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| **رقم البحث بالقائمة/ نوعه** | 5 / individual |
| **عنوان البحث** | Can Lean Accounting Preclude Traditional Accounting Flaws? An Exploratory and Critical Study |
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**Abstract**

**(1) Introduction**

The implementation of lean thinking and lean production requires radical and fundamental modifications of the internal systems in the firm, accounting system is considered one of the most important systems in the firm. So, lean accounting is a new accounting approach stemming from the increasing interest of firms in embracing the philosophy of lean thinking. In consequence of adopting and applying lean production practices, there are some studies argued that traditional financial and accounting systems became inadequate because these systems are designed towards mass production which is exceedingly against lean approach. The study also cited that lean accounting improvements are essentially directed towards management accounting which is focused on two large areas: product valuation and performance assessment. In addition, another study indicated that an indispensable emphasis of lean accounting is value stream which is the only appropriate cost collection object in the company compared to traditional accounting's use of cell.

**(2) Background and Literature Review**

1. **Lean Thinking and Lean Production (Manufacturing)**

The lean production decreases numerous concerns in the firm; containing the personnel, the required space for producing, stock that is used to buy tools, engineers who produce new products, and the repaired time. To undertake the objectives of lean thinking, Salimi (2013) argued that lean production has gained a great deal of attention in different sectors particularly in the automotive industry because of special features of this sector including the unreliability of the future and increasing costs.

1. **The Need for Lean Accounting**

Lean accounting has two understandings, the first sense if the *accounting for lean,* the analysis systems focus on cost control for lean companies, the second meaning refers to implementing lean concepts into accounting processes. In addition, lean accounting as an accounting system designed for lean manufacturing, this new accounting term requires several fundamental and radical changes, such as replacing traditional measurements with few and focused lean performance measurements, saving money by eliminating large amounts of waste from the accounting, control, and measurement systems, and finally applying better ways to understand product costs and value stream costs. Moreover, lean accounting as an accounting approach that diminishes the consumption of resources which do not add value to a product or service from the customers' perspective by utilizing the lean tools. Then, he defined the accounting for lean as an accounting system that offers precise and understandable information to encourage lean transformation throughout the organization and develops decision making process in order to develop the customer value and increase the firm's profitability. In addition, one of the studies mentioned six good reasons to advance traditional accounting methods, these reasons are; the wrong measurement, the wrong costs, decision making process, understandable information, complex systems, and less focus on the customer value.

**(3) Research limitations**

To simplify the comparison between traditional accounting systems and lean accounting practices, this research focuses on the management accounting/financial accounting perspectives so as to be aware of the weaknesses of traditional accounting systems and how can the lean accounting applications overcome those weaknesses Therefore, this research explains and discusses four significant issues; value stream costing (*VSC*), performance measurement (*PM*), decision making process (*DMP*), and financial reporting (*FR*).

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**(4) Research Hypotheses**

* H1: *Firms that use value stream as a cost object rather than a product are more likely to control costs, eliminate wastes, and develop the decision making process.*
* H2: *Firms that use financial and non-financial performance measures are more likely to reflect the firm's objectives and accomplish the continuous improvement*.
* *H3: Firms that adopt Box Score in the decision-making process are more likely to take clear-cut decisions that consider the value stream and customer value.*
* *H4: Firms that rely on lean financial reporting tools (such as value stream and Box Score) are more likely to provide a precise picture of the firm's financial performance and help in decision-making process.*

**(5) Research Methodology**

The research philosophy is related to phenomenology. So, this research is planned to assess the traditional accounting tools that have been implemented since several years in accordance with generally accepted accounting principles (GAAP) which are regularly developed by the academics and practitioners. Due to this evaluation, the research discusses the lean accounting tools and practices that can be adopted and fulfilled in the accounting field and these practices can preclude the traditional accounting flaws. In addition, this research can be described as an inductive nature. Goddard and Melville (2004) stated that the inductive approach begins with observations that help in formulating patterns; this will result in stating theory based on a number of hypotheses. This study adopts the exploratory studies as a research strategy with the purpose of finding out the weaknesses of traditional accounting systems in some specific dimensions; these dimensions may include the cost accounting, performance measurement, decision making, and financial reporting.

**(6) Research Findings and Recommendations**

**(A) The most important findings**

* Value Stream Costing (VSC)

The costs are assigned to the value stream instead of product unit, most costs are assigned to VS based on simple cost driver (*particularly labor and machine costs*) but other costs (*particularly management, IT, and human resource management costs*) which are not associated directly to value streams can be reported separately in the statement (Haskin, 2009). Van Der Merwe and Thomson (2007) explained that VSIS is the basic tool in providing monetary information through computing value stream profit.

* **Performance Measurement (PM)**

There are a number of measures should be adopted at a preliminary implementation stage of lean accounting; these measures (*for instance*) may include sales per person, deliveries on time, average cost per unit, and average receiving time. Further, Maskell (n.d) mentioned a set of performance measures that derived from the firm's strategy and can accomplish lean accounting objectives; such as sales growth, inventory days, on-time delivery, customer satisfaction, average cost per unit, day-by-the-hour production, sales per person, and sales per employee.

* **Decision Making Process (DMP)**

The study stressed that using *Box Score* in the decision making determines the influence of decisions on the whole value stream which is used sequentially to evaluate the appropriateness of these decisions. Therefore, this analysis leads to better understanding, better decisions, higher profitability, and increasing the customer satisfaction which proves hypothesis three.*Box Score* provides great information that is used in the decision making process, so there is no need to use a standard cost again.

* **Financial Reporting (FR)**

Weekly value stream reporting provides clear and understandable financial information which leads to accurate decisions because it allows managers to review and evaluate the value stream costs on a regular basis. Similarly, the lean firms can include the changes in inventory value, allocated corporate costs, and other external allocations at end of the value stream statement with the purpose of adapting the value stream statements with GAAP requirements.Box Score allows the lean enterprise to highlight the impact on whole value stream instead of focusing on individual product or production cells. Besides, Box Score can be used by the lean company for weekly value stream performance reporting which help the company assess and revise all aspects that have a great influence on the decision–making process**.**

**(B) The most important recommendations**

* + - There is a dire need for studying the impact of organizational and behavioral values on adopting and implementing lean accounting philosophy.
    - It is suggested that a research should be conducted for an industrial sector that will be able to explain in depth the obstacles of traditional systems and also how can lean accounting overcome those difficulties.
    - Revising GAAP to adapt with lean accounting approach.
    - Study should be done on the financial benefits of lean accounting in details.
    - Converting from traditional systems to lean accounting requires huge resources and costs. Thus, it will be very essential to conduct a study concerning the required costs to adapt with lean accounting.