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Impact of Developing the Production of Innovative Products on the Financial Results of Enterprises

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Introduction. Innovation today is a desirable outcome for all economic entities. One of the main conditions for the successful socio-economic development of the country is the development of innovative activities of enterprises, the production of competitive products and the economic growth of production. In the current conditions of globalization and digitalization, the development of the economy of any country is based on the active use of innovations in various aspects of the life and activities of an individual, society and the world as a whole, in order to create new consumer value, increase social and financial results, increase productivity and efficiency. All of them are necessary for the growth of the welfare of society by improving the quality of life and the level of safety, reducing negative impacts on the environment.

It should also be noted that today the most economically growing and financially stable countries are those that use innovative development models and the latest technologies. Progress in the development of such countries, their competitiveness in the world market is based not on the export of natural resources and the use of physical labour, but on innovative ideas and developments.

Literature review. Bessant et al. (2005, p. 1366) on the role of innovation in renewal and growth emphasize: "Innovation is the main process of renewal in any organization. If it doesn't change what it offers to the world and how it creates and delivers those offerings, it risks its survival and growth prospects." As Damanpour and Schneider (2006, p. 216): "Innovation is studied in many disciplines and defined from different perspectives". A common definition, adapted to different disciplines and covering various aspects of innovation, would be helpful, as "the term 'innovation' is notoriously ambiguous and lacks a single definition and measure" (Adams et al., 2006, p. 22).

A common problem with service innovation is that service innovation tends to be a random process: it just "happens". Instead of developing more formal structures to generate ideas for new product-related services, this is mostly random. Only a limited number of manufacturing firms use formal approaches to service innovation and have implemented the necessary precursors (Homburg et al., 2003; Schuh et al., 2004; Belz et al., 1997). A major challenge to success in product-related service innovation is its apparent absence from the service management literature (Musagaliev A. J., Abraev. T. E., 2022).

Manufacturers begin to create an innovative product, thinking about the needs of consumers, about what is of value to them. Value is the result of a value judgment (Sánchez-Fernandez & Iniesta-Bonillo, 2006). Consumers develop criteria for judging preferences in relation to their specific values. Understanding consumer requirements and identifying their differences seems to be the key to getting the right product innovation right the first time. As Raharjo (2007), the cost of not having accurate consumer opinion is substantially enormous, as it determines all subsequent processes. The most interesting opinion of consumers is that not all product attributes are considered equally important to

them; there is a non-linear relationship between quality indicators and overall customer satisfaction (Lin et al, 2010).

The UK Department for Innovation and Skills (2008) commented on the broader implications of innovation in the face of globalization and environmental challenges, highlighting the importance of all types of innovation in building and maintaining competencies and responding to environmental and demographic constraints. There is agreement that in order to maintain and strengthen their competitiveness, organizations and economies must innovate and promote innovation. Innovation is a key political and strategic issue. The criteria for innovation are economic, profit-oriented, economic, non-profit-oriented, and special (Зайналов, Д. Р., Алиева, С. С., & Расулов, Ш. Ж., 2016).

Analysis and results. The development of innovative products, in the broad sense of the word, at enterprises is one of the important aspects of innovative development. The period of development of innovative products has a significant impact on the financial activity of the enterprise, which has not yet been studied enough. There is no generally accepted methodology for its calculation. Meanwhile, the system of stimulating the activities of innovative enterprises that create products or new equipment must necessarily take into account the peculiarities and difficulties of the period of development, production and sale.

In our opinion, the development period (t) should be understood not only as the time during which a new model is designed and constructed at an enterprise (or a company related to it), its prototype and the first batch are manufactured. It also includes the start of mass production of an innovative product (product) (the first year or two). The development process can be considered completed only when the release of an innovative product (product) and its technical and economic indicators reach the projected level, the systematic production of new equipment is carried out in sizes that meet the needs of consumer enterprises. As a rule, the entire period of development at enterprises takes five to six years, and the cost price reaches the projected level in the third year of mass production.

The development period puts enterprises in a rather difficult financial and economic situation. After all, along with work on mastered models, they continue to produce the main one, i.e. non-innovative products. In practice, the question is as follows. Suppose that in 2019 a manufacturing enterprise produced 1000 units of an innovative product (service) A, which gave it, at the approved selling price and the cost of the product, a certain volume of sales and a level of profitability. In 2020, this enterprise A must create another 20 units of a newer sample of product B with a different price, cost and rate of return. To determine the plan for production and other indicators for 2020, it is necessary to know how the development of an innovative product will affect the financial and economic situation of the enterprise, its mandatory tax payments to budget revenues at all levels.

