to control a philosophical category; it is used to develop a route of practical action, as a navigator of movement from an idea to a substantive (organizational) result. The quality of the product, after a weighted determination, must be translated into a form corresponding to the production process, expressed in terms of technical production management, and turned into a standard. Then the history of standardization begins. The concept of "quality" is revealed in dialectics and is controlled by dialectics. The concept of "standard" implies management at the production level. It is described physically, chemically, biologically, ecologically, hygienically and, finally, mathematically. At the standard level, a model is formed, both physical and mathematical, and a systematic approach prevails. In a systematic approach - the future of standardization management. Let's illustrate this with the example of a product produced by light industry enterprises. The range of manufactured products is so diverse and significant that the probability of skeptical perception of our example is close to zero and there are enough reasons to neglect it. Let's start with quality as the highest form of abstraction in product definition. Quality is that, the absence of which makes an object pointless from the point of view of its existence. For those who are in places where light industry products are sold, at exhibition demonstrations, there is a feeling that the creative vector is the same - to create something different and different. The fan has limits, but creativity has no limits. This feeling is false, the limit is hidden in variety, as Thales said " to protect from the effects of harmful factors, to be as light and elastic as possible, not to restrict movements in their natural expression, to breathe with the skin, to minimize physical development deficiencies and to be widely available. Then the second level of the concept of product quality is formed, which ensures its consumer appearance. This "quality" has a subjective basis, represents the spiritual development of the consumer, his personal status. The subjective side of the quality of the product complements the objective quality of the substrate, it tells him without which the product would lose its consumer significance. The objective and subjective aspects of product quality combined in a common image represent the subject specificity of quality. breathe with the skin, minimize the disadvantages of physical development and be widely available. Then the second level of the concept of product quality is formed, which ensures its consumer appearance. This "quality" has a subjective basis, represents the spiritual development of the consumer, his personal status. The subjective side of the quality of the product complements the objective quality of the substrate, it tells him without which the product would lose its consumer significance. The objective and subjective aspects of product quality combined in a common image represent the subject specificity of quality. breathe with the skin, minimize the disadvantages of physical development and be widely available. Then the second level of the concept of product quality is formed, which ensures its consumer appearance. This "quality" has a subjective basis, represents the spiritual development of the consumer, his personal status. The subjective side of the quality of the product complements the objective quality of the substrate, it tells him without which the product would lose its consumer significance. The objective and subjective aspects of product quality combined in a common image represent the subject specificity of quality. represents the spiritual development of the consumer, his personal status. The subjective side of the quality of the product complements the objective quality of the substrate, it tells him without which the product would lose its consumer significance. The objective and subjective aspects of product quality combined in a common image represent the subject specificity of quality. represents the spiritual development of the consumer, his personal status. The subjective side of the quality of the product complements the objective quality of the substrate, it tells him without which the product would lose its consumer significance. The objective and subjective aspects of product quality combined in a common image represent the subject specificity of quality.

The solvent demand of the vast majority of Russian citizens does not allow them to focus on the quality of the goods. The shift towards interest in the quality of goods must go through a mandatory stage of expanding the range of available goods for the mass buyer, and this stage has not been passed by the Russians, which, in other words, does not mean deactivation of the quality of the goods.

Why is it necessary to expand the interpretation of the concept of "natural properties" by including in

its content the intellectual and psychophysiological prerequisites for creative activity. An economic understanding of quality, on the basis of which all known concepts of production quality management were directly developed. It evolved according to dialectical laws, despite the fact that economists themselves were far from always aware of the dialectic of the process. The development of economic awareness of quality was carried out "under the influence of contradictions between the internal and external goals of the manufacturer - ensuring the quality of products and, accordingly, strengthening the position of the manufacturer in the market (external goal), as well as increasing production efficiency, that is, increasing the profits of companies (internal goal).

At the first stage, J. Juran called "a problem in which a solution is programmed", problems are singled out, priorities are identified, a rating order is established; performers and their powers are determined.

At the diagnostic stage, the optimal symptoms of the condition are determined; hypotheses are built, tested; causes are being sought.

The solution search stage involves finding optimal solutions; development of necessary measures; implementation of the adopted decisions.

The final stage consists of checking the effectiveness of the implementation results, comparing the achieved results with the planned ones in the dynamics.

The high efficiency of the concepts of Deming and J. Juran provoked F. Crosby to combine their systems with the experience of quality management accumulated in the United States.

The Zero Defects program by F. Crosby did not become something fundamentally new in the theory of quality management, but it contained interesting ideas. For example, a statement about the prevention of defects; the need to develop a "quality policy", the requirement to connect to the quality of the activities of non-production units.

F. Crosby believed that each process site should have an engineer responsible for quality. His professional duties include presenting a daily list of issues causing major and frequent defects; systematizing them according to their importance for quality; determination of corrective actions; attraction of personnel employed on the site.

The 'continuous quality improvement phase' helped bridge the tension between spending on quality and achieving production efficiency. The consumer began to receive a quality product at an affordable price, the implementation of the idea of a “consumer society” has come closer.

From the manufacturer's point of view, this is an ideal situation. But the assessment of the situation was one-sided, only from the position of the consumer; quality parameters were set not by the one who consumes the goods, for whom the product is made. Quality was standardized in the manufacturer's norms and, of course, reflected primarily his own interests. The consumer was left with a choice: to purchase a product of a certain quality or refuse.

This again led to the "overheating" of production, to an increase in its cost, as there were frequent miscalculations in determining the needs of consumers. A high-quality (according to the manufacturer's estimate) product, affordable, did not find the necessary demand among consumers.

It was necessary to eliminate the new form of contradictions taking into account the interests of the consumer. The “continuous quality improvement phase” has given way to the “quality planning phase”.

The work of G. Taguchi is considered the beginning of the next phase. It was he who introduced the concept of "loss function" into the theory of quality management and developed a modern methodology for planning industrial experiments. The purpose of G. Taguchi's research was to overcome the contradiction between quality assurance and production efficiency in its existing forms.

The foundation of the concept of quality planning was formed by four new ideas:

1. Conclusion that product defects are mainly due to poor quality actions at the design stage;

2. Conclusion on the need to focus the main products not on full-scale testing of product models, but on mathematical modeling of both products and the process of their production. Due to which they expected to detect and eliminate the reasons for the increase in marriage in a timely manner. It was proposed to take control of the design and technological processes up to the stage of actual production;

3. The idea that the concept of "zero defects" should be replaced by the idea of "satisfied customer";

4. Emphasize the high quality of goods by an acceptable price and a constant price reduction, thereby ensuring a stable, market demand for quality goods.

A new turn in the development of quality management, overcame the noted form of fundamental contradiction between quality and production efficiency, but not the contradiction itself. At present, its next "ecological" form is being formed.

Inclusion in the characteristics of the quality of goods of ecological cleanliness requires significant costs.

The peculiarity of the modern stage of quality management is that all known formulas (phases) are practiced at enterprises. B.S. Aleshin and co-authors, reflecting this unusual way of existence of history and modernity, built the "Tower of Quality". It is of not only theoretical but also practical interest.

In the seventies, A. Feigenbaum summarized the accumulated intellectual and practical experience in developing the problem of economic quality

management and laid the foundation for what is known today as TQC-Total Quality Centrol (general quality management).

Essentially, TQC is not a quality management system, but a system of sufficient conditions for a quality process. Development logically led to the development of TQC. All previous steps on the way to quality quality management, despite the progressive movement, were of the same type. They "tied up" the solution of the problem of economic quality management to some fragment (fragments) of the process. Thus, the improvement of quality management "bypassed" the essence of the production process - its unity and the systemic nature of its unity as links and dependencies built in a certain way.

E. Deming, K. Ishikawa, F. Crosby and A. Feyegenbaum came closest to understanding the quality system as a reflection of the production system.

The main conditions of TQC can be considered as follows:

1. ensuring total participation in solving the quality problem of all employees;
2. awareness of the total responsibility for the quality of all participants in the process, the understanding that not a single specialized unit (QCD, OUK, etc.) is able to cope with the task;
3. conformity of the quality of activity to all stages of the "life cycle" of the product: from the development of the concept of the product and marketing research to the method of disposal of the product and its packaging. In the context of increasing environmental requirements in a number of countries, for example, Japan, product certification implies the mandatory development of a method for recycling even packaging;
4. the totality of improving the knowledge and skills of performers and managers; the regularity of specially organized forms of advanced training; appropriate cost planning;
5. achieving a total understanding that the quality of work is achieved not so much by technology and technology, as by focusing on the quality of the motivation of employees, and motivation should not be one-sided, closed only to financial returns. Then it will be stable;
6. the totality of activity structuring, its differentiation into operations, interrelated technological processes, transitions, and each link in the process must be understandable by purpose to all performers. Studies of eliminating the causes of defects have shown that up to 90% of the problems submitted for consideration are solved, while 75% of them are able to be solved by the controllers themselves (direct performers and organizers);
7. totality in the understanding of the consumer; the consumer is not someone who is outside the production process, the consumer is each next link of the production itself - the “internal consumer”, therefore, an awareness of responsibility to the consumer throughout the entire production cycle is required;
8. total cultivation of the special status of the consumer and his interest in the quality of the product;
9. continuous quality engineering;
10. understanding the importance of defect prevention, its economic advantage over the elimination of defects;
11. team spirit of all participants in the process; corporate culture;
12. leading position in the activities that ensure quality, top management, understanding quality as the goal of entrepreneurship.

