

## MODELS OF PRODUCTION

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**Annotation:** The theme of "Production models" includes various methods and approaches aimed at effective organization and management of production processes in industrial and services. The main models for production on this topic are considered to be massigited, individual, party, streaming, lean and agile. The advantages, disadvantages and scope of each model will analyze. The theme reveals the importance of choosing a model in increasing production efficiency, rational use of resources and adaptation to market demand. This analysis serves as an important auspicious and practical basis that serves to improve the production processes.

**Keywords:** In the economy, the two-sector models, domestic and foreign markets, industrial and uproduction systems, products, professions, compensation, reducing efficiency, dynamics, balance.

**Annotatsiya:** "Ishlab chiqarish modellari" mavzusi sanoat va xizmat ko'rsatish sohalarida ishlab chiqarish jarayonlarini samarali tashkil etish va boshqarishga yo'naltirilgan turli usullar va yondashuvlarni o'z ichiga oladi. Ushbu mavzuda ishlab chiqarishning asosiy modellari — massaviy, individual, partiyaviy, oqimli, lean va agile ishlab chiqarish tizimlari ko'rib chiqiladi. Har bir modelning afzalliklari, kamchiliklari va qo'llanilish sohasi tahlil qilinadi. Mavzu ishlab chiqarish samaradorligini oshirish, resurslardan oqilona foydalanish va bozordagi talabga moslashishda model tanlashning ahamiyatini ochib beradi. Mazkur tahlil ishlab chiqarish jarayonlarini takomillashtirishga xizmat qiluvchi muhim nazariy va amaliy asos bo'lib xizmat qiladi.

**Kalit so'zlar:** iqtisodiyotda ikki tarmoqli model, ichki va tashqi bozor, o'zaro tovar ayrboshlash, tenglamalar sistemasi, mahsulotlarni ishlab chiqarish rejasi, balans, depressiya, sanoat, tarmoqlararo, samarador, kompensatsiya, kamayuvchi samaradorlik, dinamika, muvozanat.

## INTRODUCTION

In modern economic conditions, the organization of competitive and efficient production is an important factor for the success of any enterprise. The structure of the production process, its approach and management style directly affect the quality of products, their cost and production volume. In this regard, the concept of production models deserves special attention.

This topic analyzes the main models of production and their role in practice, and highlights the advantages and scope of application of each model.

**Main part**

Production models are various forms of organizing the production process, which differ depending on the volume of products, customer requirements, production technology and the

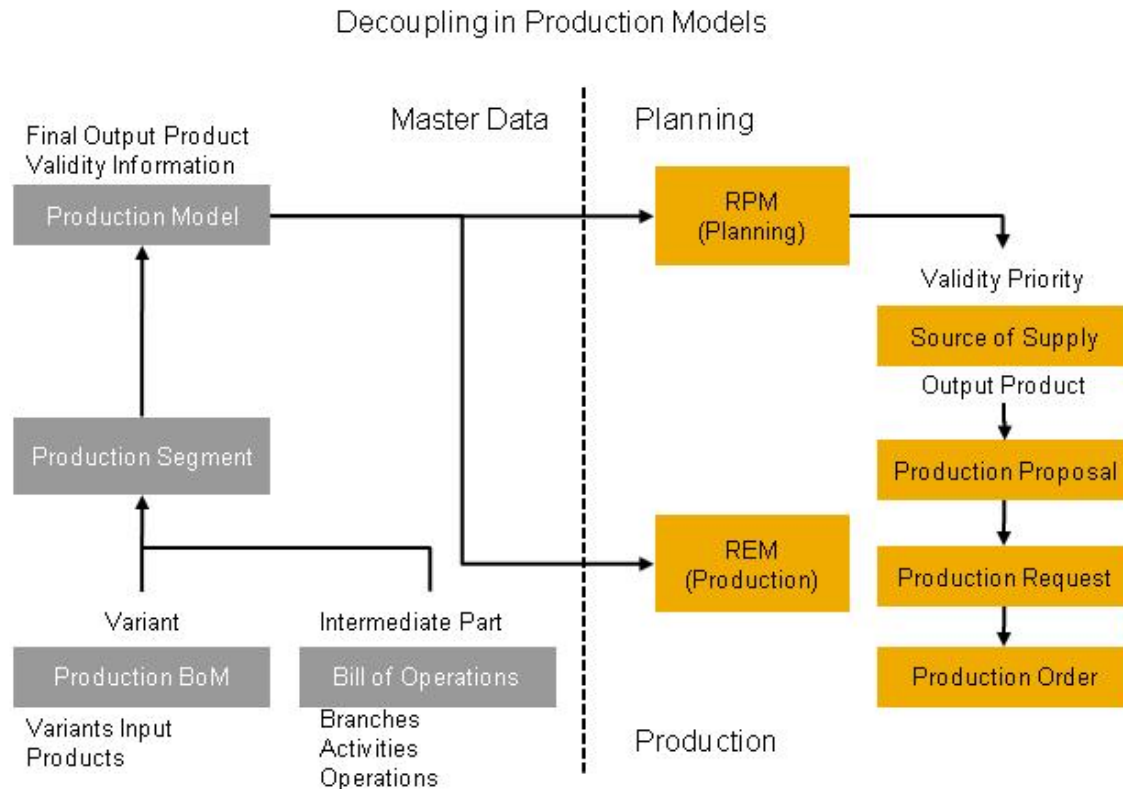
level of resource utilization. Each model has its own characteristics, which allow ensuring production efficiency, reducing costs and adapting to market requirements.

