

Conceptual Issues in Private information on Lean Accounting: Subject Review

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Abstract

Always the selected of accounting system challenge for administrators and managers, the purpose of this article is to identify the insufficiency of traditional cost accounting techniques in lean Organizations, the Article subject reviews the relevant literature to discuss the incompetence of cost methods in lean Accounting and manufacturing.

Keyword: Lean, Accounting, Production.

Introduction

Generally Accepted Accounting Principles (GAAP) were originally tailored for mass-production firms. However, several important industries have recently adopted waste-minimizing technologies at odds with mass-production for their production lines (Luo & Brozovsky,2013). In today's dynamic and vibrant business world, accounting is not merely a process that collects, collates, analyzes, interprets and communicates financial information. It is defined as a lens through which decision-makers can see through the clouded business world. Accounting is an almost mechanized process that can be used in every realm and is now highly scalable. It means, the accounting process is now robust enough to accommodate any unforeseen development (Arora & Soral,2017).

Starting in 1980, the European and American factories have faced a radical change. Mass production and scientific management techniques from the early 1900s were challenged by the Japanese manufacturing technique Just in Time. This manufacturing concept was adopted worldwide and has become known as lean production. In the past 20 years, based on lean production, has developed a new concept, that of lean enterprise, which became quickly a part of the business vocabulary (Laura^a, 2010).

With many manufacturers now undergoing a lean transformation, it becomes essential to discover exactly what part lean accounting has played in the changes made (Chopra, 2013). Lean thinking, the foundation for Lean Accounting, has a history of demonstrable benefit and is likely to have a significant impact on the U.S. business landscape. Lean refers to the management system of applying Lean principles to operations, and Lean Accounting refers to attempts to derive

monetary management information based on Lean principles. This unique bond between an operations flow design approach (Lean) and a management accounting approach means the process of coming to terms with LA has many distinctive traits. The management accountant is required to gain an understanding of Lean thinking, principles, and practices, and a manufacturing shop floor emphasis requires that those from service industries dig a little deeper before they will be comfortable. Scrutiny of LA literature (books, articles, the Lean Accounting Summit on September 2006, etc.) reveals several assertions (and/or strong implications) related to management accounting that requires technical analysis and broader, more open debate for the benefit of practitioners. The process of evaluating LA requires addressing four aspects of the case for it as presented: (1) LA's assertions as stated in the literature, (2) understanding the implications of these assertions, (3) questioning the operations-centric view of LA, and (4) evaluating LA's decision support capabilities (Kroll,2004).

Literature Review

The study of Van der Merwe (2008) that highlights questions and concerns with the principles that underlie some existing management accounting (MA) approaches. The focus of this series of articles is on foundational principles in MA conducive to effective decision support. As was pointed out in the MA Philosophy series of articles, decision science falls in that branch of the scientific method that deals with inferences of causes and their effects in different time frames i.e., origin/historical science. The scientific method has as its foundation inductive logic and causality as its guiding principle. In business, decisions are concerned with understanding the cause and effect outcomes in the future. For managers, MA is an important source of causal insights and their corresponding monetary implications.

The study of Laura, C. (2010) explain and elucidate the terms that lean accounting operates, I will emphasize the importance of lean approach to accounting in the process of transforming the organization into a lean enterprise, I will define lean accounting and review the lean costing methods and, in the end I will highlight the benefits of using the lean accounting methods and the potential barriers to their implementation.

The Study of Chopra (2013) cut through some of the common misconceptions about lean accounting and demonstrate instead the extensive benefits to be realized from its application. The Study of Ruiz-de-Arbulo-Lopez, Fortuny-Santos & Cuatrecasas-Arbós (2013) find pieces of evidence the possible mistakes of cost accounting. The necessity and validity of VSC in lean manufacturing are presented, followed by a case example. To make continuous improvement decisions, VSM, VSC and box score offer complete information on the performance of the value stream. The study of Luo & Brozovsky (2013) examine the typical implications of this mismatch to accounting practice and why lean accounting methods are seldom adopted by most accountants and discuss how lean accounting and GAAP can complement each other in accounting practice and why assimilation of lean accounting. Adjustments by GAAP would be advantageous. the Study of Monroy, Nasiri & Peláez (2014) try to compare three accounting systems designed since 1980 to address problems of the traditional accounting system. In the first place, we present a short overview of the background and definition of three accounting systems: Activity Based costing, Time-Driven Activity-Based Costing and Lean Accounting (LA). Comparisons are made based on the three basic roles of information generated by accounting systems: financial reporting, decision making, and operational control and improvement. The analysis in this paper reveals how decisions are made over the value stream in the companies using Lean Accounting while decisions under the Activity Based Costing (ABC) Accounting system are taken at an individual product level, and

