



Lean Practices for Efficiency in the South African Hospitality Sector

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Abstract

Lean thinking and practices entail the reduction of waste, time, effort and cost while perfecting the quality of products and services towards improved customer satisfaction. Lean practices are regarded as global business best practice; especially in light of the recent global recession, greening of the planet initiatives and the millennial need for streamlined systems and processes. The purpose of this article is to propose a set of lean tools by exploring the advantages and difficulties of lean implementation in the South African hospitality sector. The motivation for this paper is that there is a gap in the literature with limited conceptual and empirical knowledge on lean practices in South African organisations, especially in the hospitality sector. This conceptual paper presents the intensive literature study undertaken to explore the advantages and challenges of lean thinking, implementation and practice. The implications of this paper are that the hospitality sector in South Africa and Africa may benefit by adopting the lean advantages and eliminating the lean challenges highlighted by this theoretical paper. Furthermore, leaders and managers can practically engage with the identified lean benefits and challenges and adapt it as required by the process and systems in their organisation. This paper adds theoretically and practically. Theoretically, it increases the body of knowledge on lean thinking, lean practices, advantages and challenges as applied in the South African context. The practical contribution is that it creates awareness on lean thinking and practices as hospitality operational managers may immediately be able to reduce waste, increase profit and improve product, performance and people in their line function.

Key words: lean practices; lean advantages; lean challenges; services sector; South Africa.

Introduction

In order not to fall victim to local and global market pressures, managers should embrace lean thinking by ensuring streamlined operations, efficient processes and effective practices that lead to an organisational competitive advantage. A set of lean tools and strategy for efficient and effective practice of lean thinking are required to ensure that organisations manage wasteful expenditure, fruitless performance and dissatisfied customers. Lean practices are described as product and service quality, dependability, speed and cost efficiency from the view of the customer (Lameijer, Does & De Mast, 2016). Organisations, such as Toyota and General Electric, that turn to lean strategies generate more revenue with fewer resources, especially since



millennial employees prefer leaner, technology-linked structures, processes and practices (Burch & Smith 2017; Vermaak, 2008). It is noted that there is limited empirical research on lean models, practices and toolkits, especially in the emerging markets and developing countries (Mor, Singh & Bhardwaj 2016).

According to Dondofema, Matope and Akdogan (2017: 111), “It can be safely concluded that there is no systematic research in terms of application of lean manufacturing specifically on the following key economic activities in South Africa: mining and mineral processing, iron and steel making, construction, hotel and catering services.” The hotel, catering and tourism industry is especially prone to non-value adding tasks and wastefulness in effort, time, resources and cost; yet they could be promoting environmentally friendly practices as they are most advantaged to do so (Mor et al. 2016).

The motivation and purpose of this paper is to address the gap in the literature on lean thinking and practices, specifically focusing on the hospitality sector in South Africa (SA). The research question addressed by this theoretical paper is: What are the lean advantages and challenges experienced in the South African hospitality industry according to the literature? The research objective is to explore the existing advantages and challenges of practicing lean thinking in the SA hospitality industry. This paper contributes to theory by adding to the body of knowledge on lean thinking, practices and challenges in the African continent, South African country and global platform. The paper contributes to practice by creating awareness of lean practices so that managers and leaders may benefit from the advantages and manage the challenges of lean application. The paper consists of an introduction, literature review, findings, discussion and conclusion.

Literature Review

The literature review is presented under these subheadings: lean thinking; lean practices as a management strategy; increasing efficiency in the value chain; lean thinking in the services sector and hospitality lean practices.

Lean thinking

Open economies and fierce global rivalry are compelling organisations to pay more serious attention to cutting costs and increasing operational efficiency (Netland, 2016). In order to improve competitive capabilities, many organisations are employing management strategies such as Just-in-Time production (JIT), Total Quality Management (TQM) Six Sigma and Lean Thinking (Jasti & Kodali, 2015). Lean thinking as a management strategy, is defined by Tortorella, Marodin, de Castro-Fettermann and Fogliattoca (2016) as all the tools, techniques and organisational practices aimed at reducing waste and increasing productivity. Lean management strategy has become popular recently due to its simplicity and applicability in a wide range of sectors (Godinho-Filho, Miller, Ganga & Gunasekaran (2016). Lean practice is also considered as an operational improvement strategy (Hudson, 2017). However, the perception of employees and managers may differ depending on the short-term or long-term view of lean strategy, implementation and results (Klingenberg, Timberlake, Geurts & Brown, 2013).