Quality management in the 21st century is based on the reciprocity of total quality management (TQM) and quality system standards (ISO 8402; ISO 9000; ISO 9001). The main difference between the quality system standards is that in many countries, including Russia, they have acquired state registration and are fixed administratively. Therefore, clarity in the definition and content of the concept of "standard" is important. In the USSR and the Russian Federation, it is customary to assign a “quality mark”, officially indicating that the product meets certain agreed parameters. "Standard" in Russia and most other countries is a set of rigidly fixed, often administrative, characteristics of products, services, activities. Analogues of our "quality marks" are found in European countries, in particular in Sweden (TCO 92; TCO 95; MPR for monitors).

From the point of view of the interests of the consumer, the “standardized” concept of “standard” is not as relevant as for the manufacturer. The latter, taking advantage of the starting advantage, taking into account, first of all, their own interests. Hence the conditionality, the relativity of any standard and the "sign of the standard" as long as the standard does not balance the mutual interests of both parties: the manufacturer of the product and its consumer.

The most common quality system standard ISO 9000 is built on Dei's special organization system. The basis of this idea is the thesis about the documentation of all processes related to production: the purchase of raw materials, components; preparation of production of his organization; delivery of products to the consumer; providing warranty support; scientific and technical equipment of production; personnel management.

As a result, the concept of "quality" acquires new facets, expands; the traditional understanding of quality is being modified. The content of the concept of "quality" is loaded with knowledge corresponding to the changed situation. A classic example of the dialectic of concept development.

The most obvious illustration of what has been said is the rather frequent reports that reputable firms Ford, Toyota, etc. recall their products due to the

discovery of a technical inconsistency in just one node.

It would seem that it would be easier and cheaper to instruct service centers to replace low-quality components. In fact, firms are doing the right thing, given the competition in the market and the place of their brand in it.

In a complex system, a structural and technological defect of one node inevitably affects the entire system, so it is not easy to replace the node, block. The product as a whole must be thoroughly tested in order for the manufacturer's warranties to work according to the declared standard.

ISO 9000 and its ISO 9000-2000 modifications do not guarantee product quality. They are “tuned” to provide such production conditions that allow them to count on the “most likely” quality reserve of productive activity.

Another "weak" side of these systems is that they explain "what should be done", but they practically do not explain "how to do it".

The ideologues of ISO 9000 say: "What should be done?" - the question is "standard" and is subject to standardization. The question is: "How should I do it?" - due to the specific conditions of production in each individual case. Therefore, "how to do" should be decided by the producers on the spot.

With the introduction of ISO 9000-2000, the concept of "QS" (quality system) has become obsolete, giving way to the QMS, defined by the International Organization for Standardization:

1. constant monitoring of consumer interests;
2. system leadership of the head, ensuring the unity of goals and activities of the company, as well as a stable internal environment based on cooperation and comprehensive motivation;
3. maximum involvement of the abilities, knowledge and skills of employees in the production process;
4. use of the process approach in the management of activities and resources;
5. the need for a systematic approach to management;
6. striving for continuous improvement of the company's activities;
7. decision-making only taking into account a comprehensive analysis of the entire possible amount of "information for thought";
8. development of mutually beneficial relationships with suppliers.

From now on, international quality standards require that not goods be presented to the “quality mark”, but the method of their production. "Quality" is the compliance of the organization and management of the enterprise with the quality management system (QMS).

The modern history of the economic aspect of quality management reveals a very instructive relationship between specific scientific, special and philosophical approaches to solving socially relevant problems of production activity.

Philosophical doctrines of quality have undoubtedly always had an effect on economic knowledge. K. Marx started with G. Gogol, passed the "course" of economic analysis and founded the historical-materialistic view of social development. Then he returned to the analysis of economics and left an impressive mark on social philosophy and economic theory. Something similar can be said about the creative paths of O. Proudhon, J. St. Mill.

History repeats itself on a new turn. Thinking economists move from practice to philosophy in order to use philosophical knowledge and method to develop a deeper understanding of the subject of their own research. All modern concepts of quality management owe philosophy no less than economic theory.

Legal aspect

Philosophical analysis of the social process led to the conclusion about the growing role of the "subjective factor" in it. The "human factor" in philosophical humanism has always been presented as the decisive condition of history. Such was the opinion of the leading thinkers of Antiquity, the Renaissance, and the Enlightenment. But the "human factor" and "Subjective factor", contrary to the common practice of their convergence up to identification, are far from being the same thing.

"Human factor" is a concept that characterizes the whole range of human capabilities. The concept of "human factor" expresses the duality of our nature - a combination of biological and social in it; organization and personality; physics, physiology, psychology, intelligence, behavior and activity. As advertising likes to present: "all in one" or "in a package."

"The human factor" is, in fact, the person himself in the context of his ability to realize his own potential. Smart, educated Oblomov, lying on the couch, as well as active Stolz are examples of contrasts along with the title "Human Factor".

In the concept of "human factor" is not an expression of preference for either biological or social. Think it's right. To define a "man in action" - no matter in which one: Oblomov turning over with a newspaper in his hands, or an active enterprising Stolz - a synthetic concept is needed.

It was proposed to call an abstract person in a state of abstract activity a “human factor”, thus including an abstract person in an abstract historical process. In theory, the main thing is to find a conceptual equivalent to describe the object of study.

The object of research in our case is social progress. The task is to understand the factors that set history in motion and give progress to the movement of history.

The logic of reasoning is not complicated. The history of mankind is either an objectification outside

of human substance (an objective idea, the World mind, the World Will, God, etc.), or a product of the activity of the people themselves: their mind, feelings, will and practical activity.

The problem can be simplified, because in both cases human activity is envisaged, with the only difference that in the first case, history is made by him according to a program developed outside of human life, and in the second, a person paves the historical path, guided by his own ideas and motives. In history, whatever one may say, one cannot move away from human participation. History is "attached" to man just as he is "attached" to history.

It is then that it becomes relevant to “disassemble” the “human factor” into its component parts, to divide what exists in the person himself exclusively in unity. Divide conditionally, depending on the contribution to the historical progress of the two "halves" of man: biological and social.

The concept of "subjective factor" appears. And its components are the “individual” form of the subjective factor, and the “collective form of the subjective factor”. Politics emphasizing the historical nature of human activity, the collective essence of this activity. With regard to production and production quality, the “subjective factor” is concretized to the level of “performer”, “manager” and “team”.

To those who object to us, counting that we have narrowed the understanding of a person in the structure of the economic form of his activity to the size of a “subjective factor”, ignoring his biological status, which is also represented in production and affects its quality, we will answer: no, modern production, that is science-intensive, high-tech production, based on the power of knowledge, not muscle; on responsibility and organization, depends precisely on the “subjective factor” of a person.

The logic of the development of the process of economic quality management convincingly indicates that total quality management, to which, in general, everything went, is possible with the total mobilization of the subjective forces of a person: knowledge, beliefs, desires, will, interests, upbringing, education, concentrated in the professional form of culture.

The classics of the economic theory of quality management from Taylor to Crosby and Freigenbaum were seriously concerned with the mobilization of the motivation of the participants in production, correctly believing that it was the lifeblood of quality work. But they were realists, and realistic experience prompted them: do not absolutize the moral factor, no matter how significant it is. Quality is created by free will, but controlled administratively and legally. The legal aspect of achieving TQC objectives is very significant and requires constant attention.

Is it possible to imagine a situation where quality will be achieved only through the self-organization of the manufacturer, thanks to the team spirit, social dedication of each and every one, a high level of professional qualifications? The answer is up to the reader, but the hint suggests itself: it is possible.

What happens? Is legal regulation an optional, superfluous matter? No. Trial fantasy does not take into account the purpose of production, which, by the way, is very well spelled out in TQC.

Conclusion

The purpose of production is not the quality of the goods (this is a crafty goal, self-deception). The goal of production is not the quality of production (this is also craftiness). The goal of production is customer satisfaction with the quality!

Production, even in a subsistence economy, in which the producer and consumer are one and the same person, does not exist by itself and for itself. As for the commodity form of production, the consumer is the main figure in it.

Therefore, the understanding of quality is not in the competence of the manufacturer alone. It is formed in the mutual interest of the manufacturer and the consumer in the properties of the product (and its price) intended for sale.

The producer in relations with the consumer has one small advantage. Using it is not easy, but the chance is quite real. A manufacturer of technically complex products that require knowledge and skills in operation can try to shape the consumer's taste for it through educational and promotional activities. The mechanism, of course, is expensive, but it is unlikely to win fierce competition in the market in another way.

