A weakness determination and analysis model for business process improvement

Semih Coskun (Department of Industrial Engineering, Yildiz Technical University, Istanbul, Turkey)
Huseyin Basligil (Department of Industrial Engineering, Yildiz Technical University, Istanbul, Turkey)
Hayri Baracli (Department of Industrial Engineering, Yildiz Technical University, Istanbul, Turkey)
Business Process Management Journal
ISSN: 1463-7154
Publication date: 18 April 2008

Abstract

Purpose
Modeling of the methods for providing improvements in business processes by value adding is researched with an integrated approach. The main purpose in this approach is improving the processes by determining and analyzing the weak points and reducing the weakness degrees.

Design/methodology/approach
The designed model determines weak points that need to be improved, analyzes them to find privileged processes in improvement by considering improvement costs and obtains the improvement degrees for defining the improvement strategy by four-phase business process improvement framework: start-up, self analysis, defining improvement strategy for making changes, feedback, and continuous improvement.

Findings
The key factor in keeping up with changes in market conditions is systematic application of improvement efforts and providing planned and controlled value addition with these improvements. Decision problems in process improvement can be structured to provide input data suitable for multi-criteria decision making techniques and results meet the solution expectations.

Research limitations/implications
The reason for using analytical hierarchy process, goal programming, and linear programming model is to select the process and determine its improvement degree. Solving the decision problems by these techniques is a time consuming process, so forming suitable programs with decision support systems will be useful.

Practical implications
The theoretical structure of the modeled techniques in this study was examined with an industrial application. The application process and the results suitability were determined.

Originality/value
The proposed model shows improvement amounts according to the amount of defined importance degrees. It presents an advantage to decision makers by giving concrete improvement values from model results determining their improvement strategies.

Keywords
- Business improvement
- Continuous improvement
- Decision making
Breaking down business processes for easy analysis. Identifying errors within processes. Designing entirely new processes. We’ve covered a number of handy business process improvement methodologies that you can use to streamline your workflow and increase your team's productivity. Use them and share with us how they helped you reach your targets. What other process improvement methodologies do you use? In our next guide, we'll look into more detail about process mapping, an essential business process improvement technique that'll help you improve efficiency and cut costs.

Business process improvement leads to manufacturing process improvement methodologies process improvement techniques. Six Sigma: More related article: In literature and business practice, implementing the business strategy and analyzing business processes is often addressed separately although business processes are regarded as a competitive key resource. In many businesses, it is unclear which systematic approach is most appropriate to identify process analysis methods which support the achievement of strategic objectives best.


24. Know about measurement-based strategy for process improvement. Six Sigma has adopted the DMAIC model to reduce problems and improve quality. Read about the 5 phases of Six Sigma. With six sigma methodology, you can improve this process performance. Six sigma is a logical structured approach to improve business processes. The Greek letter “Sigma” a statistical term: measures how much a given process deviates from perfection. Sigma is also known as standard deviation of the process from its mean. Six Sigma process enables an organization to measure the number of “defects” in a process, methods to eliminate them and get close to “zero defects” as much as possible. Managers face challenges in improving the quality and efficiency of the business.