

## **GLOBAL REVIEW OF FINANCIAL THE RMOMETER PRACTICES: THE LEAN ACCOUNTING**

**Muhammad Zia ur Rehman<sup>1</sup>, Sadaf Razzaq<sup>2</sup>, Sara Shafaqat<sup>3</sup>, Sajjad Ahmad Baig<sup>4\*</sup>**

**<sup>1,4</sup>Assistant Professor, Faisalabad Business School National Textile University, Faisalabad,  
Pakistan.**

**<sup>2</sup>M.S Scholar, Faisalabad Business School National Textile University, Faisalabad, Pakistan.**

**<sup>3</sup>Ph.D Scholar, University of Management and Technology, Lahore.**

**Muhammad Zia ur Rehman , Sadaf Razzaq , Sara Shafaqat , Sajjad Ahmad Baig, Global  
Review Of Financial The Rmometer Practices: The Lean Accounting , Palarch's Journal  
Of Archaeology Of Egypt/Egyptology 18(8), 3444-3452. ISSN 1567-214x.**

**Keywords: Lean accounting, Lean enterprises, Systematic Review, Implementation, and  
Transition to lean accounting.**

### **Abstract:**

New accounting concepts has been designed to reflect the financial performance of lean enterprises in a better way. This paper is a systematic review of Lean Accounting articles that published since 2000 to 2020 around the globe. This review study on the literature of Lean accounting proceeds from the following search engine: i.e. Emerald insights and google scholar. Because modern era is providing a roadmap for finance managers while seeking to transit their organizations to Lean enterprises. Due to the significant financial impacts of lean practices a very little consideration was given to change the accounting systems which support the new production methods. Most of the companies introducing Lean thinking realize that their finance and accounting systems are very wasteful and ineffective. This review study aims to determine that how factors influence the adoption of lean accounting by lean-manufacturing companies.

### **1. Introduction:**

Lean is a multi-faceted concept that was identified to explain the success of “Japanese Way of Working” which increased their competitiveness at that time. In the response, companies have

adopted lean philosophy in their manufacturing process, but continue to use traditional accounting (Jacobson & Johnson, 2006; Fullerton et al., 2014). Although in lean implementation, accountants clearly experienced and understand the worth of lean accounting for organization, but companies are slow to practically implement the lean accounting (Fullerton & Kennedy, 2009; Rao & Bargerstock, 2011). Lean accounting was developed by accountants to provide relevant accounting information that is beneficial for lean manufacturers. However, cost accounting standards do not provide required information and sometimes also dispense misleading information (Fullerton et al., 2014; Maskell et al., 2011). Although few lean manufacturing firms have adopt lean accounting but majority of them are not using it (Fullerton & Kennedy, 2009; Rao & Bargerstock, 2011; Zia ur Rehman, 2020). The existence of little empirical corroborating has shown on the usage of lean accounting by lean manufacturers (Fullerton & Kennedy, 2009; Rao & Bargerstock, 2011; Salamat et al., 2018). It is important for the propensity of lean manufacturing firms to understand the management accountant's behaviors concerning to lean accounting (LA). The main interest of lean accounting is that it improved the practices of financial management. According to Maskell et al., (2011) for organization's financial analysis, lean accounting has designed standard work by employing three basic principles: Firstly, any decision of financial impact is based on the consequences of value stream profit. Value stream are considered as core of lean enterprises profitability, however, at this stage all financial analysis would be performed. The "Cause and Effect relationship" dynamics are real between value stream operation's performance, profitability and capacity and it can be designed financially. Secondly, cost allocations means "Costing Your Money". Mostly, cost allocations have subjectivity level like cost of product in manufacturing firms. The elimination of cost allocations and understanding the relation among capacity, cost and operation performance is critical. It can only be easy when companies create that kind of environment where "root cause analysis" on operational solutions and cost behaviors can be conducted in order to achieve the required cost behavior. Lastly, elimination of wastes create time. The time spent on wastage is now usable for value creation (frequently described as "creating capacity"). Lean accounting incorporated with practices of financial management: no doubt time creation does not have financial effect but it can be impacted how that time utilizes by businesses. Lean companies could utilize it by selling more goods or services. In this manner, without increases in corresponding cost it increase the revenue of company which is shown as financial impact. For understanding the lean accounting, accountants need to change their perception and practicing the lean management accounting.