The interests of the producer and the consumer do not always coincide, not immediately and not for a long time, because these are the interests of the subjects of production, separated by the barricade of the market. The market is a ring for them. The manufacturer is interested in profit. The consumer is in saving finances. One seeks to fill the cash register, the other does not empty the wallet. At the same time, both look at quality as a reward for winning a battle. Legal regulation helps to give the duel a civilized character. Avoid cheating.

The state cannot be aloof from the events taking place in the market, because the economy gives rise to politics; the movement of the market causes the movement of large social groups. And if today the class struggle has lost its relevance, then tomorrow the place of the proletariat and peasants will be occupied by dissatisfied - some with quality, some with price - consumers, the number of which will be no less, and the desire to win is even steeper.

The fate of each individual citizen cannot be dealt with by the state, and it is hardly advisable, but the fate of social groups should be in the zone of special attention of any state and always, if, of course, the state itself does not want to be in the zone of special attention of that main part of society, which in

calm times is called the electorate, and in troubled times - the people.

Quality is a policy, firstly, and only, secondly, it is a product of the intricacies of relations in the market. Supporters of absolute market liberalization are "scientists" provocateurs of tension in public relations and "subversers" of national security.

All modern social experience confirms that participation in quality management is a function of the state and even interstate cooperation. An example is the Bologna Agreement. It was prepared by a social movement, but, in order to give it real power as a controller of the quality of education, legitimized by the collective political will.

“The attention of the state should be focused on:

intensification of the process of import substitution by improving the quality of domestic products;

increasing the production potential of enterprises, creating advanced technologies and new types of high-quality products in order to expand the share of Russian products in the domestic and foreign markets as the domestic market develops and integrates into the world economy.

Updating the legal resources of the state throughout the vertical of political power in the field of quality management will undoubtedly contribute to the achievement of the following important results:

ensuring a quality standard of living of the population, without which it is definitely impossible to get out of the demographic collage. In order to be among the leaders of a non-absolute indication - a reserve fund, a loan paid off ahead of time, a loan, writing off part of it even to those who are not able to pay it in the foreseeable future - it is necessary to improve the quality of products and services in the social sphere;

strengthening security, territorial integrity, preventing military aggression;

strengthening the position in Russia in international relations, greater accommodating in economic partnership;

creating the image of Russia as a truly great, and not just a huge country;

development of environmentally sound policies and economic practices.

Integrating the analysis of real consequences to the intensification of the behavior of the state in the quality market, we note the most important. This is the only effective way to ensure national security, that is, what is in the ranking of the tasks of the state above everything else, since the achievement of everything else is possible only under conditions of national sovereignty.

A systematic approach to solving the problem of quality in the USSR began to take shape in the 1950s. The Saratov system of defect-free manufacturing of products, the NORM, KANARSPI, KS UKP systems were quite successful experience in the socialist embodiment of the need to control production quality.

In the mid-1960s, the Lvov initiative became widespread in the domestic industry, and was recognized as a "system of defect-free labor" - STB.

The highest achievement of the "struggle for quality", apparently, was the creation on the basis of a combination of a serious experiment (VNIIS) and a comprehensive generalization of practical work to improve the quality of work at the leading Lviv enterprises of the Integrated Product Quality Management System (CS CPC).

This system turned out to be the first where the enterprise standards became the organizational and technical basis for product quality management. Unfortunately, the effectiveness of the application of best practices was not high. By the beginning of the 90s, only 10% of civilian technical products corresponded to the best foreign analogues.

The state has large and different levels of opportunities to influence the quality of production and product quality. The legal mechanism, which is in the hands of the state, can affect both directly the improvement of the quality of the production process, and indirectly.

With the help of tax policy, it is possible to stimulate high-quality production and block low-quality production. By protecting the consumer from a low-quality product, the state actively prevents unscrupulous manufacturers from entering the market.

The basis of the legal provision of the quality of production in our state is the constitution of the Russian Federation. The Constitution of 1993 was developed at the height of the redistribution of property, and therefore its creators did everything to ensure that the provisions (articles) of the supreme Law were extremely abstract, declarative. But in its abstract format, the Constitution of the Russian Federation did not ignore the right of Russian citizens to quality goods. The relevant articles are formulated to match the time of her birth, however, in this form, some certainty is present.

Article 41 of the Constitution of the Russian Federation states: "Everyone has the right to health care." Of course, it would be better to add - "and a healthy lifestyle." And even better: “the right to health care and a healthy lifestyle of Russian citizens is guaranteed by the state.” However, in this scenario, the "legitimate" interests of the future oligarchs would suffer, so we settled on what we have.

This article does not seem to have a direct relationship to legal quality management. There is an indirect, mediated protection of the right of the country's population to health.

Goods for direct and long-term consumption must have the necessary level of quality so as not to be harmful to health. Otherwise, there are serious legal and financial sanctions against the manufacturer and the seller.

In order to ensure the protection of the right to health care, all possible tolerances (MACs), sanitary and hygienic requirements, state standards for products, services, industry standards in the company, and their own "standards" of enterprises (TU) were developed. Management structures were created or modernized inherited from the socialist time.

On the basis of the rights of citizens to quality goods proclaimed by the Constitution, a modern structure of legal support for quality management has been built.

The state does not interfere in the technology of production quality management. Its activities are aimed at controlling the method of production in order to exclude the possibility of harm to the health of citizens (and non-citizens) and harm to the natural environment of human life, as well as to prevent the appearance of dangerous low-quality goods on the market, deceiving consumers and legal regulation of relations between the seller (manufacturer) and the buyer in those situations that require such a measure.

The market is intended for ecological activities within the framework of normalized relations. Prices, priorities, demand, supply, advertising - all these are the mechanisms of the market as long as they remain within the limits of economic relations that are moral to the same markets.

Many violations of economic relations necessarily lead to the intervention of law enforcement agencies designed to protect the affected entity within the framework of the current legislation.

Any act of "purchase and sale" is a by-law and the legislator or the performer must be included in the process. Otherwise, the rights of the owner will suffer and the violator of market relations under jurisdiction will not be punished.

The situation with legal support of quality management is complex. The market divided the producer and the consumer, squeezing an intermediary (and more than one) between them. In this connection, it is necessary to differentiate the concepts: “quality production”; "the quality of the goods produced"; and "the quality of the product purchased" by the consumer.

An intermediary - a "speculator" - is quite capable of violating the technical conditions when delivering goods to the place of sale, in storing goods, and preparing them for sale. As a result, the quality parameters of the product will change. In the legal protection of the consumer, all possible situations and measures of responsibility of the seller are prescribed.

Consumer protection legislation has been around for a long time in European countries and North America and has been polished for centuries. In its current state, it is quite effective, which forces violators to reckon with it in order to avoid serious financial sanctions of death-like anti-advertising.

The Russian experience of legal regulation of relations in this area is much poorer, moreover, it was formed in the specific conditions of the socialist market. The Law of the Russian Federation "On the Protection of Consumer Rights" was adopted in 1992 and was repeatedly edited (01/09/96; 12/17/99; 12/30/01) in order to make it more adequate to the developing economic situation.

The subject whose interests are protected by this law is a consumer who has purchased a product, more precisely, a product that does not meet the entire set of consumer and technical characteristics. And the object of legal relations is the quality of the goods.

Thus, the Law has a double effect: it protects the buyer from low-quality products and protects the market from low-quality goods. The manufacturer (and intermediary) received a legal signal about the need to present quality products to the market.

In the peripheral zone of interest of the legislators was also the revitalization of the activities of a number of federal bodies: on standardization, metrology and certification, sanitary and epidemiological surveillance, environmental protection and natural resources.

The categorical apparatus of the Law on the Protection of Consumer Rights was made up of the concepts: “consumer”, “manufacturer”, “seller”, “standard”, “lack of goods”, “significant lack of goods”, “safety of goods”. As we can see, there is no mention of “quality” in the categorical apparatus of the law, despite the fact that it protects the consumer from low-quality goods, and doubles trying to protect the market from marriage and counterfeit products.

The developers of the ideology of the Law acted logically. They divided the content of the concept of "quality of goods" into components: "manufacturer of goods", "performer", "seller", "standard", "consumer", having built a system out of them, the forming factor of which was made "standard".

The relationship between the consumer and the producer is regulated in the Law with the help of the concept of "standard", which is subject to change in a certain system of units.

"Standards" are understood to exist at two levels: universal, controlled by the state, and sectoral, private, set independently by manufacturers, and having passed the necessary certification procedures.

According to the logic of building subordination relationships, the requirements of a higher level of organization are guidelines for the rest of the "pyramid". In the case of a contradiction, the advantage belongs to who (or what) is higher, i.e. more important.

It was superfluous to introduce the concept of “quality (of goods)” into the conceptual apparatus of the Law. It has been successfully replaced by the more verifiable concept of "standard". At the same time, reminding all market participants from the manufacturer and contractor to the consumer who is the boss in the house.

From a philosophical and economic point of view, the main drawback of the law is the locality of the destination. The state is still under the hypnosis of the effectiveness of the economic liberalism of the American model, super-delicately in expressing its economic interests, forgetting that these interests are not the interests of the government, but the people of Russia. The state, especially the executive power as the top manager, should realize the interests of the people, instead of being afraid of being misunderstood by foreign partners. Foreign partners, when necessary, tighten the screws tightly. The state should introduce an economic policy regarding quality on a larger scale, then its effect will be more significant and the private judicial practice that has considered private claims against the seller regarding low-quality goods will sharply decrease.

