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COVID-19 BUSINESS ENVIRONMENT– LEAN MANAGEMENT AS COPING MECHANISM

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Abstract

The corona pandemic has had extreme effects on business worldwide. In Uganda, like elsewhere, the government ordered a lockdown that lasted nearly six months in 2020 and a second one through mid-year 2021. These adversely affected business enterprises as they closed abruptly. When the lockdown of 2020 was lifted for business enterprises, many organizations started counting the losses and the continuing effects. Critical management responses included working from home; working in shifts, laying off workers, suspending contracts, redundancy leave among others. Several organizations have had to restructure to fit into what has been hyped as the new normal. An earlier study in Uganda informs this paper that lean management is one of the models that business enterprises could adopt for survival in the Covid-19 era. Even before the corona pandemic, some organizations had adopted lean management for cost cutting, effectiveness and maximizing productivity. This has now become a necessity rather than a choice as lockdowns led to immense operational difficulties. Challenges related to lean management in steering through the Covid-19 adverse effects include lapses in lean awareness, non-lean behavior, inadequate staff training and skills outlay, inexistence of guiding polices and information inaccuracies. We recommend that organizations should adopt zero time-based models of production, improve service delivery, constant information exchange and adopting new technologies.

Key words: Covid-19, Lean management, Business Resilience, Lockdown, Uganda, Post covid

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Background

The concept of lean management can be traced as far back as the industrial revolution when machines, having shorter through-put times, replaced humans (Hobbs, 2004). The different dimensions of lean management cover manufacturing, lean production, human resources management, customer services and general operations. Organizations choose to implement and sustain ways of increasing the efficiency of production and the overall customer value while at the same time eliminating waste (Bicheno & Holweg, 2009). Lean is a managerial approach which inspects processes, services and products according to their value from the customer's perspective. Womack and Jones (2003) measured lean management according to elimination of waste, continued improvement, zero defect, Just In-Time (JIT) delivery, pull of material, multifunctional teams, decentralization, integration of functions, vertical information systems and time to market. In post-recession times, many organizations always continue to resolve liquidity and capital problems, and a shift to focus on improving operational efficiency as inevitable.

The Corona pandemic has wrecked the world in the two years of 2020- 21 so far. In a short while after the onset of the epedemic, countries worldwide focused on prevention mechanisms. Like elsewhere, the government of Uganda announced a full lockdown both for public and private units. When the lift was undertaken enterprises reopened although business activity remained low. Due to the losses in revenue, stocks and market due to the Covid-19 era, organizations reopened with serious management issues to give attention to (Quaife, Van Zandvoort, Gimma & Austrian, 2020). These included among others, need for market driven production, cost cutting measures, reduction in staffing and restructuring. The key driver has been adoption of new ways of doing business through adoption of Information Communication Technologies. Organizations have improvised technologies that help to minimize human contact, to be more efficient and to cut costs. For instance, meetings and conferences being held over zoom software, teams and other emerging internet platforms. There have been job losses and other economic stresses (Economic Policy Research Center: The Uganda Business Climate Index. Special issue May 2020).

Just like after the 2008 financial crisis, organizations started looking at reducing their cost-to-income ratios by radically improving their operations. As lean operations became popular, organizations were set to develop the mindset for continuous streamlining of processes and improvements for operational efficiency. Organizations worked to eliminate waste such as overproduction, waiting time, poor logistics, over-processing, sub-optimal inventory control, rework, and unneeded movement in a process as observed by Hobbs (2004). Womack and Jones (2013) suggested adoption of lean management in operations to help management to identify customer segments that were most profitable and where service enhanced most cost-effectiveness. From this angle, this is one of the mechanisms to adopt as the world continues to strive through Covid-19 effects.

Lean Management

The key concepts, the practices, the tools and techniques of lean organizations are known and recognized all over the world as a very effective and powerful way to build and maintain improving business over the long term. In basic terms, lean is a holistic and sustainable approach of management processes of an organization, a business strategy based on creating value for the customers, while eliminating waste and deficiencies in the process. Lean is about continuous improvement, but also about respect for people and only by uniting purpose, process and people an organization may obtain sustainable change and business excellence. Many institutions routinely apply the management principles of lean to help standardize business

procedures, thus creating value for their customers (Meyer, 2008).