During the 1970's oil crisis and subsequent economic slowdown, Toyota became a success due to their operational cost-cutting and increased efficiency resulting in higher quality products (Antony, Snee & Hoerl, 2017). Standard operating procedures and limited variability in terms of supplier quality, customer satisfaction and employee efficiency were important considerations in the Toyota lean practices (Lameijer, Does & De Mast, 2017). This resulted in higher quality vehicles being produced at the lowest possible cost and as fast as possible (Antony *et al.*, 2017). Since the 1990s lean thinking and its principles have been empirically researched and reported on (Lameijer, De Mast & Does, 2017; Netland, 2016).



Advantages of employing lean practices are that it allows for continuous improvement in organisational process, especially in operational practices (Vermaak, 2008) and, efficiency in the supply chain leading to value creation for customers (Anđelković, Radosavljević & Stošić-Panić, 2016). This implies continuously striving to eliminate those activities that do not add value to the production process as well as creating benefits that will appeal to customers (Antony *et al.*, 2017). Typical wastes in organisations are equipment downtime, rework, lead times, setup time and even non-value adding human movement, and managing these unseen wastes presents a major management challenge (Lameijer *et al.*, 2017). Lean practices are applicable and relevant to any business process in any sector (Lameijer *et al.*, 2017). In South Africa the application of lean principles lies in new product development and implementing basic lean tools (Dondofema *et al.*, 2017).

Lean practices as a management strategy

Lean practices consist of a collection of critical success factors (CSF), i.e. the elements or variables that may lead to the success or failure of the lean thinking programme (Naslund, 2013). These range from mindset, to leadership, to a promotion office tasked with getting stakeholders on board (Vermaak, 2008; Netland, 2016). Lean tools include the following programmes: value stream mapping (graphically display information and material flow); takt time (production pull versus push); *kaizen* (continuous process improvement); *kaikaku* (radical system improvement), just in time (JIT) (deliver what is required when necessary), root cause analysis (problem solving), and lean measurement (matching performance against targets) (Vermaak, 2008; Brun, 2011; Bortolotti, Boscarri & Danese, 2015; Netland, 2016). Lean CSF and lean tools served organisations such as Toyota to freely introduce new, clean, fast, cost-effective products and services to its business community (Tortorella *et al.*, 2016). Yet, as reported by Liker (2004), few lean success stories can be told due to unidentified and unmanaged challenges with lean strategy formulation, lean implementation and inability to foresee lean advantages.

Although researchers and consultants are in agreement about the CSF's for implementing lean, such as Total Quality Management (TQM), Just in Time (JIT), Six Sigma and Total Productive Maintenance (TPM), they are not very clear that these tools can be applied in any situation. The tools may therefore be contingent on the situation and different in different organisational contexts (Netland, 2016). As a result, different organisational contexts may call for different lean tools, combined with the critical success factors unique to that organisation, and specific to each lean tool (Näslund 2013). Lean tools should be combined with critical success factors such as coaching and decision support, which will enable swift problem solving and effective improvement of processes. The two main streams of CSF's are people and process issues. Specific to South Africa, people issues include mindset and attitude, leadership and staff contributions; while process issues include strategic impact, stable business processes and a lean promotions office to drive implementation (Vermaak, 2008). No theoretical or empirical studies have been conducted on South African lean management strategy or lean practices or lean employee improvement programmes (Dondofema *et al.*, 2017).