It is necessary to protect the market from low-quality goods, as G. Ford, Sr., did in his time, when he entrusted the "phase from rejection" to special production, removing quality control from the main production process. As a result, low-quality components stopped coming to the assembly line.

The state does not need to strive to be a subject of the market, it needs to be above the market, stimulating manufacturers of quality goods, and not allowing low-quality goods to enter the market. In the first case, economic incentives are required, in the second, administrative and criminal sanctions.

Now the state is facing the problems of quality management, as if, half a turn, modestly distancing itself. It is necessary to turn to face him and take up the quality, "rolling up your sleeves". Only then will the time come when the ministers will not be able by their power to postpone the deadlines for the implementation of the president's instructions for years.

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Issue Article

Alijon Abdujabbor o'g'li Yusupov
Namangan Institute of Engineering and Technology
Doctoral Student, Namangan, Uzbekistan
alijonyusupov533@gmail.com

Husanhon Toxirovich Bobojanov
Namangan Institute of Engineering and Technology
DSc., Docent, Namangan, Uzbekistan
bobojanov1979@mail.ru

Sabirjon Abdujabborovich Yusupov
Namangan Institute of Engineering and Technology
Candidate of Technical Sciences, Docent, Department of Metrology
Standardization and Quality Management, Namangan, Uzbekistan
sabirjon@list.ru

Muxriddin To'xtamurod o'g'li Yo'ldoshev
Namangan Institute of Engineering Technology
Master's Degree Student, Namangan, Uzbekistan
mukhriddiny505@gmail.com

RESEARCH ON THE EFFECT OF THE NEW TRUNCATED CONE-SHAPED ROVING GUIDE PLACED ON THE BREAK DRAFT ZONE ON YARN QUALITY PARAMETERS IN A RING-SPINNING MACHINE

Abstract: *In this article, a new truncated cone-shaped roving guide was installed in the break draft zone of the ring spinning machine, yarns were spun for the sample, and their quality parameters were compared based on the standards. In the research, the same cotton and roving of the same linear density were used in the same technological and kinematic indicators. The yarns obtained for the sample were compared with the yarns obtained on a conventional ring-spinning machine. According to the results of the comparison, it was found that the yarn samples obtained by the new method had higher quality indicators.*

Key words: *ring spinning machine, truncated cone-shaped roving guide, tension, yarn quality, drafting system, rollers.*

Language: *English*

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Introduction

Modernization and fast technology only in the field of ring spinning, when the yarn is formed, the process of winding into a tube remains the same until now. In addition, the ring-spinning machine is still dominant over other spinning machines. Manufacturers of modern ring spinning frames have improved the construction of various working elements with optimal spinning geometry, the tube length is 180 mm, the ring diameter is 36 mm, and the number of spindle rotations is up to 25,000 min-1. The functions of the ring-spinning machines are already

automated. The high degree of connection between technological processes of spinning and winding, even winding and twisting, was achieved with the help of computer automation and control elements. In addition to traditional functions, speed, delivery speed, productivity, twisting, traction, machine efficiency, computer-aided systems, control of spinning conditions (shape of yarns in the tube, structure of the ring path, automatic removal and adjustment of full skein yarns) makes and allows to optimize, it will be possible to clean and lubricate the main parts of the empty machine [1, 2, 3]. Improving the construction of various working elements of the ring spinning machine, the structure of the optimized spinning process, and the continuous shape of the fibres allows to increase in the productivity of the machine, the quality of the yarn is improved, and at the same time, the flexibility of the process improves the profitability. All these were done to optimize and improve the ring-spinning frame but did not allow us to reduce the spinning triangle that could be detected. One of the most difficult and weakest problems in the traditional ring-spinning machine is the large twist triangle. This leads to more wastage of fibre and fewer opportunities to use the strength of fibres in yarns. The appearance of the spun thread is mainly evaluated by the degree of hairiness.

Researches in the field of ring spinning show that today, the drafting system of the ring spinning machine consists of three cylinders and three rollers, and leaving or partially dividing the roving greatly affects the quality of the obtained yarn. Research on ring spinning machines has shown that if the spun yarn is obtained with a truncated cone-shaped incoming fibre flow guide (densifier) placed after the drafting zone receiving the previous fibre flow (roving), the quality of the resulting yarn is improved.

The purpose of the research presented in this article is to analyze and compare yarns using two different systems from ring spinning machines and compact spinning machines offered by the ring spinning machine manufacturers of Switzerland Rieter, one of the world's leading famous firms. From the ring spinning factories of the Republic of Uzbekistan, "Namangan To'qimachi" LLC produces fine and coarse yarns consisting of cotton fibre and a mixture of cotton and chemical fibres.

The main part

Today, every enterprise aims to produce spun yarn with high-quality indicators and low prices. Therefore, the conventional spun yarn and placing an additional roving guide between the second and third drafting pairs need to optimize the equipment of the spinning machines and the distance between the drafting pairs in order to improve the quality parameters of the yarns obtained by the method. Therefore, taking into account production costs, conventionally obtained yarns can be made competitive with compact spun yarns without changing the spinning machine to a compact spinning machine by changing drafting pairs or adding additional devices. In the research, roving with a linear density of 600 tex produced at the spinning factory of "Namangan To'qimachi" LLC was used. The tests were carried out on a ring-spinning machine manufactured by Rieter. The tests were conducted together with the leading technical staff of the spinning mill and specialists of the spinning mill. During the research, in order to compare the results, between the second and third drafting pairs of the single drafting system of the ring spinning machine, a device that moves in parallel to the guide and reversibly moves and thickens the fibres is placed, and the remaining drafting pairs in the enterprise used in the traditional way. One for each test, in order to check the quality indicators of the spun yarns, to ensure sufficient yarn quantity for the tests in which the factory spun yarn and an additional truncated cone-shaped compactor, was placed between the second and third drafting pairs of threads were taken in the tube. The obtained yarns were checked for quality indicators in several USTER production equipment (Table 1).

Table 1. Quality parameters of the spun yarn with linear density T=27

№	Quality parameters of the spun yarn	Quality parameters of yarn produced at the enterprise	Quality parameters of the yarn from which the flow of fibres is compressed
1	Coefficient of variation by yarn number, U %	10.8	10.43
2	The coefficient of variation of the yarn on unevenness, CV m	13.7	13.2
3	Thin places, -40 % /km	108	98
4	Knots in the yarn, Neps 200% /km	180	165
5	The hairiness of the yarn, H	7.1	6.9

In the process of ring spinning, the twist that is transmitted to the thread appears along a curved line between the traveller and the front rollers. The transmission of the twists is opposite to the movement of the threads in this area. The traveller then passes the twists to the drawn fibres as close as possible to the compression point after the release rollers. However, the twists never reach the compression point because the fibres are directed towards the yarn axis after leaving the previous draft pairs. The path of the inner and outer fibres forming the spun thread forms a spinning triangle in a ring spinning.

The length of the rotating twisted triangle depends on the geometry of its rotation and the intensity of the twist [4,5,6]. The dimensions and shape of the spinning triangle significantly affect the structure, surface characteristics, and physical-mechanical properties of the yarn being spun. All the fibres placed on the outer edges of the twisted triangle can remain unspun into the yarn structure. Such fibres have a great effect on increasing the hairiness of the thread.

As a result of the gradual transmission of the twists and travellers of the spinning thread, a twisted triangle is formed. It creates a certain tension in the set of fibres that make up the thread.

In the cross-section of the spun yarn, the non-symmetrically distributed fibres are located at the edge of the twisted triangle of textile products, and the smallest ones are located inside the twisted triangle. During this asymmetric distribution, it causes the fibre to break according to the condition of the spinning triangle, the fibres do not cause the yarn to be cut slowly, and the outer axial yarn takes over the load, thus they also cause the yarn to break [8,9,10].

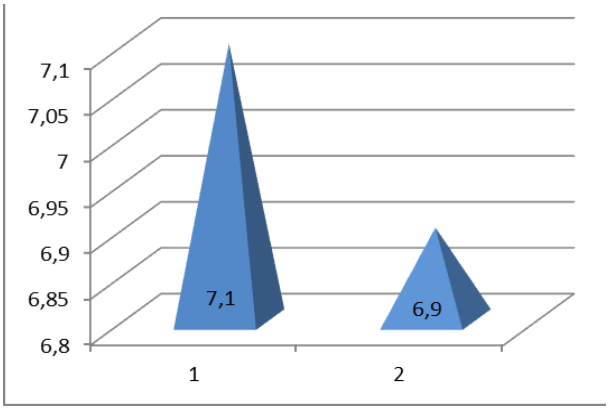
As a result, the strength of the thread decreases and the strength of the fibres is used less. Minimizing or eliminating the spinning triangle allows almost all fibres to be incorporated into the yarn structure with the maximum possible length and fibre precompression, regardless of the position of the spinning triangle. A uniform pre-tension of many fibres provides a synchronous breaking strength of many fibres, which helps to increase the strength of the spun yarn and maximize the use of the fibres in the yarn.