The objectives of implementing lean management practices are reducing costs and revenue gains. Womack and Jones (2013) argue that the adoption of lean management will change almost everything in every industry- choices for consumers, the nature of work, and fortune of industry by combining the advantages of craft and mass production. Lean management consists of various practices, which aim to improve efficiency, quality and responsiveness to customers. Maleyeff (2006) defines lean production as an element in lean management referring to initiative, whose goal is to reduce the waste in human effort, inventory, time to market, and manufacturing space to become highly responsive to customer demand while producing world class quality products in the most efficient and economical manner. In basic terms, Lean is a holistic and sustainable management processes of an organization, a business strategy based on creating value for the customers, while eliminating waste and deficiencies in the process. Employees are not expected to simply routinely do their job, but are expected to contribute to the improvement of processes and operations, utilizing their own personal experience and creativity.

Allen and Laure (2006) question the essence in adopting lean management. Time spent on working and capability are some key issues. Often it turns out that even if time is added for improvements, it takes a while for the results. Unfortunately, it happens that even after such efforts they may not immediately lead to improving process capability. The other question is that even improving capability will not last forever. This seems to be connected with the management decision regarding reaching the desired goal. Farrington, Utley and Harris (2007) posit that in the actual improvement happening, the benefits of invested time and other resources come much later in the implementation process. This is also connected to the complexity of the improvement. Focusing on the final target is always leading as is characteristic of less time for non-work related activities. Piercy and Rich (2009) determine this managerial behavior of achieving the short term goals as a reinvestment loop; a temporary emphasis on one option at the expense of the other which could become permanent.

In the situation of working harder, cutting the investments for process improvements erodes process capability and decreases the performance in a long term. Because of the pressure to meet the high target from the beginning the performance is higher than in general, which delude the work towards less investment in improvements (Psychogios, Atanasovski & Tsironis, 2012). A capability trap could prevent a organizations from developing new processes that would have increased productivity (Piercy & Rich, 2009). Under the pressure of short term limits and goals that should be met, managers often fail to see that overworking will only lead to worse performance and it will remove the chances for improving the working process. One of the most daunting challenges for every firm is to remain competitive in the long term (Mefford, 2009). They face pressure for keeping the cost low and progressively increasing profitability and at the same time they should innovate and improve product design, so as to compete. Finally, people are resistant to change in their working places even if management has dedicated effort in training programs and explaining the values of the new practice. Many negative attitudes can be turned into a great resistance (Mefford, 2009).

Therefore, in this uncertainty where firms would wish to get back into profitable loops after lockdown, yet must cut costs, managers should be convinced that the source of their difficulties is the workforce. Their actions could lead the enterprise to an attribution error resulting into high work pressure and costs. Firms could also end in a capability trap, trying to minimize employee and process costs, yet wanting to produce more. This is paradoxical

and may only be explained by multiple theoretical frameworks.

Literature on Covid-19 business environment

Scholarly literature on Covid-19 is still scanty. Much of what is published is from bodies such as UN Agencies and World Bank. Government departments are also accumulating repositories on covid-19, its effects, impacts and future directions. Possibly, more literature is in medical publications elaborating the medial aspects of the pandemic; its variants, mutations and several biomedical issues. For scholars in economics, the concerns are how this context has affected business and management. Most of the publications are country specific giving the state of economic impacts. Walmsley, Rose and Wei (2020) posit that there are many responses to Covid-19 but such measures continue to have negative economic impacts on businesses. We know that lockdowns have had severe direct impacts on production and business growth. When lockdowns were instituted, organizations responded with desperate decisions including but not limited to job cuts, suspended contracts, leave without pay or simply told workers to go home. Other mass media reports have delved into issues of social pressures like domestic violence, early pregnancies and household income distresses (Pagano, Wagner & Zechner, 2020; Mittal & Singh, 2020; Quaife, Van Zandvoort, Gimma & Austrian, 2020). Onyango, Resnick, Davis and Shah (2019) have reported on social issues like early marriages in Kenya. The abrupt closure of international borders was possibly one of the greatest direct signals to international trade. This affected bilateral trade links, international contracts (Khan, Fahad, Faisal & Naushad, 2020) and thus organizational life across the world was not the same. The countries were quick to ease cross boarder dealings to save their economies from collapse.

