

## **DETERMINATION OF ADDING VALUE STREAM AS A KEY OF INDUSTRIAL ENTERPRISE BUSINESS PROCESSES OPTIMIZATION**

**Shportko H.Y.**

Candidate of Technical Sciences, Associate Professor  
National Metallurgical Academy of Ukraine

**Vishnevskaya M.K.**

Candidate of Technical Sciences, Associate Professor  
National Metallurgical Academy of Ukraine

The management conception of lean production starts own changes at enterprise from business-processes description. The manufacturing process is one of its key business-process. So, the task of lean production implementation is the covering and elimination of losses which do not add the product and/or service value from the point of client view.

The covering of losses under main task of production system effectiveness increasing leads to the finding of optimal ways for its optimization. For the mentioned task the wide range of methods of business-process description are in use now. The most well-known scheme of added value stream mapping description is the value chain (or price chain) by Michael Porter.

The modern methods of business-processes description are the following: Business Process Modeling, Data Flow Modeling, Work Flow Modeling. Each of mentioned has its own fits and drawbacks.

The method that considers the mentioned in paper drawbacks is Value Stream Mapping (VSM). VSM is a key tool of Lean production for values stream creation and its further improvement that allows to ex-

ecute the analysis of current condition and describe the target condition of value stream creation as well as to optimize the enterprise business-processes.

VSM or mapping is the instructive representation of step-by-step scenario of enterprise strategic tasks achievement. In other words, it is a graphic scheme that shows the material and information streams, which are needed for product delivery to the end consumer. The map makes possible to cover the stream problematic places as well as to discover the existing loses and make a plan of development. The process of value stream mapping for business-processes optimization is a cyclic and consist from definite steps that are described in paper. The sequences of actions during mapping of further process condition are the same as under current one.

The covering and elimination of value stream loses using the lean manufacturing tool namely value mapping allows the optimization of business process, decreasing of human and financial resources, space and time for product manufacturing. In addition, it helps enterprise to react on changes in inner and outer space changes more flexible.