During the period of adaptation of the production of new products, the enterprise, as a rule, worsens its performance indicators: the growth rates of production volumes and labour productivity fall, and profits decrease. As a result, incentive mechanisms are narrowing down. The enterprise may not uphold the approved task for the main products, product range and quantity, which is fraught with unpleasant consequences. That is why the President of the Republic of Uzbekistan Sh.M. Mirziyoyev set the task of creating the necessary conditions and privileges for pioneering enterprises in the production of new machines and equipment, facilitating their economic situation and increasing interest in creating newer innovative products (i.e. equipment, machines , equipment, etc.).

The position of the enterprise depends, first of all, on how it copes with the tasks assigned to it, the most important indicators (Рузибаева, Н.Х., 2021). Therefore, in order to stimulate the development of the production of innovative technology, it is necessary, first of all, to provide conditions that allow on time and fully cope with the task, respectively, according to the main indicators. Among the financial indicators, an important place is occupied by the volume of profit and profitability.

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It's clear, that profitability is calculated as the ratio of the amount of profit for the "n" period to the average annual cost of production assets, or as the ratio of profit to the cost of production. The first indicator more fully reflects the efficiency of production, since profit is compared with the total amount of costs, both current and non-recurring. However, this can only be calculated based on the available reporting data, only in general for all innovative products of the enterprise for the year. On the contrary, when determining profitability in relation to cost, profit from the production and sale of innovative products is compared only with current costs. But, on the other hand, this indicator can be obtained for each individual type of product, including innovative, and, if necessary, for each type of innovative product or product (that is, to track how it changes from quarter to quarter). At the same time, it is recommended to use the profitability indicator calculated as the ratio of profit to the cost of an innovative product or product to assess the impact of shifts in the assortment.

The data obtained for a number of innovatively developing enterprises indicate that during the period of mastering the production of innovative technology, the mass of profit and profitability decrease, and new innovative products, as a rule, are less profitable than previously mastered ones. This is understandable, because the high costs of preparing the production of innovative equipment increase the cost and, at a slow pace of its decline, affect profitability for a long time. If we follow the rate of return by years of development of innovative production, we can see that it is the higher, the longer this product is produced. So, for the group of enterprises "A", "B", "C" studied, the following data were obtained:

Table 1 - Mastering innovative products in 2021

Innovative enterprises - manufacturers	Innovative products	Profitability in % to cost
A	New Model Replacement Model	1,9 36,5
Б	New Model-1 Replacement Model-1 New Model-2 Replacement Model-2	-2,0 15,6 -17,2 22,7
B	New Model Replacement Model	21,3 34,6

The production of innovative products (equipment) in these entities is either unprofitable (which is indicated in the table with a minus sign) or has a lower profitability compared to the mastered products. This does not contribute to an increase in the production of innovative products, and often to the fulfillment of tasks for their production.

The issue of profitability raises the issue of prices. It is more expedient to reduce prices for long-established, obsolete products, lowering their profitability. But in some cases, the need to reimburse large costs for the development and strengthening of the interest of enterprises in the production of innovative products requires the establishment of increased profitability on them. This is the order of the new innovative technology. The implementation of this order is largely facilitated by a system of premiums and discounts for the quality of products, which should be distributed everywhere. However, in our opinion, it is wrong to place only innovative products that are more competitive at the center of the system of incentives for the quality of equipment. It is necessary to stimulate more strongly the improvement of the quality of all the products necessary for the enterprise and included in the strategic plan, including the first category, in terms of competitiveness. In addition, in many cases,

innovative products are subject to evaluation according to several parameters or criteria until their production is fully mastered, and some of them are not evaluated at all. To speed up the innovation process, it is advisable to extend to all products provided for by the business plan the introduction of scientific and technological achievements, methods of stimulating the production of innovative products (increased profitability, deductions from profits to various special funds, including innovative products in the plan without tax, etc.) (Zaynalov, D.R., & Alieva, S.S., 2015). The proposed activities will expand the range of innovative products that have a high price. However, this, firstly, will affect a small amount of innovative products, and, secondly, it will create preferential conditions for all truly innovative products that are distinguished by innovative and technical novelty and efficiency.

