

Design for Six Sigma (DFSS): An Application to the Service Sector

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Abstract

Purpose The main aim of this paper is to describe a practical application of a Design for Six Sigma (DFSS) project to conception and development of a new service in the logistics sector.

Design/methodology/approach A market analysis was first carried out to identify opportunities for innovation, which then led to the identification of potential DFSS projects. Based on the company's strategic priorities, a project targeting the development of a specialized service in providing logistics solutions for campaigns and events was selected. The project was conducted throughout the IDOV (Identify, Design, Optimize, Validate) roadmap. Customers and other relevant stakeholders were identified, and their requirements determined. This was followed by the identification of the high-level functional requirements for the service, which was the starting point to first define the design intent for the service and then to proceed from the conceptual stage to the detail design activities. A service pilot was finally conducted to validate the designed service.

Findings The case study proves that is possible to successfully apply DFSS in new service design contexts.

Originality/value This is the first paper describing a practical application of a DFSS project to the service sector in Portugal. Another contribution is the up-to-date literature review on DFSS case studies provided in the paper.

Keywords: Design for Six Sigma (DFSS), IDOV, Service Design