Despite great successes in some organisations and the widespread popularity of lean as a business strategy, its failure rate is been as high as 90% of the cases researched (Holmemo & Ingvaldsen, 2017). Many reasons are cited for this failure. For example, management lack of lean awareness and consequent resistant to change (Eswaramoorthi, Kathiresan, Prasad & Mohanram, 2011). The perception is that lean is a management tactic to cut costs and increase workload. This results in employee and union resistance to change and management rejection of lean processes, lean operations and lean systems (Radnor & Johnston, 2013). Furthermore, the choice of the lean practice or implementation strategy, such as a one-sided, top down decision enforced by management, may result in the failure of the strategy even before it is adopted in the organisation. Furthermore, a lack of relevant skills, funds and strategic and tactical



communication may hinder lean implementation (Bhasin, 2012; Syltevik, Karamperidis, Antony & Taheri, 2018),

According to Godinho-Filho *et al.*, (2016), the rate of adoption of lean principles is increasing globally and spreading rapidly. Lean consultancy firms are on the increase, helping organisations to continuously transform and improve their operations through lean principles. Their successes include cost reductions, improved efficiency and profit margins for organisations in sectors ranging from construction, energy, food and beverages, high-tech organisations, (Kumar, Sharma, & Agarwal, 2015). Furthermore, lean thinking and its practices have benefited healthcare and government departments across the globe with some challenges noted (Madsen, Risvik & Stenheim, 2017; Costa & Godinho-Filho 2016).

Lean practices increases efficiencies in the value chain

Various internal efficiencies result from the optimal combination of lean tools and lean CSF's. Enhanced customer relations, increased profit margins and functional relationships with external stakeholders are cited as a direct result of lean practices (Godinho-Filho *et al.*, 2016). JIT as a lean tool enables organisations to improve their own efficiency, productivity and profitability, by redesigning their factory layout and involving their suppliers in co-creating the best, most efficient supply chain. When suppliers provide input materials of a high quality and reasonable cost, as well as just in time, manufacturing organisations can drastically reduce their inventory holding cost. They save on rework if input materials are of superior quality (Garengo & Sharma, 2014). JIT lean practices may not always positively impact all lean performance indicators. Factors such as culture, structure, size of the plant and geographic location may lead to variation in the efficiency of JIT implementation (Godinho-Filho *et al.*, 2016).

Lean practices in the South African manufacturing and hospitality sectors reflect the successes and failures of most global counterparts with only 4% of organisations reporting successful lean think, strategy and implementation (Vermaak, 2008). Many lean initiatives in the South African manufacturing sector may fail due to managers not implementation lean practices correctly. Lean models such as the Liker's 4P Model of lean implementation, which considers the people, processes, problem solving and philosophy, may neglect any of the Ps during implementation (Dondofema *et al.*, 2017). In order to achieve accurate lean implementation, an awareness must be created of its benefits and challenges with a sound philosophy, involving the people in the processes through problem solving creativity. Furthermore, in order to ensure smooth, cost-effective operational efficiency, all four Ps must be successfully aligned to the business strategy (Anđelković *et al.*, 2016)

Lean thinking should not be confused with cost reduction, as its emphasis is on waste reduction or elimination of wasteful expenditure in operational processes. Lean was successful in Toyota because of a reduction of waste and an increase in operational efficiency. The organisational respect for people and the importance of the human aspect in the successful implementation and maintenance of the lean strategy was the highlight of the Toyota value chain initiative (Pakdil & Moustafa-Leonard, 2017). Lean thinking, in contrast to mass production, aims to continuously improve flow between and synergize processes, thereby eliminating muda, the Japanese word for waste (Anđelković *et al.*, 2016). Wasteful activities may occur anywhere in the production system. For example, regular and continuous waste of human effort, supply delays and mechanical or technological malfunction on the factory floor, in the warehouse or elsewhere in the logistics system could be eliminated or managed to achieve beneficial outcomes (Richards, 2014). The challenge is to identify and eliminate those non-value-adding tasks that from the customer's viewpoint are of no benefit to the customer or the service provided (Burch & Smith, 2017).



The focus of lean thinking has gravitated away from the tools aspect to an emphasis on the human and organisational aspects such as continuous improvement, change management, culture building and respect for people (Holmemo & Ingvaldsen, 2017). Herein lies the challenge however. The mere implementation of lean tools in South African organisations has not produced the desired results, and may even achieve undesirable objectives (Dondofema *et al.*, 2017). The real advantage lies in respect for employees through ethical leadership, building a culture of striving for perfection, as well as building customer and supplier relationships. These aspects, followed by implementing lean tools were found to be positively correlated to successful lean practices (Chavez, Yu, Jacobs, Fynes, Wiengarten & Lecuna, 2015; Dondofema *et al.*, 2017). However, people issues are broad and complicated, which makes the leadership role vitally important. Practical suggestions include making a senior executive responsible for lean implementation, supported and guided by an experienced lean facilitator and involvement from the human resources practitioners who must facilitate a lean culture change (Vermaak, 2008; Holmemo & Ingvaldsen, 2017).