Production is the process of creating material wealth (various economic products) necessary for the survival and development of society; the transformation of production factors into goods and services intended for consumption and investment. Production consists of the natural conditions of human life and the material basis of other types of activity. Production is necessary at all stages of the development of human society. Its content is determined by the labor process. The production process involves the presence of 3 elements - labor, objects of labor and means of labor.

Social Production consists of means of production, production and consumer goods. Each of these sections consists of many economic sectors, in which various means of production and consumer goods are created. The superiority of the first section over the second is an expression of the extended economic law of production. Production does not consist only of the production of products, but also includes distribution, exchange and consumption. The development of production begins, first of all, with the change and improvement of the means of production. The development of production allows for a constant increase in the well-being of all members of society and its comprehensive development. Production is the process of creating material wealth (various economic products), which is considered important for the survival, development and satisfaction of natural needs of society. It is explained by the transformation of production factors into goods and services suitable for consumption and investment. It consists of the natural conditions of all living human life and the material basis of other types of activity. At all significant stages of the development of human society, production is of great importance, and its content is determined by the labor process. The production process includes three elements - labor, objects of labor, and instruments of labor.

### **Decoupling**

There is a clear split between master data and process information. This helps to ensure error free master data information is handed over to planning and manufacturing.



## Reuse

You need to specify key master data elements just once. You can then use the single master data element again and again as you specify your master data requirements. This simplifies the process of master data definition, and cuts down on labor and overhead.

The elements you can reuse include:

- Input products from production BoM variants

You can assign the same input product to more than one production BoM variant. This means that you just enter the input product once to the system.

- Production BoM variants

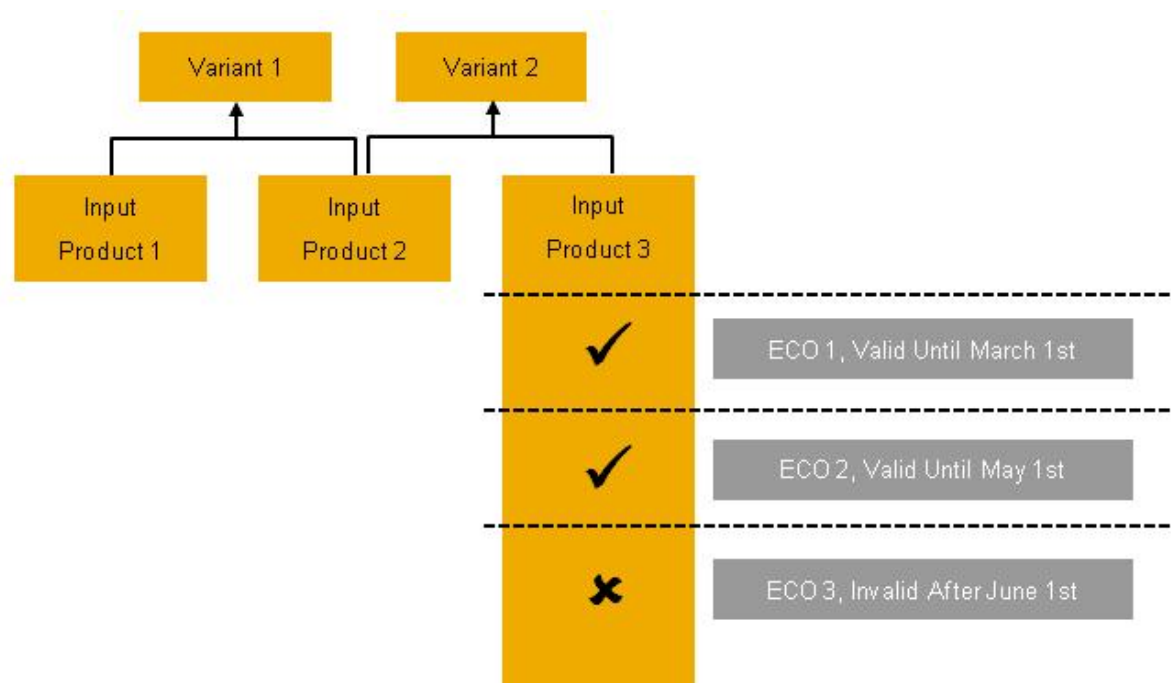
You can use the same production BoM variant in more than one segment.