While Covid-19 had blown the world into uncertainty, it has had greater innovations than any other pandemic of all time. Jose Antonnio (2020) and Slotegraaf (2021) describe the innovations that now drive the world business. Innovations have enabled new ways of running organizations and will possibly add on to organizational resilience through work from home and other human resources management perspectives (Diep Ngoc Su et al (2021). The earlier effects on the global value chains have unwound. Verbect (2021) notes that the pandemic has had indeed several impact's on the governance of the global value chains. This is similar to the observations by Beech (2020) on education and research impacts.

Lean Management to counteract Covid-19 effects

The extant management literature postulates certain strategic stances than can be followed to improve lean management. We aver that when considered, these conceptual assertions will enhance the ability of Ugandan organizations in the post-Covid era. These include being innovative, managing complexity, product diversification, customer preferences, elimination of redundancies and policy support.

The market has become diverse due to corona effects. There have been changes in taste and loss in consumption capability. The Organization for the Economic Development (OECD) has forecasted an economic recession on major economies in the world. The OECD forecasts a decline in economic growth rates for these major economies as follows: China 4.9% instead of 5.7%; Europe 0.8% instead of 1.1%; the rest of the world 2.4% instead of 2.9%; with the World GDP falling by 0.412 units from the first quarter of 2020. This analysis is worrying but certainly true. A multitude of factors will continue playing against each other from both the supply and demand sides. This could destabilize enterprises from the short into the medium term. Organizations must try of necessity a balance that will ensure efficient operations and competitive advantage within their industry.

Elimination of inefficient tasks with incremental improvements may recover productivity within two to three years. Importantly is for lean models to serve as a school for learning, with the current vast knowledge, thanks to technological innovations. And learning from the others will be the key to continuous improvement. In a nut shell, the constructs by Womack and Jones (2003) namely elimination of waste, continued improvement, zero defect, just in-time modeling, efficient delivery, pooling materials, and integration of function should be given attention in maneuvering the current and post-Covid-19 business dynamics.

Empirical support and discussion

The conceptual detail of this paper is supported by excerpts from an earlier empirical study in Uganda (Nakafeero, 2017) on lean management in the banking sector. Two key functional areas are cited for purposes of grounding configurations that managers might test. The study was conducted on a population of 625 banking staff from across the divide of managerial positions, clerical, supervisors and managers. This study extends Nakafeero's 2017 findings that revealed the need for lean management for firms as a coping mechanism in times of business dynamism and complexity. Thus the Covid-19 era imposed a complexity business environment especially on human resources and customer services. Triangulation of decision models on other functional areas can be grounded for the blend of these two units. In synthesis, for organizations to focus on lean management, they should emphasize elimination of variations in systems and processes, reduce lead time, efficiency in inventory management and cut operational costs within reality of post-Covid-19 human resources and customer operations.

Lean management in Human resources

The Human Resources department is the hub for organizational services. This department defines the organizational structure, the housing in which firms do their work. Strategy scholars are conscious of structure as its ramifications are strong on performance. Many organizations have undertaken downsizing in terms of reducing employees by sending them on unpaid leave or suspending contracts. While this is in no doubt necessary, it should not compromise quality in systems and efficiency in off the line services. Firms that will stabilize into lean structures in the post Covid-19 era should have invested a lot in the human resources in the normal times. This should have involved multiple skilling, training, developing comprehensive HR manuals, managing well employee relations, clear policies and managing a HR information system. In such an arrangement, it is likely to be smooth to decide on layoffs, sendoff packages, workers to keep in operations with skill combinations, providing orientation and still ensure quality work. The reward system should be supportive of those being laid off as well as those to stay with increased job tasks. In the absence of such earlier investments, organizations should undertake minimal procedures of handling staff in these dimensions.

Lean Management in the Customer Service

The conceptual findings in our study revealed demand driven customer services, emphasis on waste reduction, reduced process time and standardized service delivery. Today, organizations are faced with dilemma in their customer dealings. It is clear that the effects of covid-19 have been high on people's income as well as revenue streams of firms. This means that both personal and corporate customers may not be as feasible as before the covid era. The customer service unit should interact with the customers, provide them with information on how the firm is addressing the effects of Covid-19 and the business continuity plans in place. The customer is now more delicate than before; purchasing power has gone down, new tastes have emerged, substitutes are less yet innovations are on the rise. This new pattern may disorient customers thus the need to address their inquiries regarding products and

services. In addition, there are likely to be complaints arising from the pre-Covid dealings that may not be satisfied now. Firms need abstemious management style to resolve any such customer complaints. Organizations will need some form of forecast prepared on a regular basis to systematically calculate the ongoing customer needs. This should be balanced with internal processes to avoid inadequacy of supply and minimize waste at the same time. Given the uncertainty that is still looming, short term production cycles should be the ideal blend of lean management.