Lean thinking in the services sector

The continuous drive for organisational excellence in the service industry is very similar to that in the manufacturing industry. Lean thinking the hospitality industries are following the example of the manufacturing lean practices. The lean principles are the same in every industry with slight adjustments. Many lessons learned in the manufacturing industry can be used in the service industry and this has led to the emergence of the concept of lean services (Hadid & Mansouri, 2014). Often organisations are part of a chain of enterprises where waste takes place in their interrelationships and is passed through the value chain. Collectively, these organisations fail to add value and instead impair product or service quality and brand loyalty. Only a continuous and brutal redesign of processes within and among organisations in the value chain will enable organisations to create value based on the lean philosophy (Holmemo & Ingvaldsen, 2017). Lean thinking in the service sector is underdeveloped and under researched (Hadid, Mansouri & Gallea, 2016). More research is also required about this sector. In developed economies, its contribution to GDP is bigger than that of the manufacturing sector (Malmbrandt & Åhlström, 2013). There are many differences between manufacturing processes and service processes, such as the presence of the customer during the production and consumption of the service, as well as the intensity of employee involvement (Strydom, 2011). Studies in lean service practices have found that technical practices such as automation and technology, which is present in both manufacturing and service organisations, are enhanced by social practices such as training and development, teamwork, culture and customer relations (Hadid *et al.*, 2016).

Due to the high failure rate of lean in manufacturing, researchers and lean consultants alike are increasingly shifting their focus to the human aspects, which include organisational learning, building culture and managing change (Holmemo & Ingvaldsen, 2017). The Norwegian public sector found that a combination of broad participation and skills training for customer-facing employees as well as a coordinated service value chain were vital for lean success. Early research into the service aspect of lean thinking centered on the health sector (Gupta, Sharma & Sunder, 2016). UK hospitals found many instances of waste and many potential areas of improvement with lean thinking being considered as an effective method in transforming hospital processes. Other studies conducted in hotels found that hospitals in Sweden and Malaysia used implementation tools such as the 5S (sort; set; shine; standardise; sustain), with varying success (Chourasia & Nema, 2016).

Hospitality lean thinking practices

In a study conducted in European hotels it was found that the application of lean techniques could reduce the number of person-days wasted up and down the tourist accommodation value streams (Vlachos & Bogdanovic, 2012). Taco Bell, a fast food chain in the USA as well as the US based



South West Airlines, managed to improve customer service by applying a production line lean approach to service and proved that this approach can deliver value to customers (Abdi, Shavarini & Hoseini, 2006).

Organisations need to relook at the conventional method of pricing a product. Instead of adding a profit margin to operating cost to determine price, organisations should begin with the customer price and deduct operating cost, leaving a residual profit margin. The benefit of this approach is that margins can increase by lowering the operating cost and an organisation that is in control of its costs can easily increase its margins. However, when waste enters the organisational system, performance measures such as the customer's needs are not met or timing, cost and quality are compromised (Hansen & Olsson, 2011). In times of global economic uncertainty organisations are probing means of reducing waste and simultaneously adding value to service quality and profit margins (Vlakov & Bogdanovic, 2013).

In both the manufacturing and services sectors the practice of lean thinking has been found to be an effective counter to waste through the elimination of non-value adding human activity (Ganapathy, 2015). Any excess interruption, unnecessary work, unaligned processes or redundancies in the system that do not add value to customers or represents waste or muda (Japanese) must be identified, managed and eliminated (Anđelković *et al.*, 2016). In the service industry, too much emphasis on waste reduction could come at the cost of innovation when offerings to customers are heterogenic and a high level of variation, agility and creativity is needed (Ganapathy, 2015). Lean tools in the service industry, and especially in the hospitality sector, therefore need to be applied widely across the organisation, taking into account both the technical and social practices (Hadid *et al.*, 2016).