Featuring a completely new range of all compact spun yarns from short staple fibres (cotton-type man-made fibres, cotton, and their blends) or long staple fibres (man-made fibres, wool, wool-type fibres, and their blends). When comparing their quality and appearance to the yarns obtained from the traditional ring spinning machine, compact yarns are significantly stronger, meet the standard requirements for elasticity, have less hairiness, and are characterized by abrasion resistance. A lower number of twists per meter can be used to achieve the yarn strength obtained from a conventional ring-spinning machine, resulting in increased ring-spinning machine productivity.

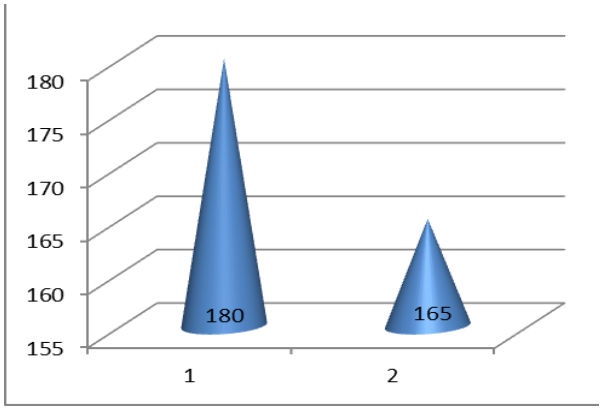
Better use of fibre strength in spun yarns results in reduced hairiness of the spun yarn. The length of the second pile is 3mm when the fibres are used for further processing. Compared to conventional yarns, it should be noted that the length of one end of the fibres left out of the spun yarn is reduced by 50%. In some cases, it is not required to determine the degree of hairiness of the fibres in the yarn. Fibres with a main length of 1-2 mm and fibres with a length of more than 3 mm are rarely seen in the textile industry.

The level of hairiness of the spun yarns is as low as possible and the external appearance is better and clearer if the cross-section is flat, it allows for the production of high-quality textile products. For example, in jacquard woven and printed fabrics, there is a strong demand for the smooth surface, high beauty, and high durability of the gauze product. It is necessary to use compact threads, the prices of which are slightly higher than those of traditional threads. Despite the high level of competition in the entire textile industry, some countries still produce spun yarns with high hairiness, low durability, and poor appearance. Manufacturers of high-quality spun yarns have been testing various traditional spinning machines.

In the study, the statistical significance of the spun yarns obtained experimentally and traditionally produced at the enterprise was checked with the help of standard methods and laboratory equipment. Data were analyzed and compared. An additional compacting device was placed between the produced cylinders, and the physical and mechanical properties of the spun threads obtained by the traditional method were tested. Unevenness, tensile strength, elongation at break and several indicators were checked according to the actual number. Uster tester 5 was used to check the hairiness of 100 meters of thread in the Uster device (Fig. 1).



Hairiness level indicators of spun yarns, H
1. Traditional thread
2. Yarn obtained by the additional compacting device



Knots of spun threads, Nep 200% /km
1. Traditional thread
2. Yarn obtained by the additional compacting device

Figure 1. Indicators of yarns were obtained by the traditional method, with an additional compacting device placed.

These two types of spun yarns are 100% cotton yarns. An additional compacting device was placed between the cylinders, and the quality indicators of the yarn with a linear density of 27 tex obtained by traditional methods were checked.

The degree of hairiness of the spun yarn obtained by placing a device moving parallel to the truncated cone-shaped guide in the space of the cylinders has been significantly improved compared to the yarn obtained by the traditional method. The hairiness of the yarn obtained by the traditional method was 7.1, The degree of hairiness of the thread obtained through the additional thickening device was 6.9.

In the conducted studies, when we checked the defects on the surface of the thread, the average number of knots of the yarn spun at the enterprise was 180 units/km, and we can see that the number of defects in the sample yarn obtained by installing the compactor device was 165 units/km. It can be seen that, when comparing the T=27 tex number of yarns obtained in the spinning machine, compared to the yarn produced in the enterprise, it was improved by 8.3%.

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Issue Article

Annaguly Rejepovich Deryaev
Scientific Research Institute of Natural Gas of the State Concern „Turkmengas"
Candidate of Technical Sciences, Senior Researcher,
Ashgabat, Turkmenistan
annagulyderyayew@gmail.com

TECHNOLOGICAL MODE OF OPERATION OF WELLS AND FEATURES OF IMPROVING THE SYSTEM OF COLLECTION, PREPARATION AND TRANSPORT OF NATURAL AND ASSOCIATED GAS AT GAS CONDENSATE FIELDS

Abstract: *Mandatory research and measurement complexes for monitoring development should cover evenly the entire area of the development object, the entire fund of observation wells. They should contain measurements of reservoir pressure for control and piezometric wells, measurements of reservoir and bottom-hole pressures, well flow rates for liquid, gas factors and water content of products for producing wells, measurements of wellhead injection pressures and injection volumes for injection wells, hydrodynamic studies of producing and injection wells in stationary and non-stationary modes, studies on the control of the oil and water contact, gas and oil contact, oil and gas saturation, technical condition of the wellbore by field-geophysical methods, selection and research of deep oil samples, surface rock products of wells (oil, gas, water).*

The article is devoted to a detailed consideration of proposals to improve the system of collection, preparation and transport of natural, associated gas and condensate on the example of the Altyguyi gas condensate field. The topic of operation of gas wells, the state and proposals for improving the system of collecting and preparing gas and condensate are touched upon. The resources of high-pressure gas that ensures its preparation to the required conditions at the integrated gas treatment plant, corresponding to the calculated values of the inlet pressure.

Key words: *condensate degassing, aggregate, group measuring unit, separation, measuring gauge, booster pumping unit, associated gas, bottom hole, gas factor, perforation interval, gas lift, gas separation.*

Language: *English*

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Introduction

The operational and technical characteristics of productive oil wells of the Altyguyi field are given in Tables 1 and 2.

The flow rate of 24 fountain wells is 82-6 t/day, the water content is 1-30%, only the water content of 3 wells (№ 7, 16, 18) is 73; 71; 77%. The gas factor is 205-1129 m^3/t and the oil solidification temperature is 36-37 ºC.

In 2011, 2 wells (№. 3 and 51) were transferred to gas lift operation. In 2014, due to the transition of these two wells to a semi-spontaneous mode of operation, the supply of a working agent was stopped [1]. And now these wells are working in a fountain way. During the operation of wells by the gas lift method, over time, there was a decrease in annular pressure, oil degassing and an increase in dissolved gas in the composition of the extracted products. As a result, this condition led to the transition of wells from the gas lift to the fountain method of operation.

Subsequently, with the time of reduction of reservoir pressure on productive formations, it will be necessary to restore the gas supply and switch to the gas lift method of operation.

Table 1. Operational and technical characteristics of productive oil wells of the Altyguyi field

№ wells	Method of operation	Horizon	Down-hole (m)	Interval Perforations (m)	Output (t/day)		Water cut, %	Gas factor m^3/t
					Q_{fluid}	Q_{oil}		
1	2	3	4	5	6	7	8	9
21	fountain	NK-8	4007	4001-4004 3993-3998 3994-4000	17	16	6	401
3	fountain/ gas lift	NK -9	3757	3732-3778	19	17	13	309
4	fountain	NK -9	3770	3728-3740	40	39	3	289
7	fountain	NK -9	3758	3746-3750	26	7	73	461
10	fountain	NK -9	3674	3653-3662	24	22	8	513
11	fountain	NK -9	3868	3833-3839	53	37	30	349
12	fountain	NK -9	3740	3720-3726	60	58	3	501
16	fountain/ gas lift	NK -9	3875	3850-3857 3800-3806 3769-3775	7	2	71	1129
1	2	3	4	5	6	7	8	9
17	fountain	NK -9	3860	3842-3848	79	78	1	331
18	fountain	NK -9	3905	3890-3896	35	8	77	403
19	fountain	NK -9	3910	3891-3897	84	82	2	401
24	fountain	NK -9	3751	3691-2302	56	52	7	205
51	fountain/ gas lift	NK -9	3685	3652-3662	13	12	8	403
52	gas lift	NK -9	3685	3672-3679	16	15	6	290
102	fountain	NK -9	3727	3695-3704	37	36	3	332
104	fountain	NK -9	3760	3714-3723	17	16	4	612
105	fountain	NK -9	3860	3838-3844	56	55	2	250
106	fountain	NK -9	3810	3783-3792	43	33	23	283
107	fountain	NK -9	3885	3864-3869	40	39	3	318
108	fountain	NK -9	3829	3790-3796	35	33	6	303
110	fountain	NK -9	3820	3789-3791	12	11	8	513
111	fountain	NK -9	3880	3834-3842	71	70	1	283
112	fountain	NK -9	3771	3763-3769	55	53	4	374
113	fountain	NK -9	3705	3686-3695	7	6	8	726
114	fountain	NK -9	3700	3682-3691	44	36	18	403