It should be said that profitability in itself is not always a characteristic indicator of the impact of mastering the production of innovative products on profit. It also happens that innovative equipment is no less profitable than the old one it replaces, and, nevertheless, the enterprise is less interested in its production compared to the one being replaced. Here we are faced with the problem of economic efficiency of mastering the production of innovative equipment for self-financing enterprises.

Economic efficiency, the profitability of the production of a particular innovative product is determined, first of all, not by its profitability (although this is important for the enterprise), but by the impact on the specific performance of the enterprise, in particular, on profit growth. In this article, specific profit is understood as the ratio of the mass of profit from output to its labor intensity. The ratio of profit and labor intensity should, in our opinion, be considered as an important calculated indicator by which one can judge the impact of mastering the production of new equipment on the level of profitability of the enterprise. Of course, this indicator alone cannot solve the problem of mastering new products. An important role is played by the solution of other issues: the complexity of the strategic plan, covering all the strategic tasks of development; correct pricing; material support, etc. In other words, the process of mastering the production of innovative products is influenced by many factors, and among them such a factor as the amount of profit (that is, profitability) is of great importance.

Why is it advisable to correlate such market indicators with the complexity of manufacturing innovative products? Because it has a significant impact on these indicators, and the manufacture of innovative products requires, as a rule, large labor costs compared to previously mastered or traditional ones. The more perfect and complex the technique, the higher its labour intensity, especially in the first years of production or manufacture (if the composition of the work performed at the enterprise remains unchanged). The higher labour intensity of innovative products (products) in comparison with the old ones leads to a relative decrease in output (with normally used production capacities) and a corresponding decrease in the mass of profit, a decrease in the profitability of an enterprise in relation to production assets, and a decrease in the fund of funds used for economic incentives.

Labour intensity expresses the labour costs for the manufacture of a product and therefore is the inverse way of measuring labour productivity. As you know, there are two ways to measure labour productivity - direct and reverse. In the first method, the number of innovative products manufactured per unit of time measures it. The direct value of labour productivity is expressed by the amount of use-values produced in a certain time. But, if innovative products consist of various use values, then it has to be expressed through cost or other indirect values. With the reverse method, labour productivity must be measured by the amount of time spent on the production of a unit of innovative products. If we denote $PT(OtPUit)$ - the performance of the thread (output per unit of time); $LIofUInP$- labour intensity of a innovative products unit, A$ofTSonP$- amount of time spent on production; $NofMInP$ - number of manufactured innovative products, then:

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$$\left.\begin{aligned} PT(OtPUit) &= \frac{AofTSonP}{NofMInP}, \\ as\ LIofUInP &= \frac{NofMInP}{AofTSonP}. \end{aligned}\right\} (1)$$

These formulas give reciprocals. The output per unit of time is the inverse of labour intensity. Therefore, by reducing labour intensity, it is easy to determine the growth in production, the increase in labour productivity.

The labour intensity, calculated as the sum of the norms of time for all operations of the innovative technological process, is standard (normalized) and is measured in standard hours. Currently, there are no direct methods for determining and accounting for the actual labour intensity of individual products. On the contrary, the standard labour input is calculated before the start of production and is the most common and used indicator. It is associated with such important values as indicators of the work of enterprises, such as the size of the wage fund and a number of the most important items of production costs.

The indicator of standard labour intensity is very important for enterprises, since it is used to calculate their production capacity. Labour intensity most directly reflects the level of technology, technology and organization of production. On the other hand, the magnitude of labour intensity determines the level of labour productivity, and after it, to one degree or another, other economic indicators of the work of a given enterprise (total output of innovative products, total profit). The decrease in the normative labour intensity of the production of individual products indicates a decrease in the cost of living labour for their manufacture and, consequently, an increase in labour productivity in the production of this particular innovative product.

Thus, being a key indicator, labour intensity expresses the relationship between the technical and economic side of production. Not being a mandatory indicator of the state forecast task, it is successfully used in economic work as an important calculation indicator. Labour intensity plays an important role in the formation of the main indicators of the economic activity of enterprises. The volume of production depends on its value. Due to differences in the levels of material consumption and profitability of innovative products, a change in the cost of products does not always accurately characterize the actual change in the volume of an enterprise's production activity. In fact, the volume of its activity is determined not by the cost of manufactured products, but by its labour intensity.