According to the Tourism Competitiveness Index of the World Economic Forum, South Africa ranks 48th out of 140 countries and competes with other countries such as the Seychelles, Mexico, Australia, China and Thailand for tourists that enjoy the diverse fauna and rich world heritage natural sites each offers (Makhudu & Smith, 2016). This is an improvement of 16 positions since 2013 and 12 positions since 2015 and may be ascribed to these countries' strategy to make the industry their top priority. Therefore, South Africa is clearly at a competitive disadvantage compared to its BRICS partner, China, and other emerging tourist destinations. The Department of Tourism in South Africa emphasises the importance of a strategy to develop domestic tourism, which is less volatile than the foreign tourism market; however, the high cost of flying for example, limits both business and leisure airlift (National Department of Tourism, 2017).

There is little evidence of lean applications in the service industry, and even less in tourism and hospitality. Empirical studies focusing on lean in the services sector support the effectiveness of lean in this sector (Vlachos & Bogdanovic, 2012). Although training, knowledge attainment and organisational culture are vital factors to successful lean implementation in the hospitality sector, establishing a lean culture stands out as the one factor that may holistically affect lean practices positively.

The programme of continuous lean improvement, called the Toyota Production System, has implications for leaders, managers and employees in any organisation. Furthermore, concepts such as 'lean service' will become part of the business lingo (Julien & Tjahjono, 2009). The predication is that lean thinking is spreading into the service industry rapidly creating a generation of lean thinkers.

Research conducted in many European countries on service organisations and the public sector found that the institutions surveyed could achieve the critical success factors of productivity, increased delivery, speed, reduced costs, and time to market, by applying lean principles (Scalera & Uruci, 2011). It was found that the cooperation of stakeholders is crucial for lean thinking to be executed successfully. For example, in the Czech Republic organisations where evidence reveals that they are the least willing to adopt lean principles, it has resulted in worsening the business



climate of the country. In contrast, the governments of Albania and Montenegro successfully streamlined bureaucracy and reduced costs by applying lean principles which resulted in a positive and thriving business culture (Scalera & Uruci, 2011). In service organisations, too much emphasis has been placed on the use of lean tools such as just-in-time and continuous improvement due to the fact that managers adopt lean manufacturing tools without adapting them for a service environment; and not enough emphasis is on changing work performance and work flows. Isolated changes are implemented in selected divisions or functions, with no change in the fundamental methods of how the work is performed. As a result such organisations do not realise the true benefits of implementing lean. This results in employees becoming discouraged to the point where eventually the lean initiative is abandoned (Lochner, 2013).

The fundamental difference between service and manufacturing organisations lies in the nature and variability of the work performed as well as the unpredictability of demand in these two sectors (Lochner, 2013). The demands of no two customers are similar, resulting in individual and unique service value streams (Vlachos & Bogdanovic, 2012). Within the customer service process there is a sub-process, being the service recovery process (Escobar & Revilla, 2005). By studying service recovery, an organisation can uncover why its service delivery system fails, and how, by managing it, the organisation may improve customer loyalty, which in turn impacts on income and profitability. Through these means an organisation has access to a good source of information for continuous improvement (Tax & Brown, 1998). The success of mass production practices combined with the flexible approaches adopted during lean implementation in the services sector could enable an emerging country like South Africa to become more prosperous and competitive through means other than manufacturing. Tourism is such an alternative industry. The global tourism industry shows resilience in demand despite difficult economic conditions. The industry has significant potential to generate income, foreign currency and employment opportunities and thus contribute to the GDP more than other sectors (World Travel & Tourism Council, 2017; Department of Trade & Industry, 2017).

If executed correctly, lean could enhance an organisation's competitiveness regardless of their size or economic sector. Lean is more than a collection of tools and techniques. It is the practice of continuously improving the operations by using knowledge of critical successes and failures gained from problem solving (Shehadeh, Al-Zu'bi, Abdallah & Maqableh, 2016). For managers who do not implement the practice of continuous improvement in all core processes, the success of lean implementation could be compromised. Following the successes in various manufacturing organisations and the early success in a few service organisations, an in-depth study into the tourism and services sector is warranted. Another compelling reason for studying lean in tourism is the diverse opinions of the various authors regarding the measurable variables of successful lean implementation with regards to its advantages and challenges. While progress of lean implementation in the service sector varies greatly among countries and economic sectors, there is an apparent gap in the knowledge of the variables of successful lean implementation in the service industry organisations in South Africa.