## **2. Background of Literature:**

### **Lean Accounting: The Best Practices**

There is a need to address how lean concepts and traditional accounting system fuse together and decompose into lean accounting. When Ohno and Monden introduced Toyota Production System, other scientists started criticize on it by comparing it with tradition system of manufacturing or production. Johnson & Kaplan., (1987) acknowledge that "the company's management accounting systems are inadequate for today's environments". With the regard to cost and financial management, Johnson & Kaplan., (1987) noted that most of the accounting practices were outdated and rather some were obsolete. It is the belief of Johnson & Kaplan., (1987) that the standardized system of cost accounting we employ is develop to support "external environment", so the overhead cost can be allocated in small amount to those products which

based on touch labor. The design of traditional accounting supports older production process which is based on “mass production”, however, lean explored that shifting from mass production to lean manufacturing methods of traditional accounting must be changed or adjusted according to requirements (Laura, 2010). Lean accounting is a new accounting approach that has emerged with the rise of business interest in embracing the culture of lean thinking. Lean accounting aims to quantify the monetary impacts of implementing the lean improvement projects in business processes (Woehrle & Abou-Shady, 2010). Following table-1 shows the pervious study on the emerging concept of Lean accounting:

**TABLE-1: Pervious Study on the Emerging Concept of Lean Accounting:**

<b>Year</b>	<b>Journal Name</b>	<b>Authors</b>
<b>2002</b>	Cost Management in Supply Chains	(Hines & Silvi, 2002)
<b>2006</b>	Association for Manufacturing Excellence’s Target Magazine	(Maskell & Baggaley, 2006)
	Journal of cost management	(Johnson, 2006)
	International Scientific Days	(Stojanovic & Radojevic, 2006)
	Journal of Corporate Accounting & Finance	(Kennedy & Brewer, 2006)
<b>2007</b>	Journal of Corporate Accounting & Finance	(Maskell & Kennedy, 2007)
	Strategic Finance	(Anton Van Der Merwe & Thomson, 2007)
<b>2008</b>	Management Accounting Research	(Kennedy & Widener, 2008)
	Cost Accounting	(ANTON Van der Merwe, 2008)
	Encyclopedia of Statistics in Quality and Reliability	(Grayeski & Stavish, 2008)
	II International Conference on Industrial Engineering and Industrial Management	(Arbulo López & Basurto Uraga, 2008)
	Financial Management	(Maynard, 2008)
<b>2009</b>	International Conference on Management and Service Science	(Wang & Yuan, 2009)
	Superfactory newsletter	(Maskell, 2009)
	Zeszyty Teoretyczne Rachunkowości	(Michalak, 2009)
	Management Accounting Quarterly	(Hutchinson & Liao, 2009)
	Journal of the Comptroller General's Department	(Rajchamaha, 2009)
	American Journal of Business Education	(Haskin, 2010)
	Industry Week	(Cable, 2009)
<b>2010</b>	Journal of Industrial Engineering and Management	(de Arbulo-López & Fortuny-Santos, 2010)
	Ovidius University Annals, Economic Sciences Series	(Laura, 2010)
	Jurnal Akutansi Fakultas Ekonomi Universitas Udayana	(Sisdyani, 2010)
<b>2011</b>	Industrial engineer	(Yu-Lee, 2011)
<b>2012</b>	Journal of Corporate Accounting & Finance	(DeBusk, 2012)

