

CHOICE OF PRODUCTION MANAGEMENT METHOD TO PRODUCE INNOVATIVE PRODUCT IN THE PUBLISHING SPHERE

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There are different methods of production process management, which companies use according to their product, production abilities and environment. These methods describe a concept of applying business process management design and tools to the areas of manufacturing plant and supply chain activity management within and across the extended enterprise. Processes are designed to follow chronological steps of how manager wants to run the business by connecting and supporting predefined, sequenced events.

Nowadays we can see a division between companies, which produce material products and companies, whose product is non-material – digital. Companies, whose product is material, should control supplies of raw material, production process at the plant, inventories, stock, storage and delivery of produced goods. Such companies should use complex of traditional methods of production process management. Between these methods are Enterprise Resource Planning (ERP), Product Lifecycle Management (PLM), Supply Chain Management (SCM), etc.

Companies, who produce digital product don't need to control all material things, because they don't need it for production. Their main resources are time and qualified staff, the only equipment they need is computers. The methods, used to manage production process at the traditional enterprises would not work in such conditions.

With the developing of the digital – especially IT – sphere, the number of enterprises, who create digital, non-material product, grew fast. As a result there developed other methods to manage production process. There are methods of project management, because process of producing some digital product is usually mean project at such enterprises.

Enterprises in publishing sphere are not the same with IT companies, but they also produce intellectual, digital product, which then become material inside other companies (printing houses). The process of creating a book also looks like a project, at which team works for some period of time. That is why we studied project management techniques as production management methods.

Now let's take a look at some popular project management methods.

1. Agile

It's a type of process where demands and solutions evolve through the collaborative effort of self-organizing and cross-functional teams and their customers. It is best suited for projects that require flexibility. Agile is a methodology that has methodologies within itself, such as Scrum and Kanban [1].

2. Scrum

Scrum is comprised of five values: commitment, courage, focus, openness, and respect. Scrum is best suited for projects that consist of teams of less than seven people who need a flexible approach to delivering a product or service [2].

3. Kanban

Kanban is another popular Agile framework that, similar to Scrum, focuses on early releases with collaborative and self-managing teams. It is very visual method that aims to deliver high quality results by painting a picture of the workflow process so that bottlenecks can be identified early on in the development process [3].

4. Lean

Lean methodology promotes maximizing customer value, while minimizing waste. Its values suppose that "as waste is eliminated, quality improves while the production time and cost are reduced" [4].

5. Waterfall

One of the more traditional project management methodologies. Originating in the manufacturing and construction industries, its lack of flexibility in design changes in the earlier stages of the development process is due to it becoming exuberantly more expensive because of its structured physical environments [5].

6. Six Sigma

It aims to improve quality by reducing the number of errors in a process by identifying what is not working and then removing it from the process. It uses quality management methods, which are mostly empirical and statistical, as well as the expertise of people who are specialists in these methods [6].

This was a brief view of the popular production management methods in the sphere of digital products. But which one would be appropriate for managing the production of innovative product? To make proper decision we should better understand our innovation and decide to what type of models – push or pull – it refers.

According to Wallace J. Hopp and Mark L. Spearman, push-based models are more internally and technologically oriented approaches, whereas pull-based models are more customer and market-oriented approaches for managing innovation. Push-oriented organizations are usually already aware of (or at least presume to be aware of) the challenges and the users. They are also focused on searching for the best ways to address these challenges, usually with new technology.

Pull-oriented organizations, in contrast, are looking for ways to adapt to changing markets and customer demand, and are usually focused on listening to customers, learning from them and moving fast in their innovation work. Pull-based innovation processes are usually adopted by organizations that are operating at an early stage and bear a greater risk, such as start-ups or more radical initiatives within larger organizations [7].

The good example of push-oriented method of innovative product management is the waterfall.

The ideology behind the Waterfall is that each idea will have to go through certain pre-determined phases in their development. At the end of each phase, there is a “gate”. When the idea reaches a gate, it will be assessed by using certain pre-determined criteria. If the idea passes the assessment, it will receive additional investment and is able to proceed to the next phase.

Organizations using Waterfall method in their innovation work have been able to increase the organizational awareness regarding innovation, which has proven to promote transparency, improve collaboration, and enhance overall innovation culture [8].

The Waterfall method was push oriented. But there are innovative projects, for which is better to use pull oriented method. A good example of pull oriented method of innovative product management is Lean Startup method.

Build-measure-learn feedback loop is the main component of the Lean Startup Method for building and testing new ideas. The core ideology behind it is to launch a new idea or concept to the market as quickly as possible to gain experience and gather feedback for further improvement.

Lean Startup method focuses on finding the customer need and promoting the speed and urgency in idea search to avoid spending too many resources on something that isn't interesting to the target customer [9].

The creation of innovative products in publishing sphere is mostly caused by external environment. There is a very strong competition

between traditional and digital sources of information. Books belong to the traditional ones, so their producers are forced to be innovative and change its product in order to survive. This situation meets the requirements for pull oriented methods to be introduced.

However the electronic books and books with digital additions now are experimental for the most of the publishers. They gain profit from publishing usual paper books, but at the same time they forced to look for own niche in the digital world. So Lean Startup method is looks as the most appropriate.

On our opinion this method would be appropriate for some time, when certain publishing company is just seeking for the digital niche, which it may fill with own innovative product. Company should make experiments and constantly develop its innovative product, until it confidently take its place on the market. But when place is already taken, in gives possibility to approach thoroughly to the product development. In this case company may spend more money to make product better and use more certain production method as Waterfall to control this process.

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