Discussion

According to the current literature trends, the global and South African hospitality sector enjoys advantages yet struggles with challenges in lean implementation and practice. This discussion highlights the lean advantages and lean challenges.

Lean advantages

These seven advantages of lean practices were identified as following: implement an effective lean strategy; sustain customer satisfaction; create meaningful value for people through lean processes; foster healthy business relationships; ensure efficiency (work smart, speedily with

savy); improve productivity; and develop a competitive advantage. Figure 1 presents the seven advantages of lean practices for the South African hospitality sector.

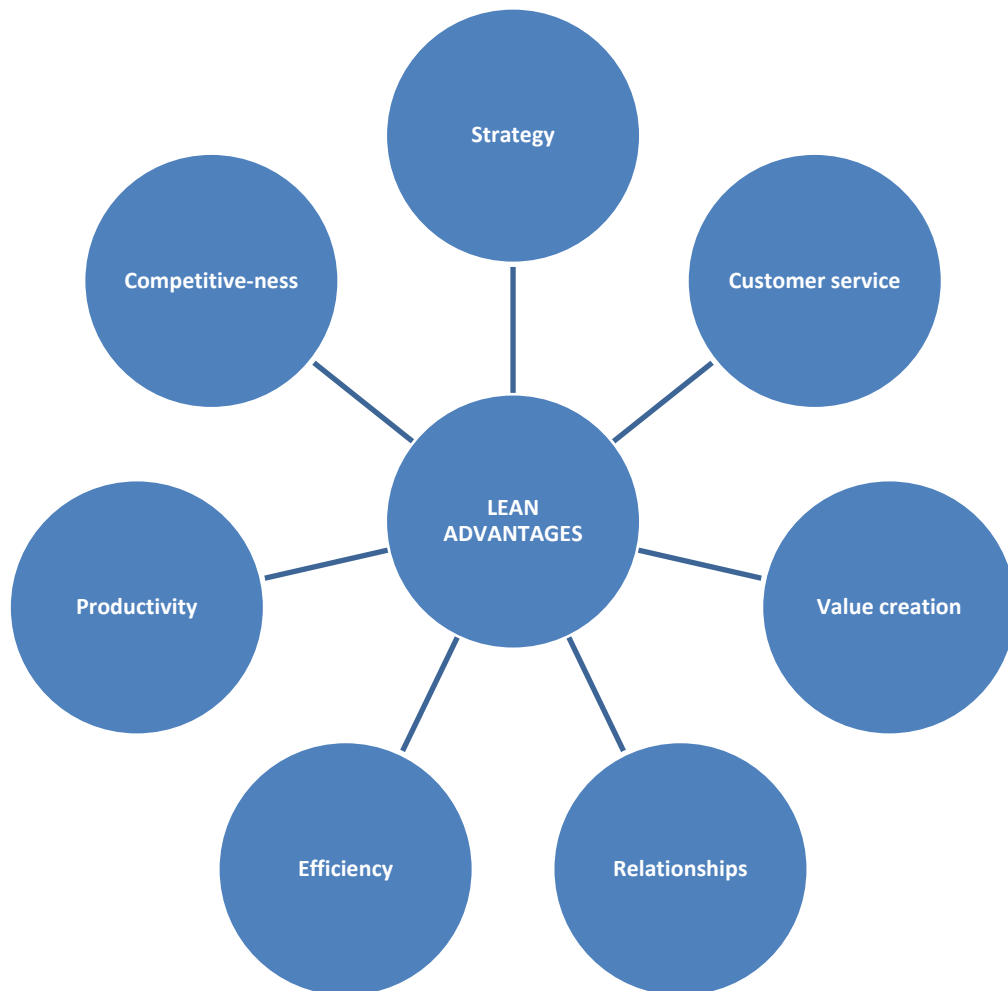


Figure 1. Lean advantages for the South African hospitality sector

The first lean advantage of strategy ensures strategic business leverage through these five process improvements: continuous systems improvement; simple management practices; easily implementable lean strategy; identify critical success factors; and select the most effective and efficient leans tools. The second lean advantage is customer satisfaction. The five processes to gain this lean advantage include: creating customer benefits; establish customer centricity; plan customer consultation; engage with customers; and conduct customer evaluations (Antony *et al.*, 2017). The third lean advantage is value creation. The five processes associated with achieving this lean advantage includes: cutting unnecessary costs; reducing and recycling waste; respecting the peoples' values; conducting needs assessments; and matching price to production costs (Vermaak, 2008). The fourth lean advantage of enhanced relationship building can be achieved through these five processes: establishing stakeholder engagement; ensuring predictable supplier quality; targeting value chain management; educating all suppliers; and creating trust in business relations.