Table 2. Operational and technical characteristics of productive oil wells of the Altyguyi field

№ wells	Method of operation	Horizon	Downhole (m)	Interval Perforations (m)	$P_b/P_{ann.}$	Fitting diameter (mm)	Gas inlet depth (m)	Note
21	fountain	NK -8	4007	4001-4004 3993-3998 3994-4000	34/118	5	2200	
3	fountain/ gas lift	NK -9	3757	3732-3778	60/105	4		
4	fountain	NK -9	3770	3728-3740	44/106	8		
7	fountain	NK -9	3758	3746-3750	24/153	5		
10	fountain	NK -9	3674	3653-3662	76/154	6		
11	fountain	NK -9	3868	3833-3839	27/136	6		
12	fountain	NK -9	3740	3720-3726	153/248	8		

16	fountain/ gas lift	NK -9	3875	3850-3857 3800-3806 3769-3775	152/155	5		Puncher 2000 m
17	fountain	NK -9	3860	3842-3848	57/143	8		
18	fountain	NK -9	3905	3890-3896	15/116	4		
19	fountain	NK -9	3910	3891-3897	114/122	8		
24	fountain	NK -9	3751	3691-2302	118/144	8		
51	fountain/ gas lift	NK -9	3685	3652-3662	31/94	5		Puncher 2000 m
52	gas lift	NK -9	3685	3672-3679	46/76	6	2200	Puncher 2000 m
102	fountain	NK -9	3727	3695-3704	100/114	6		
104	fountain	NK -9	3760	3714-3723	63/154	4		
105	fountain	NK -9	3860	3838-3844	81/152	8		
106	fountain	NK -9	3810	3783-3792	122/136	5		
107	fountain	NK -9	3885	3864-3869	78/110	5		
108	fountain	NK -9	3829	3790-3796	63/115	6		
110	fountain	NK -9	3820	3789-3791	52/137	4		
111	fountain	NK -9	3880	3834-3842	57/148	8		
112	fountain	NK -9	3771	3763-3769	13/167	4		
113	fountain	NK -9	3705	3686-3695	70/112	8		
114	fountain	NK -9	3700	3682-3691	102/136	6		

Currently, 52 wells are being operated at the field. According to the calculations of the field development, the transition of all fountain wells to operation by the gas lift method is being considered.

Table 3 shows the proposed options for the development of the transition of fountain wells to the gas lift method of operation.

Table 3. The proposed variant of the development of the transition of fountain wells to the gas lift method of operation for the Altyguyi field

(basic option I)

Indicators	Unit of measurement	2022	2023	2024	2025	2026	2027
Oil production	thousand tons						
Liquid extraction	thousand tons						
Associated gas resources	miln m^3						
Transfer of wells to the gas lift method	well		5	6	7		
Fund of gas lift wells operating until the end of the year	well	1	6	12	19	19	19
Average oil flow rate of operating wells	t/day						
by liquid	t/day						
Water cut	%						
Required gas resource for gas lift	miln m^3	1,9	5,9	30,2	32,3	43,1	41,7

(Option II)

Oil production	thousand tons						
Liquid extraction	thousand tons						
Associated gas resources	miln m^3						
Transfer of wells to the gas lift method	well		7	12	12	12	12
Fund of gas lift wells operating until the end of the year	well	1	8	20	32	44	56
Average oil flow rate of operating wells	t/day						
by liquid	t/day						
Water cut	%						
Required gas resource for gas lift	miln m^3	1,9	19,7	68,8	141	188	209

(Option III)

Oil production	thousand tons						

Liquid extraction	thousand tons						
Associated gas resources	miln m^3						
Transfer of wells to the gas lift method	well		11	24	13	7	6
Fund of gas lift wells operating until the end of the year	well	1	12	36	49	56	62
Average oil flow rate of operating wells	t/day						
by liquid	t/day						
Water cut	%						
Required gas resource for gas lift	miln m^3	1,9	11,0	45,4	88,7	120	120

In the gas lift mode, the supply of the working agent in the range of 2000-2200 meters lifts are carried out at 38 ^{0}C with heated gas through the holes of the gas lift valves temporarily installed in place [2, 3].

At the field, gas is supplied to gas lift wells with operating pressures of 70-85 kgf/cm2 by special gas compression lines. The gas consumption for each well currently averages 15 thousand m^3/day.

To operate the lift with the greatest efficiency, i.e. with the minimum specific consumption, it is necessary that the lift operates at the optimal flow rate, which requires the greatest immersion under the dynamic level, i.e. the length of the lift must be equal to the depth of the well. The minimum specific flow rate in the maximum feed mode is provided if the relative immersion is $\xi = 0.5$, and for the optimal mode the relative maximum flow rate is $\xi = 0.6$ [4].

Operated gas lift wells need to be optimized according to existing methods. According to calculations, in gas lift wells with a gas inlet point of 2300 - 2500, we accept a working pressure of P_{work} = 6.4; 7.4; 8.4 MPa, and in wells with a gas inlet depth of 3000 - 3500 m - 10-12 MPa. At gas condensate fields, it is necessary to implement a closed-cycle compressor gas lift with high-quality gas preparation for the needs of the gas lift and with further gas supply to the export gas pipeline.

The system of collection and preparation of products at the wells of the Altyguyi field is compatible with the collection and preparation of products at the wells of the Korpedje field.

The system of collecting and preparing gas condensate wells of the Altyguyi field is shown in the figure 1.

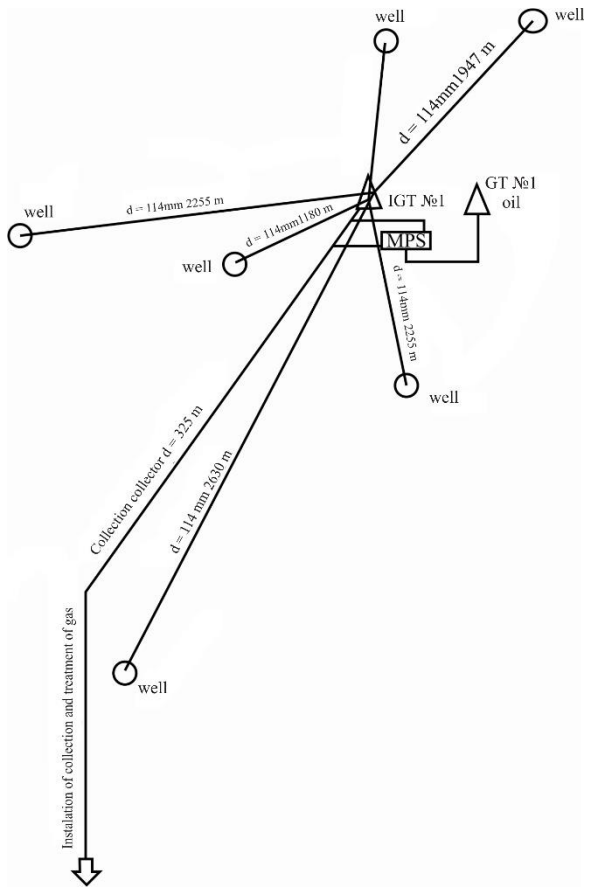

Figure 1. The system of collecting and preparing gas condensate wells of the Altyguyi field

The products of gas condensate wells with gas pipelines are sent to a complex metering unit and from there they are sent through collectors to the first stage of the Korpedje complex gas treatment plant.

Let's consider the features of the energy technology complex of a gas condensate field on the example of the Western part of Turkmenistan, including producing wells, a collection system, a preparation system and compression of the extracted gas in the aspect of expediency (necessity) of modification (reconstruction) for the future covered by the field development project [5].

The compressor station (CS) provides:

1. compression of associated gas coming to the CS reception through the gas pipeline in three compression stages: from 0.3 MPa to 7.5 MPa;

2. compression of associated gas coming to the CS reception via combined gas pipelines from oil and gas collection points (DNC-1 and DNC-2) by fields;

3. compression of the natural gas of the gas condensate field itself, which is received by the CS through an incoming combined gas pipeline connected to the corresponding group measuring units (GMU).

The technical and technological features of the CS are also:

- the presence at the compressor station of two units (with cooling systems) of the first and second stages of compression of associated gas from an inlet pressure of 0.3 MPa to a pressure of 2.8 MPa, which is the inlet pressure to the terminal (third) compression stage;

- the presence at the compressor station of three units at the third compression stage, one of which is designed to compress associated gas, and the other two to compress natural gas coming directly to the final compression stage from the natural gas supply pipeline;

- the presence of a gas cooling system by low-temperature mechanical refrigeration, i.e. by low-temperature condensation, which is provided by generating cold on steam compression machines using a refrigerant - freon.

The gas resources that can be disposed of (sent to the consumer with the required gas quality) through the CS are unambiguously equal to its design productivity per year while maintaining the above pressure at the inlet to the CS through two gas streams [6,7].

A feature of the operation of the gas processing unit (integrated gas treatment unit) at the current stage of field development is the need to maintain a pressure at the inlet to the installation that ensures the required quality of export gas, i.e. obtaining dew points for water and hydrocarbons established by the gas supply contract.