finally, we will show how Time-Driven Activity-Based Costing (TD-ABC) covers both product and process levels for decision making. Besides, this paper shows the importance of nonfinancial measures for operational control and improvement under the Lean Accounting and TD-ABC methods whereas ABC relies mostly on financial measures in this context. the Study of Fullerton, Kennedy & Widener (2014) aim is to help both researchers and practitioners better understand how lean MAP can support operations personnel with their internal decision making, and operations executives and business leaders in their objective of increasing lean operations performed as part of a holistic lean enterprise strategy. We use survey data from 244 U.S. manufacturing firms to construct a structural equation model. We document that the extent of lean manufacturing implementation is associated with the use of lean MAP, and further that the lean MAP is related systematically: simplified and strategically aligned MAP positively influences the use of value stream costing, which in turn positively influences the use of visual performance measures. We also find that the extent of lean manufacturing practices is directly related to operations performance. More importantly, lean manufacturing practices also indirectly affect operations performance through lean MAP. These findings are consistent with the notion that lean thinking is a holistic business strategy. To derive the greatest impact on performance, our results indicate that operations management cannot operate in a vacuum. Instead, operations and accounting personnel must partner with each other to ensure that lean MAP is strategically integrated into the lean culture. In sum, the lean MAP provides essential financial control that integrates with and supports operations to achieve desired benefits.

What is lean accounting?

In today's business world, accounting is defined as not only a tool for measuring financial figures but also a foolproof system that can measure and manage the value. This has forced the companies to re-think on their internal processes so that the process also meets the value definition of the customer. Lean accounting can be the answer to all the expectations raised. It is a principle-based operating system which can be expressed in terms of customer value, value stream, flow and pull with minimum interruption, the pursuit of perfection, and empowered people. It is a systematic approach to eliminate waste like overproduction, waiting, transportation, inventory, over-processing, etc. through continuous improvement. The current cost accounting system earns profit by full utilization of resources, and is associated with large inventory, long lead time and poor delivery, while lean system earns profit through 'maximized flow' on pull from customers and elimination of waste, resulting in superior customer value, good quality, good delivery and shorter lead time. This paper tries to explore the conceptual issues of lean accounting, i.e., its meaning, definition, evolution, need, and also presents a comparison between lean accounting and traditional accounting which helps the readers to understand the term lean accounting clearly (Arora & Soral,2017).

The term lean was first brought to public attention in 1990 when it was published the book *The Machine That Changed the World* by James Womack, Daniel Jones and Daniel Roos, a description of an extensive system of production developed by Eiji Toyoda and Taiichi Ohno at Toyota Motor Co., in Japan. The Toyota lean manufacturing system has become over the years a model for Boeing, Porsche, Pratt Whitney, Danaher Corporation, Wiremold Organization, Pella Windows and others (Laura^a, 2010).

There are at least three assertions in Lean Accounting that justify closer scrutiny: (1) Accounting is the problem, (2) all conversion costs (in Lean Accounting, conversion costs are defined as all value stream costs except materials and purchased outside services) are fixed, and

(3) claims for support of external reporting Lean Accounting follows the Lean operational principle of one-touch flow design for the management accounting information it provides. LA proposes a single cost collector—the value stream. A value stream is defined as all the activities required to bring a product or service from conception through to the customer, including related information processing, logistics, and the collection of money. From a management accounting perspective, the total cost of all the resources plus any product material and outside service costs are included in the value stream cost object. The value stream income statement serves as the primary tool in providing monetary information for decision making and reflects revenues from which direct material and all people, machine, and other conversion costs are deducted to obtain value stream profit. A value stream profit margin (profit divided by revenue) is calculated. Although an average product cost is sometimes calculated, Lean Accounting insists that product unit cost isn't necessary for decision making as a Lean enterprise (Kroll,2004).

Today companies develop new production systems in order to provide better and more convenient service for their customers. Replacement the traditional manufacture system with the modern ideas requires businesses to review their processes and adopt modern approaches. In this context, lean manufacturing system is one of the production systems which are developed. In a Organization which adopts lean production system, it is a necessity that the accounting system changes have to be made. Lean accounting is a series of methodology designed to support lean manufacturing methods. In lean accounting system, every single process is considered as additional cost, and be evaluated in this regard Therefore, lean accounting its self should be lean and remove additional waste. Value stream costing is one of the tools used by lean accounting approach to improve decision making process through identification and elimination of unproductive activities. We focused on this study lean thinking, the emergence of lean manufacturing and lean accounting (Kocamiş, 2015).

Manufacturing firms operating in rapidly changing and highly competitive markets have embraced the continuous process improvement mindset. They have worked to improve quality, flexibility, and customer response time using the principles of Lean thinking. To reach its potential, lean must be adopted as a holistic business strategy, rather than an activity isolated in operations. The lean enterprise calls for the integration of lean practices across operations and other business functions. As a critical component for achieving financial control, management accounting practices (MAP) need to be adjusted to meet the demands and objectives of lean organizations (Fullerton, Kennedy & Widener, 2014).