The fifth lean advantage is improved efficiency via the five processes of increasing the operational efficiency; standardizing the operating procedures; controlling the push and pull factors; enhancing employee skills; and optimizing time, cost and effort. The sixth lean advantage is increased productivity. The five processes underlying this advantage are: producing quality



products and providing quality services; enhancing employee and team performance; limiting the variability in performance, processes and systems; increase operational speed; and reduce the number of operations in the production cycle. The seventh lean advantage is to achieve a competitive advantage in the sector and marketplace. The five processes associated with achieving this lean advantage are: increase organisational capabilities; manage organisational knowledge; optimise shareholder value; provide a range of global offerings; and differentiate products and services based on customer needs. Table 1 presents the description and authors supporting the seven significant lean advantages identified for lean practices in the South African hospitality sector.

Table 1. South African Hospitality Lean Advantages

LEAN ADVANTAGE	DESCRIPTION	SOURCES
1. Strategic leverage	Continuous systems improvement; simple management practices; easily implementable; critical success factors; leans tools.	Vermaak (2008); Netland (2016); Godinho-Filho <i>et al.</i> , (2016).
2. Customer satisfaction	Create customer benefits; customer centricity; consultation; engagement; evaluation.	Antony <i>et al.</i> (2017); Hadid <i>et al.</i> (2016); Godinho-Filho <i>et al.</i> , (2016).
3. Value creation	Cutting costs; reduce waste; respect people; needs assessment; match price to production cost.	Vermaak (2008); Netland (2016); Jasti & Kodali (2015); Andelkovic <i>et al.</i> (2016).
4. Relationship building	Stakeholder engagement; predictable supplier quality; value chain management; educate suppliers; create trust.	Vermaak (2008); Lameijer <i>et al.</i> (2016); Godinho-Filho <i>et al.</i> , (2016).
5. Improved efficiency	Increase operational efficiency; standardise operating procedures; control push and pull factors; employee skills enhancement; optimize time and cost.	Vermaak (2008); Netland (2016); Lameijer <i>et al.</i> (2016).
6. Increased productivity	Quality products and services; performance enhancement; limited variability; operational speed; reduced production cycle.	Vermaak (2008); Tortorella <i>et al.</i> (2016); Godinho-Filho <i>et al.</i> , (2016); Lameijer <i>et al.</i> (2016).
7. Competitive advantage	Organisational capabilities; knowledge management; optimizing shareholder value; global offerings; differentiation.	Vermaak (2008); Jasti & Kodali (2015); Makhudu & Smith (2016).

Lean thinking has implications for the SA services sector, the country and the continent and indeed global business success, by creating and enhancing organisational competitive advantage, business innovation, employee efficiency culture, streamlining the value chain and ensuring supplier and customer satisfaction. The implication for the SA hospitality industry is that the operational efficiency of its organisations through waste reduction and value creation can improve, resulting in increased profits and enhanced guest experiences. The implication for SA as a country is that tourism and hospitality organisations can compete more successfully on a global scale surpassing other competitor countries. The implication for the continent of Africa is that organisations in the continent can attract more foreign tourists when competing with other emerging tourist destinations such as the BRICS countries, especially Brazil and China (World Travel & Tourism Council, 2017).

Lean challenges

These six challenges of lean practices were identified from the theoretical study of the literature as follows: unawareness of lean practices; no lean strategy; employee perception; value destruction; invisible wastes; and limited research. Figure 2 presents the six lean practice challenges identified for the South African hospitality sector.



