Abstract
Purpose
This paper aims to clarify emerging aspects and trends of Six Sigma literature over 17 years, from 1992 to 2008.

Design/methodology/approach
The literature on Six Sigma from 417 referred journal articles in business and management disciplines, information systems and computer science, engineering, healthcare, etc. were systematically analyzed based on a scheme that consists of four distinct dimensions: publication year and journal, major themes, research type, and application sector (i.e. manufacturing vs service).

Findings
A number of key findings emerged: Six Sigma research is growing rapidly, covering various disciplines and domains with a great focus on Six Sigma tools and techniques; empirical research is dominant with more emphasis on case study approach; and the growing gap between manufacturing- and service-focused articles implies the return of Six Sigma to manufacturing as its initial base. Although a large volume of literature is available on Six Sigma, the topic is still under development and offers potential opportunities for further research and applications.

Originality/value
The paper provides both academics and practitioners with a useful framework for pursuing rigorous Six Sigma research through explaining the chronological growth of Six Sigma, challenging themes of Six Sigma research, dominating research types and application areas in Six Sigma, and the major sources of Six Sigma information.

Keywords
Six Sigma, Total quality management, Lean production, Supply chain management

Citation

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Like quality management in general, Six Sigma has penetrated into most sectors of today's business world. Although Six Sigma originated in industry, it has inspired a considerable amount of academic literature. This paper reviews this literature describing the trends, sources, and findings. The paper also seeks to synthesize the literature, with an emphasis on establishing its relationship to quality management theory and topics for future research. 

Six Sigma has much in common with Gemba Kaizen, the Japanese production improvement method and the LEAN Manufacturing method for waste reduction. The objective of Kaizen Gemba is to eliminate waste within an organization and to standardize prod The lean six sigma method ensures high quality and customer satisfaction in the manufacturing. The main purpose of this chapter is to explore the Lean Six Sigma (LSS) in the manufacturing sector. Lean six sigma is a structured problem solving methodology [63]. The lean six sigma framework aim at providing an effective approach to integrating lean and six sigma [65]. In this research different lean six sigma tools were used at different level/phase like-Value Stream Mapping (VSM), 5S, Kaizen, Cause and effect diagram, Quality Function Deployment (QFD), High level SIPOC, Eco-QFD, Pareto chart, Environmental VSM (current level), life Cycle Impact Assessment, Brainstorming, Design of Experiments, Cost benefit analysis, Design for Environment, Life Cycle. review and implications for future. research. Mohamed Gamal Aboelmaged. for pursuing rigorous Six Sigma research through explaining the chronological growth of Six Sigma, challenging themes of Six Sigma research, dominating research types and application areas in Six Sigma, and the major sources of Six Sigma information. Keywords Six Sigma, Total quality management, Lean production, Supply chain management. Six Sigma is a data-driven methodology that provides tools and techniques for making business processes more effective and efficient. Six Sigma actually has its roots in a 19th Century mathematical theory, but found its way into today's mainstream business world through the efforts of an engineer at Motorola in the 1980s. Now heralded as one of the foremost methodological practices for improving customer satisfaction and improving business processes, Six Sigma has been refined and perfected over the years into what we see today. SHARE ON: Staff — January 9, 2020. Six Sigma ranks among the foremost methodologies for making business processes more effective and efficient.