Benefits of lean accounting

Benefits of lean accounting Lean accounting followers assign it a number of benefits which worth mentioning. The first would be that lean accounting closely follows lean manufacturing and can report in an exactly way what happens on the production floor. However, this benefit is registered only by companies that are implementing or have implemented lean manufacturing, like Toyota, Boeing, Aero Gear Inc., Danaher and others (Mreza, Bachay & Flayyih, 2018). Another advantage is that lean accounting systems collect data by the value stream and not by department. Lean accounting is representing a new direction to accounting and by adapting to the information society requirements, frequently uses non-financial performance indicators to help management with vital in formations. Although there are traditional costing methods that use these indicators, lean accounting manages to apply them in three different circumstances: at the work cell level, at the value stream level, or at the Organization equipment level (Maskell, Baggaley & Grasso, 2017).

Results

A survey of previous studies shows that there are six sub-dimensions of Lean production, These dimensions are arranged based on the saturation level of each dimension after the Factor Analysis is a statistical method used to deal with multiple data associated with different degrees of correlation, summarized in the form of independent classifications based on qualitative bases of classification, and the researcher examines these taxonomic bases Exploring their common characteristics according to the theoretical framework and the scientific logic it started, since the direct use of factor analysis tends to examine the correlations between a number of variables and indicate which of these questions is more important at the level of variables or the number of questions at the level of the variable Or axis, And these dimensions:

1. Arrange and organize the workplace.
2. Value path map.
3. continuous improvement.
4. Reduce setup time.
5. Quality Improvement.
6. Cloud Systems.

Conclusions

Lean Accounting is difficult to foresee whether it will develop or not. It is in early stages and can to be more widely accepted by those companies that have, implement lean manufacturing. while accounting professionals seek ways and learn how to translate the financial impact of adopting lean principles in the financial statements (Laura^b, 2010).

The industrial companies in Iraq will not be developed before or after the war in 2003, as they used to rely on production traditionally and after the war, many of them were suspended for political and technical reasons. The technical reasons are the slack of the labor force, which was dependent on the socialist system, and the lack of modern technologies, the possibility of applying agile production and lean accounting.

Reference:

- Arora, V., & Soral, G. (2017). Conceptual issues in lean accounting: A review. *IUP Journal of Accounting Research & Audit Practices*, 16(3).
- Chopra, A. (2013). Lean Accounting-An Emerging Concept. *International Journal of Marketing, Financial Services & Management Research*, 2(8).
- Flayyih, H. H. (2013). Using Benford Law in Detecting Earnings Management and its Reflection on the audit quality: In application on a sample of listed companies in the Iraq stock Exchange. *College of Administration and Economics University of Baghdad*.
- Fullerton, R. R., Kennedy, F. A., & Widener, S. K. (2014). Lean manufacturing and firm performance: The incremental contribution of lean management accounting practices. *Journal of Operations Management*, 32(7-8), 414-428.
- Kocamiş, T. U. (2015). Lean Accounting Method for Reduction in Production Costs in Companies. *International Journal of Business and Social Science*, 6(9), 6-13.
- Kroll, K. M. (2004). The lowdown on lean accounting. *Journal of Accountancy*, 198(1), 69.
- Lauraa, C. (2010). Lean accounting, a new global approach. *Ovidius University Annals, Economic Sciences Series*, 10(1), 1510-1515.

- Laurab, C. (2010). Lean accounting, a new global approach. *Ovidius University Annals, Economic Sciences Series*, 10(1), 1510-1515.
- Luo, J., & Brozovsky, J. (2013). Lean Accounting and Information Adjustment in Efficient Industries: Assimilation Ahead?. *Academy of Accounting & Financial Studies Journal*, 17(4).
- Maskell, B. H., Baggaley, B., & Grasso, L. (2017). *Practical lean accounting: a proven system for measuring and managing the lean enterprise*. Productivity Press.
- Monroy, C. R., Nasiri, A., & Peláez, M. Á. (2014). Activity based costing, time-driven activity based costing and lean accounting: Differences among three accounting systems' approach to manufacturing. In *Annals of Industrial Engineering 2012* (pp. 11-17). Springer, London.
- Mreza, M. D., Bachay, I. R., & Flayyih, H. H. (2018). The Role Higher Education Quality in Achieving Sustainable development: Field Study from the perspective of Iraqi Universities Instructors. In *The annual second conference*.
- Ruiz-de-Arbulo-Lopez, P., Fortuny-Santos, J., & Cuatrecasas-Arbós, L. (2013). Lean manufacturing: costing the value stream. *Industrial Management & Data Systems*, 113(5), 647-668.
- Van der Merwe, A. N. T. O. N. (2008). Debating the principles: Asking questions of lean accounting. *Cost Accounting*, 22(5), 29-36.