Figure 2. Lean challenges in the South African hospitality sector

The first lean challenge is management unawareness of lean principles, benefits and practices. Business leverage through these five process improvements: continuous systems improvement; simple management practices; easily implementable lean strategy; identify critical success factors; and select the most effective and efficient leans tools (Eswaramoorthi *et al.*, 2011). The second lean challenge is customer satisfaction. The five processes to gain this lean challenge include: creating customer benefits; establish customer centricity; plan customer consultation; engage with customers; and conduct customer evaluations (Holmemo & Ingvaldsen, 2017). The third lean challenge is value creation. The five processes associated with achieving this lean challenge includes: cutting unnecessary costs; reducing and recycling waste; respecting the peoples' values; conducting needs assessments; and matching price to production costs (Antony *et al.*, 2017). The fourth lean challenge of enhanced relationship building can be achieved through these five processes: establishing stakeholder engagement; ensuring predictable supplier quality; targeting value chain management; educating all suppliers; and creating trust in business relations (Lameijer *et al.*, 2016).

The fifth lean challenge is improved efficiency via the five processes of increasing the operational efficiency; standardizing the operating procedures; controlling the push and pull factors; enhancing employee skills; and optimizing time, cost and effort. The sixth lean challenge is increased productivity (Vermaak, 2008). The five processes underlying this challenge are: producing quality products and providing quality services; enhancing employee and team performance; limiting the variability in performance, processes and systems; increase operational



speed; and reduce the number of operations in the production cycle (Dondofema *et al.*, 2017). Table 2 presents the description and authors supporting the seven significant lean challenges identified for lean practices in the South African hospitality sector.

Table 2: South African Hospitality Lean Challenges

LEAN CHALLENGE	DESCRIPTION	SOURCES
1. Unawareness of lean	Low levels of awareness and lean acceptance; management resistance to change; limited budget allocation.	Eswaramoorthi <i>et al.</i> (2011); Vermaak (2008).
2. No lean strategy	Lean not incorporated in business or change strategy; failure to implement lean in operational processes; silos versus integrated business strategy.	Holmemo & Ingvaldsen, (2017); Syltevik <i>et al.</i> (2018).
3. Employee perception	Disrespect from managers; increased workload with cost-cutting; resistance to change, operational processes and systems; short versus long-term view.	Antony <i>et al.</i> (2017); Radnor & Johnston (2013); Klingenberg <i>et al.</i> (2013).
4. Value destruction	Non-value destroying activities; not identifying typical wastes; management inability to eliminate value destroying activities in service production processes.	Lameijer <i>et al.</i> (2016); Antony <i>et al.</i> (2017).
5. Invisible wastes	Manager inability to identify unseen wastes; employee downtime; unnecessary human movement.	Vermaak (2008); Lameijer <i>et al.</i> (2017).
6. Limited research	Little lean hospitality research in South Africa; emerging economies lack hospitality and services lean empirical studies.	Dondofema <i>et al.</i> , 2017; Syltevik <i>et al.</i> (2018).

The implication of identifying and presenting the lean challenges is that it impacts the organisation, its employees, industry, sector, country and continent. The main challenges that impact on the SA hospitality industry is that a lack of management awareness and no lean strategy translates into a resistance for change and limited budget allocation for lean practices. The implications for SA as a country are that the challenge of poor employee perception on lean thinking results in inadequate value created for the customer leading to loss of competitive capability. The implications for the continent of Africa are that the challenges of invisible wastes and limited lean research results in other emerging economies becoming the preferred destination for discerning tourists and foreign investors.

Conclusion

This paper focused on exploring lean thinking and practices within the South African hospitality and services sector with specific reference to lean advantages and challenges. The main findings reveal that lean advantages include: lean is aligned to the business strategy; improvement in customer satisfaction, efficiency, productivity and relationships with stakeholders; and value is created resulting in enhanced competitiveness. Lean challenges were identified as: lean unawareness and lack of lean strategy; negative employees' perceptions resulting in value destroying operational activities; not detecting invisible wastes; and limited theoretical and empirical lean studies in the African context.

There are significant implications and management application emerging from this paper. Lean challenges has implications for people and processes in that the advantages of lean practices to enhance organisational competitive challenge, business innovation, employee efficiency culture, streamlining the value chain and ensuring supplier and customer satisfaction will be negated.

The recommendations for further research are that these theoretical advantages and challenges should be empirically tested and a comparison of the hospitality, manufacturing and health lean practices should be drawn.



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