The current analysis of the parameters of the operation of the IGTU reveals a shortage of reservoir energy of the gas pressure entering the IGTU in the modes corresponding to the design performance.

We note that the overall (integral) effect of gas cooling using low-temperature gas separation technology using regenerative heat exchange largely depends on the type of installed heat exchanger, i.e. its design features and the area of the heat exchange surface [8].

The heat exchangers installed on the IGTU provide an almost twofold decrease in the temperature of the gas entering the low-temperature separator in relation to the Joule-Thompson choke effect [9,10].

The formula for determining the required operational value of the gas separation temperature (in a low-temperature separator) is presented as:

$$T_{sep} = T_{ent.} - \Delta T_{thr.} - \Delta T_{To}$$

$T_{ent.}$ is the temperature of the gas at the entrance to the IGTU;

$\Delta T_{thr.}$- reducing the temperature on the throttle due to the Joule Thompson effect:

$$\Delta T_{thr.} = \frac{\Delta P}{\varepsilon}$$

$\Delta P_{thr.}$ is the pressure drop on the throttle, MPa;

ε is the Joule-Thompson coefficient, determined by the thermodynamic conditions of throttling and assumed to be ε = 0.27 MPa/°C;

ΔT_o is a decrease in the temperature of the gas in the heat exchanger, which, according to operational data, is represented as:

$$\Delta T_{thr.} = 2\Delta T_{thr.}$$

The critical value of the pressure at the inlet to the IGTU, at which the conditions for the preparation of conditioned gas are met, is determined by the ratio:

$$P_{ent.cr.} = P_{req.} + P_{thr.}$$

where $P_{req.}$ is the pressure at the beginning of the gas pipeline (at the outlet of the IGTU), which, in turn, is determined depending on the values of the required pressure at the end of the pipeline and pressure losses in the pipeline;

$$P_{req} = P_{ter.} + \Delta P_{g.p.} \ ,$$

where: P_{ter} is the terminal pressure accepted under the terms of gas supply equal to 5.6 MPa.

As a result of calculations based on the above ratios, the necessary pressure drop at the IGTU to obtain conditioned gas with a dew point on water $T_{d.w.}$ = 0 °C is in summer ΔP ~ 3.0 MPa and in winter ΔP ~ 1.5 - 2.0, which corresponds to the need to provide at the entrance to the IGTU pressure P_{ent} ~ 9.5 MPa in summer and 8.5 MPa in winter.

The resources of high-pressure gas, which ensures its preparation to the required conditions at the IGTU, corresponding to the above calculated values of the inlet pressure, are determined in this field development project for the future under consideration [11, 12].

Due to the projected reduction in high-pressure gas resources in the future, in order to maintain the

operation of the gas compressor station in modes that ensure gas preparation to export condition, an urgent construction of a booster compressor station is required.

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Issue Article

Marine Ugulava
Caucasus International University
Political Science Ph.D
PhD student of the program

RELATIONS BETWEEN GEORGIA AND AZERBAIJAN IN A HISTORICAL PERSPECTIVE

Abstract: *Today, as never before, the Caucasus occupies a key place on the world political map. Accordingly, the political, economic and cultural relations of the two geopolitically most important countries in the Caucasus - Azerbaijan and Georgia - are the main cornerstone of these processes. They were part of the same empire, where they had to co-exist in a common political-ideological system. The issue of occupation and the struggle for independence, political, economic and cultural challenges after independence are important. In 2010, the President of Azerbaijan - Ilhalm Aliyev wrote - "We are the continuation of each other, we are the end of each other, we are parts of one organism." Azerbaijan is a determinant of many processes on the world political map. Due to its geopolitical location and energy resources, Azerbaijan is a preferred partner for many countries of the world. Georgia is connected with it by historical, economic and cultural roots. However, the relations between these two countries are bilateral, both from the economic and political point of view, for centuries. The security line of global energy and trans-national transport projects pass through these two countries. Accordingly, the relations between Georgia and Azerbaijan fundamentally determine the common Caucasian geopolitical strategy.*

Key words: *Georgia, Azerbaijan, collapse of the USSR, geostrategy.*

Language: *English*

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Introduction

Geographical proximity does not determine Georgia-Azerbaijan relations. Both states have a centuries-old history of relations. There have always been close political-economic and cultural relations between the Turkic-speaking kingdoms-kingdoms in the territory of Georgia and today's Republic of Azerbaijan or Iran-Azerbaijan, which were often strengthened by family ties. Sometimes Azerbaijanis are mistakenly referred to as "Tatars" in a negative context. This is because after the invasion of the Mongol-Tatars in Georgia, the word "Tatar" was completely associated with the Turkic-speaking people. Sometimes Azerbaijanis are mistakenly referred to as "Tatars" in a negative context. This is because after the invasion of the Mongol-Tatars in Georgia, the word "Tatar" was completely associated with the Turkic-speaking people. There used to be many khanates in the territory of modern Azerbaijan (Nakhchevan, Shirvan, Shaki, Karabagh, Ganji), which were ruled by khans of Turkic-speaking Azerbaijani origin and were vassals of the Shah of Iran, before Russia dominated the Caucasus. As a result of the Russo-Iranian wars in the 19th century, Iran lost these territories forever and became part of the Russian Empire. As a result of the Russo-Iranian wars in the 19th century, Iran lost these territories forever and became part of the Russian Empire. After the overthrow of the Russian tsarism, the countries of the South Caucasus first established the Transcaucasian Special Committee (ОЗАКОМ). The Provisional Government of Russia entrusted the management of Transcaucasia to the special committee of the regional government body - Transcaucasia. Regional government body "Ozacom" was staffed with Caucasian deputies of the Russian State Council. V. was appointed as the chairman of the committee. Kharlamov, members were: M.

Papajanov, M. Jafarov, Ak. Chkhenkeli K. Abashidze. Ozakom began his work in Tbilisi in March 1917 and his authority was terminated in October 1917, when a coup d'état by the Bolsheviks took place in Russia and overthrew the two-government system.[1] Soon the Transcaucasian Commissariat was formed, which officially separated from Soviet Russia, although it was announced that the Transcaucasian Commissariat would act as a regional authority until the restoration of legal power in Russia, i.e. It was emphasized that Transcaucasia was not declared an independent state.[2] In 1918, the Transcaucasian Commissariat convened the Transcaucasian Seim, a representative government body of the Transcaucasian countries, where three factions were formed: the Muslim faction (Musavateli and non-partisans)— 50; Social Democrats (Mensheviks) — 32 members; Dashnak faction — 27; At the invitation of the Seym, the Transcaucasian Commissariat emphasized the separation of this region from Russia, although independence was not officially declared and all this was legally signed a little later. On March 3, 1918, in Brest-Litovsk, Soviet Russia signed a treaty with Germany and its allies, by virtue of which Kars, Ardagan and Batumi were handed over to Turkey. No one has agreed on this issue with the Transcaucasian Commissariat, so they protested with arguments from the point of view of international law. Turkey demanded the Transcaucasian Sejm to vacate the districts in order to ensure the right granted by the armistice, but the Transcaucasian Sejm and the Commissariat tried to resolve the conflict through negotiations, but without success. A crisis situation was created, one of the important decisions to avoid it was the declaration of independence of the Transcaucasian Federal Republic. On April 22, 1918, Transcaucasia was declared independent, but soon the issue of foreign-political orientation arose. It is impossible for Germanophile Georgia, Anglophile Armenia and Turkophile Azerbaijan to live in a united state.

At the same time, there was an acute border issue between Georgians, Armenians and Azerbaijanis. [3]The only way out was to create a constitution (Armenia, Azerbaijan, Georgia). As long as the discussion on the constitutions was going on, the situation continued to change unfavorably. It was necessary to declare Georgia's independence. On May 26, 1918, the Transcaucasian Seim held its last session in the former residence of the Viceroy of the Caucasus, where the Transcaucasian Federal Republic was declared dissolved and Georgia's independence was declared on the same day. Azerbaijan also declared independence two days later in the same hall.

Relations between Georgia and Azerbaijan as democratic republics were first established in 1918. On June 16, 1919, a joint defense treaty was signed against General Denikin's volunteer army. The issue of belonging to the Zakatali District and Azerbaijan's support to the Republic of the South-West Caucasus remained a problem between these two countries, although it did not lead to an armed conflict. After the sovietization of Azerbaijan by the Bolsheviks in 1920, part of the political elite there moved to Tbilisi, but in February 1921, Soviet Russia conquered Georgia as well. Article 3 of the Russia-Georgia Treaty of May 7, 1920 defined the state border between Georgia and Russia, from the Black Sea along the Psou River to Mount Asakhchi. In the north - to Zakatali district and from there to the border of Armenia in the east. [4] Due to the conclusion of this agreement, Sovietized Azerbaijan protested the assignment of Zakatali to Georgia, since the majority of its population consisted of Muslims. The protest was followed by the placement of Georgian and Azerbaijani troops in Zakatala and a small escalation, which Russia used to its advantage and deployed its troops there. On May 12, 1920, Russia and Georgia signed a new agreement, which provided for the creation of a joint commission from the representatives of Georgia and Azerbaijan, where they would agree on the Zakatal issue.