	Lean Accounting: Best Practices for sustainable Integration	(Fiume, 2012)
<b>2013</b>	International Journal of Marketing, Financial Services & Management Research	(Chopra, 2013)
	Tourism & Management Studies	(Rosa & Machado, 2013)
	International journal of economics, finance and management	(Enoch, 2013)
	Advances in Management Accounting	(Harris & Cassidy, 2014)
<b>2014</b>	Annals of Industrial Engineering 2012	(Monroy et al., 2014)
	Journal of Operations Management	(R. R. Fullerton et al., 2014)
	Proceedings of The 18th IAMB Conference, September	(Cesaroni & Sentuti, 2014)
<b>2015</b>	International Journal of Business and Social Science	(Kocamiş, 2015)
	Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu	(Kowalewski, 2015)
	Mediterranean Journal of Social Sciences	(Elsukova, 2015)
<b>2017</b>	IUP Journal of Accounting Research & Audit Practices	(Arora & Soral, 2017)
<b>2018</b>	Advances in Research	(Daferighe et al., 2018)
	Journal of Accounting & Finance (2158-3625)	(Fliedner, 2018)
<b>2019</b>	Journal of Engineering and Applied Sciences	(Amusawi et al., 2019)
	Polish Journal of Management Studies	(Allawi et al., 2019)
<b>2020</b>	Economic Themes	(Čečević & Đorđević, 2020)
	Inžinerinė ekonomika	(Stončiuvienė et al., 2020)
	İşletme Araştırmaları Dergisi	(Kaldırım, 2020)

### 3. Conclusion:

This review study clearly explains that many manufacturing companies have come to terms with the myths of mass production. They are making the transition to lean thinking. However, accountants continue to embrace the myths of traditional accounting and drive employee compensation using counterproductive measures. Meanwhile, the existing accounting system is inadequate for lean environment. Different studies (Kaldırım, 2020; Stončiuvienė et al., 2020; Amusawi et al., 2019; Zia ur Rehman, 2020; Mohsin et al., 2019; Rosa & Machado, 2013) concluded that many accountants, managers and financial executives spend time doing non-value added activities to record unnecessary information and produce unneeded data and duplicate things. Even the value added work they do may arrive late (the reports) so it became obsolete and outdated. There is no systematic method to produce on time reports to help track the root causes of issues. But there are some restraints that hinder while shifting from outdated to new system. The transition of company's traditional operations and accounting to lean operations or lean accounting can be seen as best continuous process. The transition of outdated organization structure to new can be considered as lengthy and difficult (Amka, 2020). Lean

shows best to the business (Čečević & Đorđević, 2020). Womack et al., (2007) and others (Schonberger, 2008; Mohsin et al., 2020a; Naseem et al., 2019; Tranfield et al., 2003) provided several examples on lean and traditional manufacturing differences and concluded that the aim of lean is to reduce wastage from organization. Generally, main goal of lean is to produce high quality product or service by using low cost and shortest lead time (Van Goubergen & Van Dijk, 2011; Salamat et al., 2018) Companies have to understand that for lean implementation the support of whole organization is required (Cunningem & Fiume, 2003; Sarfraz et al., 2021; Mohsin et al., 2021; Fullerton et al., 2014). In practices two concepts “accounting for lean and lean accounting” have been used interchangeably Solomon & Fullerton., (2007); however, both concepts have a clear distinction (Timm., 2015). Lean accounting “uses lean tools to eliminate waste in the accounting function” Cunningem & Fiume., (2003); Solomon & Fullerton., (2007) although accounting for lean “is the process that captures the financial benefits of a lean implementation” (Solomon & Fullerton, 2007). Generally, main goal of lean is to produce high quality product or service by using low cost and shortest lead time (Van Goubergen & Van Dijk, 2011; Naseem et al., 2020). Companies have to understand that for lean implementation the support of whole organization is required (Cunningem & Fiume, 2003; Mohsin et al., 2020b; Fullerton et al., 2014). Although few lean manufacturing firms have adopt lean accounting but majority of them are not using it (Fullerton & Kennedy, 2009; Rao & Bargerstock, 2011). The study of Maskell & Baggaley, (2006) concluded that those companies which are using lean accounting must have better information to make decision and understand financial changes due to lean accounting, it helps the organization to generate more cash flow by cutting extra cost and increasing in profit margins. Meanwhile replacing traditional accounting with lean accounting two types of issues raised; one is it takes a lot time to reduce cost and get financial benefits and other is that it undermines the profitability and revenue of company (Maskell & Kennedy, 2007). Lean accounting shows a new direction to companies by adopting non-financial measures too in reporting (Laura, 2010).