At many leading enterprises in the country, labour intensity has become the leading indicator in intra-factory forecasting and stimulating the work of each department. In our opinion, this experience should be widespread.

Some economists suggest making labour intensity reduction an evaluative and incentive indicator for enterprises, having previously tested this possibility. In practice, there are clear facts of improving the estimated indicators, taking into account the labour intensity of innovative products (products), in particular, in the oil and gas sector of the economy, at industrial enterprises for the production of equipment, etc.

So far, there is no methodology for determining the impact of mastering the production of innovative products on the estimated performance of enterprises. But it is very important to determine this influence. Some methods have been developed and proposed for assessing the impact of the period of mastering the production of innovative products on the final performance indicators of enterprises, in particular, on the profit indicator (and therefore profitability). Their essence is to compare the specific profit for innovative or new and replaceable products (products), i.e. profit from the release of a unit of production (product) (in soums), related to the labour intensity of its manufacture (in standard hours). The model data obtained at a number of enterprises give an idea of the unprofitability (in terms of

specific profit) for enterprises of the production of innovative products (technology) during the period of its development:

Table 2 - Characteristics of enterprises in terms of profit on innovative products

Enterprises for the production of innovative products	The amount of profit (soums) received from the sale of a unit of production (product) per 1 standard hour of labour intensity of its production or manufacture		
	innovative products (new products or equipment)	replacement products (equipment)	Exceeding the specific profit for old products compared to innovative products (products)
1	-0,62	0,41	-
2	0,19	1,91	10 times
3	0,08	0,60	7,5 times
4	0,10	0,60	6 times

As a result of mastering the production of innovative products (or new technology), not only the specific profit for comparable innovative products or new products decreases, but often the total mass of profit at the enterprise and even the average rate of return. And this creates the possibility of reducing incentive funds, which reduces the interest of workers in the production of innovative products or new machines.

Innovative development requires an increase in the interest of enterprises in the development of innovative products (new technology). The solution to this problem is connected with the improvement of the production planning system for the main activity of enterprises, taking into account the difficulties and characteristics of the development period. Some authors (Авдеева, Е. А., et set., 2021) indicate the need for such an organization of forecasting and stimulation, which would cover the negative impact of development processes on economic indicators and would create economic advantages for innovative enterprises mastering new technology. To do this, it is proposed to single out the processes of mastering innovative products (new technology) when forecasting, stimulating, especially taking into account the cost limit and terms of mastering when developing forecasts and adjusting general business indicators.

When predicting the performance indicators of enterprises (in particular, the volume of profit and the rate of return), it is necessary to take into account the influence of the development period and, accordingly, set them in feasible volumes. Incentive funds should be increased or maintained at the same level. Such an order will require a more thorough substantiation of forecast and planned indicators. Their improvement in this direction has already begun to be carried out: recently, the forecast task of enterprises includes additional indicators on the volume of sales of innovative products.

In our opinion, in promising measures for the development of enterprises, indicators on the volume of production of innovative products should be indicated in a separate line with the allocation of volumes of production of innovative products and profits for this part of the program, taking into account their impact on the level of profitability. The indicators of subordinate enterprises with a significant share of the production of innovative products must be approved by the parent enterprises with strict consideration of the impact of these products on capital-forming indicators. The existing methodology allows all this to be taken into account, but in the vast majority of cases this is not done precisely because financial indicators for innovative products are not provided for in a separate line. Therefore,

in our opinion, it is expedient and necessary to introduce this into the plan in order to accelerate the development of the production of innovative products. Then it will be impossible not to take into account the impact of the production of innovative products on the financial performance of enterprises.

In the event of a decrease in profits as a result of the development of the production of innovative products, the parent enterprises (organizations) must ensure that the incentive mechanism is maintained in the amounts provided for in the socio-economic measures for 2022-2026. With a lack of profit to maintain the previous level of incentives at enterprises producing innovative products, it would be possible to replenish them through centralized incentives.

The proposed proposal requires experimental verification at a number of enterprises. It seems that the introduction of such an incentive procedure will improve the economic conditions for the activities of enterprises that master the production of innovative products, and increase the scientific validity of the production and sale of innovative products.

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