Coping with challenges in Post Covid -19

Lean management as an organizational practice has embedded challenges. Given the Covid-19 universal challenges, managers should embrace to encountering obstacles. In this paper we enlist, among others, lack of awareness, non-lean behavior among staff, system failures, lack of training, blurred vision; others are lack of lean-management friendly policies, increasing operational costs, poor information asymmetry and pressure from customers. In addition, Nakafero's 2017 study reaffirmed the conventional challenges of resistance to change, lack of top management commitment and unclear benefits of a lean management system. In Uganda, generally organizations will continue facing hardship from the foregoing thus likely to miss benefits from pillars of lean management.

While the new normal is now a verbal tick, we recognize views that it is blinking (Bagire, 2020) and thus uncertainty continues. Managers will still endure ambiguity in the business environment for some time. The first suggestion is that managers should not rush into fast mode to compensate lost time, production and revenues. It is important to reanalyze the strategies that were in place before Covid-19. There is need to generate options in short, medium and long-term dimensions. Managers should negotiate a range of options anchored on realistic assumptions. In Ugandan systems reengineering is necessary to meet the paradoxical outlay of Covid-19, with high demand in some cases and low demand in other aspects of the same organization. Managers should synthesize information astutely; society is engulfed in an era of information overload, thanks to social media technologies. Managers must filter facts that they need for smooth operations, not rush decisions and not delay to decide. This is the paradoxical nature of the Covid-19 era that organizations are in.

Conclusion and implications

This paper highlighted a nexus of concepts and practice. At the shop floor, managers today must be concerned with resuming operations with improved efficiency, quality and responsiveness to the customer in the Covid-19 uncertainty. Corporate leaders should focus on the tools and techniques, policies and practices that score balance of lean management and gains from business operations. Structures that shield businesses from further shocks should be instituted. The human spirit of employees in these trying times should be galvanized through carefully designed procedures. We post the need for more studies on enterprise survival and reinvigoration in the post-Covid-19 era.

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References

Ahlstrom, P. (2004). Lean Service operations: Translating lean production principles to service operations. *International Journal of Services Technology and Management*; Vol.5(5/6), pp.545-564.

Allen, D. K. and Laure, P. (2006). Exploiting Lean Six-Sigma Quality Tools to Improve Test and Other Processes in Autotestcon. 2006. IEEE.

Amin, M. E. (2005). Social Science Research: Conception, Methodology and Analysis, Makerere University Printery, Kampala, Uganda.

Bagire, V. (2020). *The New Normal is Blinking*, Makerere University Periodical Magazine, July 2020.

Bank of Uganda Quarterly Performance Review (2013), Kampala, Uganda.

Beech, N. and Anseel, F. (2020). COVID-19 and Its Impact on Management, Research and Education: Threats, Opportunities and a Manifesto. *British Journal of Management*, 31(3), 447–449.

Bicheno, J. and Holweg, M. (2009). The Lean Toolbox: The essential guide to lean transformation. 4th Edition. Buckingham: PICSIE Books

Brown, N. A., Orchiston, C., Rovins, J. E., Feldmann-Jensen, S., & Johnston, D. (2018). An integrative framework for investigating disaster resilience within the hotel sector. Journal of Hospitality and Tourism Management, 36, 67–75.

Burgess, N. and Radnor, Z. (2013). Evaluating Lean in healthcare. *International Journal of Health Care Quality Assurance*, 26(3): 220-235.

Cascio, W. F. (2009). Downsizing and redundancy. In A. Wikinson, N. Bacon, T. Redman, & S. Snell (Eds.), Sage handbook of human resource management (pp. 87–96). Sage.

Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. Journal of Sustainable Tourism, 1–20.

Cronbach, L. J. (1950). Further evidence on response sets and test design. Educational and Psychological Measurement, 10, 3-31.

Czabke, J., Hansen, E.N. and Doolen, T.L. (2008). A Multisite Field Study of Lean Thinking in US and German Secondary Wood Products Manufacturers, *Forest Products Journal*, vol. 58, no. 9, 77-85.