### References:

1. Allawi, K. M., Mijbil, S. H., & Salloomi, R. K. (2019). The compatibility between lean accounting and cleaner production for achieving competitive advantage. *Polish Journal of Management Studies*, 20.
2. Amka, A. (2020). The Integration of Lean Accounting and Activities-Based Public Budgeting for Improving the Firm’s Performance. *The Integration of Lean Accounting and Activities-Based Public Budgeting for Improving the Firm’s Performance*.
3. Amusawi, E. G., Almagtome, A. H., & Shaker, A. S. (2019). Impact of Lean Accounting Information on The Financial performance of the Healthcare Institutions: A Case study. *Journal of Engineering and Applied Sciences*, 14(2), 399–589.
4. Arora, V., & Soral, G. (2017). Conceptual issues in lean accounting: A review. *IUP Journal of Accounting Research & Audit Practices*, 16(3).
5. Cable, J. (2009). LEAN-Lean Accounting’s Quest For Acceptance-Despite growing interest in lean accounting, proponents say adoption has been slow-going in the manufacturing community. *Industry Week*, 258(9), 26.
6. Čečević, B. N., & Đorđević, M. (2020). LEAN ACCOUNTING AND VALUE STREAM COSTING FOR MORE EFFICIENT BUSINESS PROCESSES. *Economic Themes*, 58(4).
7. Cesaroni, F. M., & Sentuti, A. (2014). Implementing a lean accounting system in a lean enterprise. *Proceedings of The 18th IAMB Conference*, September, 17–19.

8. Chopra, A. (2013). Lean accounting-an emerging concept. *International Journal of Marketing, Financial Services & Management Research*, 2(8).
9. Cunningem, J., & Fiume, O. (2003). *Real numbers: management accounting in lean organization*. Managing Times Press, 194.
10. Daferighe, E. E., James, E. E., & Offiong, P. E. (2018). Lean accounting and waste management in brewery industry in Nigeria. *Advances in Research*, 1–11.
11. de Arbulo-López, P. R., & Fortuny-Santos, J. (2010). An accounting system to support process improvements: Transition to lean accounting. *Journal of Industrial Engineering and Management*, 3(3), 576–602.
12. de Arbulo López, P. R., & de Basurto Uraga, P. D. (2008). Alineando los costes con la producción lean: Lean Accounting. II International Conference on Industrial Engineering and Industrial Management, 1152–1162.
13. DeBusk, G. K. (2012). Use lean accounting to add value to the organization. *Journal of Corporate Accounting & Finance*, 23(3), 35–41.
14. Elsukova, T. V. (2015). Lean accounting and throughput accounting: An integrated approach. *Mediterranean Journal of Social Sciences*, 6(3), 83.
15. Enoch, O. K. (2013). Lean Accounting and Lean business philosophy in Nigeria: An exploratory research. *International Journal of Economics, Finance and Management*, 2(7).
16. Fiume, O. (2012). Lean Strategy and Accounting: The Roles of the CEO and CFO. *Lean Accounting: Best Practices for Sustainable Integration*, 43–65.
17. Fliedner, G. (2018). Lean Accounting: Current State and Future Needs Assessment. *Journal of Accounting & Finance* (2158-3625), 18(3).
18. Fullerton, R., & Kennedy, F. A. (2009). Modeling a management accounting system for lean manufacturing firms. Available at SSRN 1445703.
19. 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.
20. Grayeski, F., & Stavish, L. (2008). Lean Accounting. *Encyclopedia of Statistics in Quality and Reliability*, 2.
21. Harris, D., & Cassidy, J. (2014). The adoption of lean operations and lean accounting on the profitability and cash flows of publicly traded companies. In *Advances in Management Accounting*. Emerald Group Publishing Limited.
22. Haskin, D. (2010). Teaching Special Decisions in a Lean Accounting Environment. *American Journal of Business Education*, 3(6), 91–96.
23. Hines, P., & Silvi, R. (2002). A Framework for Extending Lean Accounting into a Supply Chain \$ ) UDPHZRUN IRU ([ WHQGLQJ / HDQ \$ FFRXQWLQJ LQWR D 6XSSO \ & KDLQ. April 2021. <https://doi.org/10.1007/978-3-662-11377-6>
24. Hutchinson, R., & Liao, K. (2009). Zen accounting: How Japanese management accounting practice supports lean management. *Management Accounting Quarterly*, 11(1), 27.
25. Jacobson, J. M., & Johnson, M. E. (2006). Lean and Six Sigma: not for amateurs: second in a 2-part series. *Laboratory Medicine*, 37(3), 140–145.
26. Johnson, H. T. (2006). Lean accounting: to become lean, shed accounting. *Journal of Cost Management*, 20(1), 6–17.
27. Johnson, H. T., & Kaplan, R. S. (1987). The rise and fall of management accounting. *IEEE Engineering Management Review*, 15(3), 36–44.
28. Kaldırım, Y. (2020). Performance Measurement and Reporting in Lean Manufacturing

