



VALUE ENGINEERING IN PRODUCT QUALITY MANAGEMENT APPLIED IN THE ENERGY EFFICIENT WOOD CONSTRUCTION

Author: Eng. Renata Stasiak-Betlejewska, PhD. Czestochowa University of Technology, Poland

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Value Engineering began at General Electric Co. during World War II because of the war, there were shortages of skilled labour, raw materials, and component parts, Lawrence Miles and Harry Erlicher at G.E. looked for acceptable substitutes.

They noticed that these substitutions often reduced costs, improved the product, or both. What started out as an accident of necessity was turned into a systematic process. They called their technique "value analysis" [McGill University 2022].

Value Engineering is identified as systematic use of recognized methods, which identify the function of the product or service, they establish value of this feature and provide the necessary reliability of functions at the lowest cost total. The function should be realized at the lowest possible the cost of the product (service) life cycle consistent with the requirements: qualitative, maintenance, safety, aesthetics.

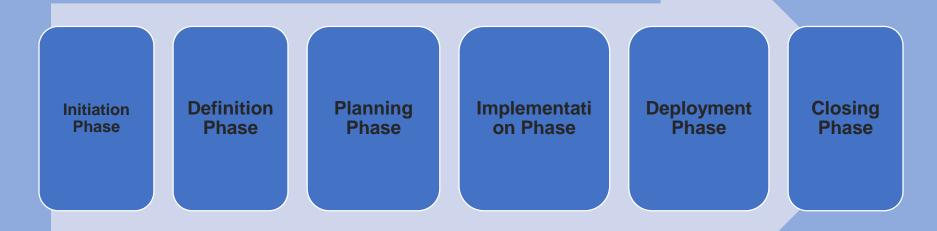
According to Document No. FHWA-2012-0046 Value Engineering (VE)

is defined as a systematic process of project review and evaluation

at the concept and design stage, carried out by an interdisciplinary team of people not related to the project, the purpose of which is to provide recommendations regarding:

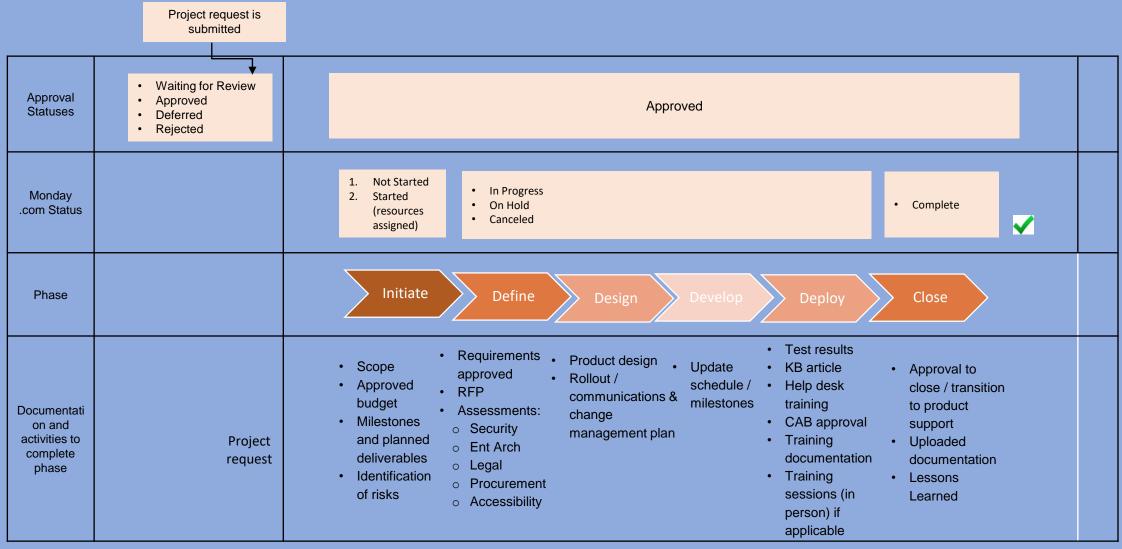
- essential functions ensuring safety, reliability and efficiency at the lowest total cost,
- improving the quality and increasing the value of the project,
- reduce the duration of the project.

Project Life Cycle





Project Management Processes and Tools

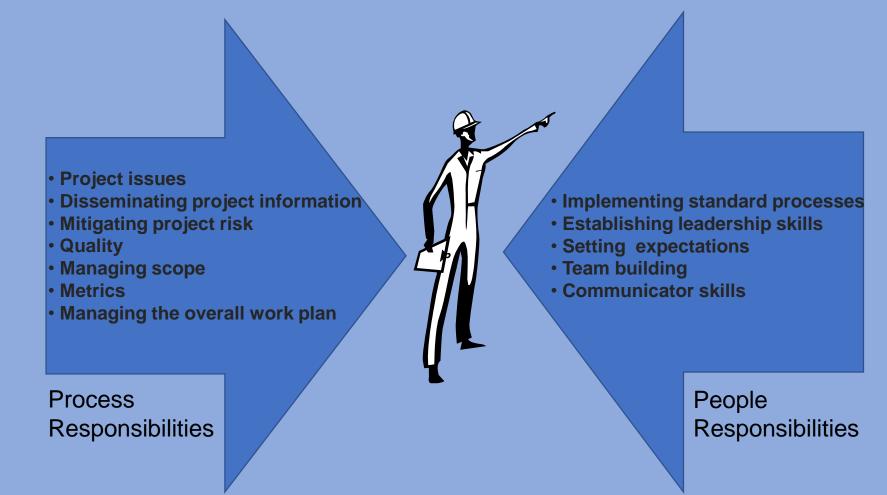


^{*} EA, Security, and Legal assessments should begin when selection has narrowed to 2-3 finalists. Procurement engagement can begin earlier.

Project best practices:

- Take notes and store in a centralized location: identify a note-taker or crowd-source
- Set your agendas and hold effective meetings

Role of Value Engineering Methodology





Thank you for your attention





Questions?
Please, ask via e-mail:
renata.stasiak-betlejewska@wz.pcz.pl