- Bills of operations

You can use the same bill of operations in more than one segment.

- Production segments

You can use the same production segment in more than one production model.



"Production models" (or "production models" in English) are theoretical or practical systems used to plan, control and optimize production processes. There are several of these models, which can be classified as follows:

**1. Mass Production** (Mass production). Aimed at producing identical products in large quantities. Automated lines and standardized processes are used. For example: car factories, beverage production.

**2. Individual production** (Job production / Custom production).

Each order is produced separately. Products adapted to specific needs.

For example: custom-made furniture, buildings.

**3. Batch production** (Batch production). Products are produced in groups (batches). Suitable for medium-volume orders.

For example: pharmaceutical products, pastries.

**4. Flow Production** (Flow production / Continuous production).

The process occurs continuously. Oil refining, chemical industry are examples of this.

**5. Lean manufacturing.** Aims at reducing waste. The Toyota Production System is the basis for this.

Rational use of resources, reduction of excess inventory.

**6. Agile manufacturing.** A system that adapts to rapidly changing demand. Light flexible methods, small batches, quick response.

The further development of local industry, the creation of a value-added chain in production, the expansion of intra-sectoral and inter-sectoral cooperation, the increase in the competitiveness and variety of manufactured products, as well as the increase in the production volumes of industrial products in demand in domestic and foreign markets are among the pressing issues of today. The role of marketing personnel in the economic development of these sectors is significant. The 13 approved programs for the development of industrial sectors in the Republic of Uzbekistan provide for the deepening of the localization of industrial production, the development of intra-sectoral and inter-sectoral

cooperation, including with the involvement of business entities, and on this basis, an increase in the volume of production and export of local products, as well as the creation of new jobs. The creation of additional conditions for offering finished products, components, raw materials and materials produced by local enterprises on the domestic market through the electronic cooperation portal of the Digital Transformation Center under the Ministry of Investments and Foreign Trade of the Republic of Uzbekistan, as well as the introduction of the possibility of making purchases directly through the portal without conducting tender procedures for all consumers, solves the problems of manufacturers in the marketing sector. Today, the issues of localization of production and expansion of cooperation relations in the industry remain relevant to achieve target indicators for the localization of production of products in demand in domestic and foreign markets.

Let's assume that two sectors in the economy interact through commodity exchange in the process of producing their products for the domestic and foreign markets. That is, each sector uses the products of the other sector to produce its own products. For example, mechanical engineering and energy industries, etc. In such cases in the economy, the issue of how much each sector can produce to satisfy both domestic and foreign market demand is considered a pressing issue.

### CONCLUSION

Production models are an important strategic tool for any manufacturing enterprise. With their help, it is possible to effectively organize production processes, rationally use resources, improve product quality, and adapt to market demand.

Each of the analyzed models — mass, individual, batch, flow, lean, and agile production — has its own advantages and disadvantages, and their choice is made based on the goals of the enterprise, production capacity, and customer requirements.

Therefore, the correct choice of a production model and its correct application play an important role in ensuring the competitiveness of the enterprise, optimizing costs and quickly meeting market needs.

In the future, along with technological development, production models will also improve and new approaches will emerge. This will create new opportunities and challenges for manufacturers.

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