- Environment: Integration of Balanced Scorecard and Lean Accounting Box Score. *İşletme Araştırmaları Dergisi*, 12(2), 1098–1108.
29. Kennedy, F. A., & Brewer, P. C. (2006). The lean enterprise and traditional accounting—Is the honeymoon over? *Journal of Corporate Accounting & Finance*, 17(6), 63–74.
  30. Kennedy, F. A., & Widener, S. K. (2008). A control framework: Insights from evidence on lean accounting. *Management Accounting Research*, 19(4), 301–323.
  31. 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.
  32. Kowalewski, M. (2015). SOFP, czyli planowanie operacyjne w lean accounting. *Prace Naukowe Uniwersytetu Ekonomicznego We Wrocławiu*, 389, 213–221.
  33. Laura, C. (2010). Lean accounting, a new global approach. *Ovidius University Annals, Economic Sciences Series*, 10(1), 1510–1515.
  34. Maskell, B. H. (2009). What is lean accounting. *Superfactory Newsletter*, 5(5), p1-9.
  35. Maskell, B. H., Baggaley, B., & Grasso, L. (2011). *Practical lean accounting: a proven system for measuring and managing the lean enterprise*. CRC Press.
  36. Maskell, B. H., & Baggaley, B. L. (2006). Lean accounting: What's it all about? *Target*, 22(1), 35–43.
  37. Maskell, B. H., & Kennedy, F. A. (2007). Why do we need lean accounting and how does it work? *Journal of Corporate Accounting & Finance*, 18(3), 59–73.
  38. Maynard, R. (2008). Lean accounting. *Financial Management*, 44–46.
  39. Michalak, J. (2009). Założenia, zasady i narzędzia lean accounting. *Zeszyty Teoretyczne Rachunkowości*, 49, 169–183.
  40. Mohsin, M., Naiwen, L., Zia-UR-Rehman, M., Naseem, S., & Baig, S. A. (2020a). The volatility of bank stock prices and macroeconomic fundamentals in the Pakistani context: an application of GARCH and EGARCH models. *Oeconomia Copernicana*, 11(4), 609–636.
  41. Mohsin, M., Naseem, S., Muneer, D., & Salamat, S. (2019). The Volatility of Exchange Rate using GARCH type Models with Normal Distribution: Evidence from Pakistan. *Pacific Business Review Internationalsl*, 11(2), 124–129.
  42. Mohsin, M., Naseem, S., Zia-ur-Rehman, M., Baig, S. A., & Salamat, S. (2020b). The crypto-trade volume, GDP, energy use, and environmental degradation sustainability: An analysis of the top 20 crypto-trader countries. *International Journal of Finance & Economics*.
  43. Mohsin, M., Zhu, Q., Naseem, S., Sarfraz, M., & Ivascu, L. (2021). Mining Industry Impact on Environmental Sustainability, Economic Growth, Social Interaction, and Public Health: An Application of Semi-Quantitative Mathematical Approach. *Processes*, 9(6), 972.
  44. 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.
  45. MAJEED, MK, JUN, JC, Muhammad, ZUR, MOHSIN, M., & RAFIQ, MZ (2020). The Board Size and Board Composition Impact on Financial Performance: An Evidence from the Pakistani and Chinese's Listed Banking Sector. *The Journal of Asian Finance, Economics and Busin*, 7(4), 81–95.
  46. Naseem, S., Fu, G. L., Mohsin, M., Rehman, M. Z., & Baig, S. A. (2020). Semi-Quantitative Environmental Impact Assessment of Khewra Salt Mine of Pakistan: an Application of Mathematical Approach of Environmental Sustainability. *MINING METALLURGY & EXPLORATION*.
  47. Naseem, S., Fu, G. L., ThaiLan, V., Mohsin, M., & Zia-Ur-Rehman, M. (2019).