Diep Ngoc Su, Diep Luc Tra , Hanh My Thi Huynh , Hai Hong Thi Nguyen & Barry O'Mahony (2021): Enhancing resilience in the Covid-19 crisis: lessons from human resource management practices in Vietnam, *Current Issues in Tourism*, DOI:10.1080/13683500.2020.1863930

Dennis, P. Hobbs (2004). Lean Manufacturing Implementation: A Complete Execution Manual for any Size Manufacturer, Published by J. Ross.

Farrington, P., Utley, D. and Harris, G. (2007). Integrating Lean and Six-Sigma into the Industrial Engineering Curriculum: An Engineering Management Perspective. IIE Annual Conference. Proceedings, 2007: 625.

Gottfredson, M. and Aspinall, K. (2005). Innovation Versus Complexity: What is too much of a good thing?, *Harvard business review*, vol. 83, no. 11, pp. 62.

José Antonio Rosa (2020). Accelerating innovation and protecting organizations: Pluralism

in the COVID-19 age Journal of Product Innovation Management. DOI: 10.1111/jpim.12568

KPMG Financial Sector Review (2014)

Krejcie, Robert, V. and Morgan, Daryle, W. (1970). Determining Sample Size for Research Activities, Educational and Psychological Measurement, 1970.

Maleyeff, J. (2006). Exploration of Internal Service Systems using Lean Principles. *Management Decision*, 2006. 44(5): 674-689.

Mayer, K. (2008). Lean Banking; www.evolvingexcellence.com/BLOG/2008/09/ Lean banking.

Mefford, R. N. (2009). Increasing Productivity in Global Firms: The CEO Challenge, *Journal of International Management*, vol. 15, no. 3, pp.262-272.

Moore, R. (2007). Selecting the Right Manufacturing Improvement Tools. 2007, USA: Butterworth-Heinemann. 359.

Mugenda, O. M. and Mugenda, A. G. (1999). Research Methods- quantitative and qualitative approaches, ACTS press, Nairobi, Kenya.

Nakafeero, E, S. (2017). Lean Management in Ecobank Ltd. An MBA Unpublished Dissertation, Makerere University Kampala.

Nunnally, J. C. (1978). Psychometric Theory (2 ed.). New York: McGraw Hill.

Pawan, B. and D. Cumming *(2020). New* Directions in Management Research and Communication: Lessons from the COVID-19 Pandemic 1,2 *British Journal of Management, Vol. 31, 441–443.* DOI: 10.1111/1467-8551.12426

Pedersen, E. R. G. and Huniche, M. (2011). Determinants of Lean Success and Failure in the Danish Public Sector: A Negotiated Order Perspective. *International Journal of Public Sector Management*, 2011. 24(5): 403-420.

Piercy, N. and Rich, N. (2009). Lean Transformation in the Pure Service Environment: the Case of the Call Service Centre. *International Journal of Operations & Production Management*, 2009. 29(1): 54-76.

Psychogios, A.G., Atanasovski, J. and Tsironis, L.K. (2012). Lean Six Sigma in a Service Context a Multi-Factor Application Approach in the Telecommunications Industry. *International Journal of Quality and Reliability Management* 2012. 29(1): 122-139.

Quaife, M., Van Zandvoort, K., Gimma, A., & Austrian, K., 2020. The impact of COVID-19 control measures on social contacts and transmission in Kenyan informal settlements. *BMC medicine*, *18*(1), 1-11

Repenning, N. and Sterman, J. (2001). Creating and Sustaining Process Improvement, California Management Review, Summer, pp.1-8.

Sayer, N. J. and Williams, B. (2007). Lean for Dummies, Wiley Publishing, Inc.2007

Sekaran, U. (2003). Research Methods for Business (4th ed.). New York: John Wiley & Sons, Inc.

Slotegraaf, R, J. (2021). Paving a path for a post-COVID-19 innovative environment. *J Prod*

Innov Manag. 2021; 38:238–241. https://doi.org/10.1111/jpim.12569

Verbeke, A. (2020). Will the COVID-19 Pandemic Really Change the Governance of Global Value

Chains? *British Journal of Management, Vol. 31, 444–446 (2020)*

DOI: 10.1111/1467-8551.12422

Womack, J. and Jones, D. (2013). Lean Thinking: Banish Waste and Create Wealth in Your Corporation (Revised and Updated). Translation from English. Moscow: Alpina Business Books.

Womack, J. P. and Jones, D.T. (2003). Lean Thinking: Revised and Updated. 2003, New York, NY: Simon & Schuster.