On June 12, 1920, an agreement was signed between the Democratic Republic of Georgia and Soviet Azerbaijan in Agstafa, according to which the border between these two countries passed along the border of Borchalo and Kazakh Mazri. Several neutral zones were defined in the Kazakh Mazra, the governance of which remained in the hands of Azerbaijan. This became the last document between these two countries in the 20s of the 20th century, which was signed between Georgia and Azerbaijan. Here we should mention another important border dispute, which is related to the Davit-Gareji monastery complex, although it was put a little later on the agenda. Soon, Soviet Russia annexed the Republic of Georgia. It is no coincidence that after the occupation of Azerbaijan and Georgia by Russia, the diaspora of Azerbaijan and Georgia engaged in common coordinated activities in foreign countries in the direction of eliminating the occupation.

On December 30, 1922, Georgia, Azerbaijan and Armenia became part of the Soviet Union. As part of the Transcaucasian Soviet Federated Socialist Republic, which was abolished in 1936, the socialist republics of Georgia, Azerbaijan and Armenia were created separately.

[1] History of Georgia XX century. Editorial group V. Guruli, M. Bakhtaze, M. Vachnadze, D. Shvelidze, Av. Tsotskolauri, N. Kirtadze, P. Firanishvili, TSU 2003, Ed. Artanuj p55-60

[2] A. Silagadze, Restoration of Georgia's state independence (1917-1918) ch. 1998. p. 56

[3] History of Georgia XX century, p.54

[4] M. Khvedelidze, The State Border of Georgia in Constitutions and International Agreements. Tbilisi 1999, p. 8

In the 1930s, Stalinist repressions affected both countries, killing thousands of victims of the system. During the 1940s, Azerbaijan was the main supplier of oil to the Socialist Soviet Republic Union (especially during the war with Nazi Germany, it was an important strategic region). After the Second World War, both Georgia and Azerbaijan showed signs of crisis. Azerbaijan's oil lost its importance in the Soviet economy. This was partly due to the fact that oil production had shifted to other regions of the Soviet Union, and partly to the fact that all known oil-rich areas had been exhausted. Therefore, Azerbaijan became the least needed in terms of productivity and economic benefits among the other Soviet republics, excluding Tajikistan. [5]

The annexation of Georgia by Soviet Russia was followed by political repressions and inclusion in the country's socialist system. The wave of repressions passed over Georgia several times (1927, 1937, 1954). After the Second World War, writing, all branches of art came under severe ideological pressure, and censorship was tightened. The aspirants of the Soviet ideology fought against the manifestation of the bourgeois ideology everywhere. The aggressiveness of the Soviet ideology created unbearable conditions for writers and artists. It should be noted that the formation of autonomies in Georgia (which is the main concern of Georgian politics today and due to which important territories of the country have been lost) was a political goal of Soviet Russia. After the operation carried out in 1921, Abkhaz and Os separatists were protected by Soviet Russia. In March 1921, according to the instructions of Soviet Russia, Abkhazia was declared a Soviet Socialist Republic. After Moscow's coercion in May 1921, Revkom recognized the Soviet Republic of Abkhazia. In December 1921, an agreement was signed between the Soviet Socialist Republic of Georgia and the Soviet Socialist Republics of Abkhazia, by virtue of which Abkhazia became part of Georgia. Soviet Russia protected the OS separatists as well. In 1921, the Revkom of Georgia, again at the will of Moscow, created the South Ossetian Autonomous District within the territory of Shida Kartli as part of Georgia. Soviet Russia protected the OS separatists as well. In 1921, the Revkom of Georgia, again at the will of Moscow, created the South Ossetian Autonomous District within the territory of Shida Kartli as part of Georgia. At the time of the creation of the autonomous district, the majority of the population of Samachablo were Georgians, therefore the creation of an autonomous republic would not be justified. The South Ossetian Autonomous District was practically launched in 1922. [6]

On the initiative of the Soviet government, the number of Azerbaijani residents on the territory of Georgia increased especially since the second half of the 20th century. Their number is growing rapidly and is ahead of all other ethnic groups of the population of Georgia. During 20 years (1959-1979), the number of the entire population of Georgia increased by 24%, and the number of Azerbaijanis - by 66%, that is, their average annual growth was 2.66%. This is when the external migration processes among Azerbaijanis in the mentioned period, although weakly expressed, still had a negative balance. It should be noted that unlike Russians and Armenians assimilation of Azerbaijanis with other ethnic groups did not take place, most of the Azerbaijanis settled in Georgia live in rural areas. In 1970, 18.2% of their total number lived in the cities of the republic. In 1979, 12.9 thousand Azerbaijanis lived in Tbilisi, 7.4 thousand in Rustavi. Azerbaijanis made up the majority of the rural population of Kvemo Kartli (in the districts of Marneuli, Bolnisi, Gardabani, Dmanis). The second area of their settlement is Kakheti - the territory of Sagarejo, Lagodekhi, Telavi districts. There are Azerbaijani villages in Shida Kartli - in Kaspi, Mtskheti and Kareli districts, as well as in Trialeti and Tetritskaro districts. The number of Azerbaijanis in the rest of the republic's regions is relatively insignificant. There are Azerbaijani villages in Shida Kartli - in Kaspi, Mtskheti and Kareli districts, as well as in Trialeti and Tetritskaro districts. The number of Azerbaijanis in the rest of the republic's regions is relatively insignificant. As a result of living for a long time surrounded by Turks, this part of the Greeks, who were called Urumi and currently live in Trialeti, lost their language and acquired Azerbaijani. It is confirmed in the Azerbaijani scientific literature that even in 1873 there were 64 thousand inhabitants in Tbilisi province,[7] of course, this number is not true, because Muslim Georgians were also counted as Azerbaijanis.

During the USSR, the economic situation of Georgia and the Republic of Azerbaijan improved in the 60s of XX century, when V. Mzhavanadze was appointed, and in Azerbaijan - H. Aliev. Aliyev temporarily improved the economic situation and promoted alternative branches of agriculture, including cotton farming. He also reinvigorated the republic's ruling elite, which was already largely composed of ethnic Azerbaijanis. In 1982, Aliyev became a member of the Politburo of the Communist Party - the highest position ever achieved by an Azerbaijani in the Soviet Union.

In 1987, when restructuring began, he was deposed by the leader of the Soviet Union, Mikhail Gorbachev, whose policies Aliyev opposed.[8]By the

[5] M. Matsaberidze, Political system of modern Azerbaijan, Tbilisi 2020. p. 6.
[6] Georgian Soviet Encyclopedia, Vol. Georgian SSR, Tb., 1981. — p. 2.
[7] Azerbaijanis, Baku 1988 p.47
[8] M. Matsaberidze, approx. copy page 7

end of the USSR in the late 1980s, during Gorbachev's rule, the problem of Nagorno-Karabakh emerged. In February 1988, the ethnic conflict was renewed, which was caused by Armenia's demand to join the Nagorno-Karabakh Autonomous Oblast, which is part of Azerbaijan. By March 1988, Armenians had expelled hundreds of thousands of Azerbaijanis from Karabakh, along with this Armenian population was being raided in Baku and Sumgait. Moscow was "establishing order" by using military force, but the unrest continued.

Moscow was "establishing order" by using military force, but the unrest continued. The ethnic conflict revealed the absence of the Communist Party as a leader of national interests. Independent publications and political organizations appeared in the background of "publicity". The most powerful of these organizations was the Azerbaijan People's Front (ASP), which in 1989 equaled power with the Communist Party. Moscow was "establishing order" by using military force, but the unrest continued. The ethnic conflict revealed the absence of the Communist Party as a leader of national interests. Independent publications and political organizations appeared in the background of "publicity". The most powerful of these organizations was the Azerbaijan People's Front (ASP), which in 1989 equaled power with the Communist Party. The ASF soon split into a conservative-Islamic and an opportunist wing, leading to violence against Armenians in Baku and the intervention of Soviet troops. The unrest culminated on January 20, 1990, when Soviet troops killed 132 demonstrators in Baku, although Azerbaijan claims a much higher death toll. [9]Similar problems appeared in Georgia as well, which was carried out by Abkhazian and Ossetian separatists. During the period when the USSR was disintegrating, Azerbaijan and Georgia declared their independence, and these conflicts took on a regional character.

In the Soviet period, in 1965-70s. Georgia's economic situation has relatively improved, although the economic development was not aimed at fundamental, radical transformations. Reforms were started in agriculture, and planned management of the economy remained in industry. Although the reforms could not be implemented, this in turn hindered the growth of agricultural production, as for the industry in both Georgia and Azerbaijan, it went to the republics of the Soviet Union and foreign countries, and the income was subject to common-Union consumption.

The collapse of the Soviet Union brought independence to the countries of the South Caucasus. Georgia and Azerbaijan have embarked on their own path of development, the age-old relationship has become more active in political, economic and social aspects. The line of global energy security passes through these two countries and transnational transport projects are implemented. Accordingly, the relations between Georgia and Azerbaijan fundamentally determine the common Caucasian geopolitical strategy.

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