- Macroeconomic Variables and the Pakistan Stock Market: Exploring Long and Short run Relationship. *Pacific Business Review International*, 11(7), 621–672.
48. Rajchamaha, K. (2009). Lean accounting: a perspective of managerial accounting for business value improvement. *Journal of the Comptroller General's Department*, 5(50), 11–29.
  49. Rao, M. H. S., & Bargerstock, A. (2011). Exploring the Role of Standard Costing in Lean Manufacturing Enterprises: A Structuration Theory Approach. *Management Accounting Quarterly*, 13(1).
  50. Rosa, A. C. R., & Machado, M. J. C. V. (2013). Lean accounting: Accounting contribution for lean management philosophy. *Tourism & Management Studies*, 3, 886–895.
  51. Salamat, S., Fu, G. L., Mohsin, M., Zia ur Rehman, D., & Baig, S. (2018). The Volatility of Pakistan Stock Market: A Comparison of GARCH Type Models with Five Distribution. Naseem, S., Mohsin, M., Zia-Ur-Rehman, M., & Baig, SA (2018). Volatility of Pakistan Stock Market: A Comparison of Garch Type Models with Five Distribution. *Amazonia Investiga*, 7(17), 486–504.
  52. Salamat, S., Lixia, N., Naseem, S., Mohsin, M., Zia-Ur-Rehman, M., & Baig, SA (2020). Modeling Cryptocurrencies Volatility Using GARCH Models: A Comparison Based on Normal and Student's T-Error Distribution. *Entrepreneurship and Sustainability Issues*, 7(3), 1580–1596.
  53. Sarfraz, M., Mohsin, M., Naseem, S., & Kumar, A. (2021). Modeling the relationship between carbon emissions and environmental sustainability during COVID-19: A new evidence from asymmetric ARDL cointegration approach. *Environment, Development and Sustainability*, 1–19.
  54. Schonberger, R. J. (2008). *World class manufacturing*. Simon and Schuster.
  55. Sisdyani, E. A. (2010). Lean Accounting: Suatu Alternatif Teknik Akuntansi Manajemen dalam Industry Manufaktur. *Jurnal Akutansi Fakultas Ekonomi Universitas Udayana*.
  56. Solomon, J. M., & Fullerton, R. (2007). *Accounting for world class operations: A practical guide for providing relevant information in support of the lean enterprise*. WCM Associates.
  57. Stojanovic, D., & Radojevic, Z. (2006). Accounting characteristics in lean manufacturing. *International Scientific Days*, 1146–1151.
  58. Stončiuvienė, N., Ūsaitė-Duonielienė, R., & Zinkevičienė, D. (2020). Integration of activity-based costing modifications and LEAN accounting into full cost calculation. *Inžinerinė Ekonomika*, 50–60.
  59. Timm, P. H. (2015). Perceptions of value-stream costing and the effect on lean-accounting implementation.
  60. Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222.
  61. Van der Merwe, ANTON. (2008). Debating the principles: Asking questions of lean accounting. *Cost Accounting*, 22(5), 29–36.
  62. Van Der Merwe, Anton, & Thomson, J. (2007). The lowdown on lean accounting. *Strategic Finance*, 88(8), 26.
  63. Van Goubergen, D., & Van Dijk, P. (2011). Value Stream Costing for quantifying the financial benefits of lean" Accounting to See". *IIE Annual Conference. Proceedings*, 1.
  64. Wang, L., & Yuan, Q. (2009). Lean accounting based on lean production. *2009 International Conference on Management and Service Science*, 1–4.



65. Woehrle, S. L., & Abou-Shady, L. (2010). Using dynamic value stream mapping and lean accounting box scores to support lean implementation. *American Journal of Business Education (AJBE)*, 3(8), 67–76.
66. Womack, J. P., Jones, D. T., & Roos, D. (2007). *The machine that changed the world: The story of lean production--Toyota's secret weapon in the global car wars that is now revolutionizing world industry*. Simon and Schuster.
67. Yu-Lee, R. T. (2011). Proper lean accounting. *Industrial Engineer*, 43(10), 39–43.