

A systematic literature review (SLR) comparing Japanese Lean philosophy and the South African Ubuntu philosophy

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Abstract

Purpose – The purpose of this study is to enhance the understanding of Japanese Lean management principles in South African contexts using Ubuntu, to improve buy-in during Lean implementation.

Design/methodology/approach – A scoping systematic literature review (SLR) was used to investigate the correlations and variations between Lean management principles and Ubuntu management principles.

Findings – Both similarities and differences were discovered between Ubuntu and Lean. It was noted that Lean adopts principles that do not have corresponding Ubuntu principles, such as levelling out workload, continuous process flow, stopping to fix the problem and visual management.

Research limitations/implications – While this research only used a South African concept (Ubuntu) to develop a novel Lean analogy, future research could be pursued in a similar vein for other countries outside of Japan.

Practical implications – The similarities could assist in “translating” Lean concepts to a South African context, ergo improving the understanding of the Lean principles and possibly contributing to more successful Lean implementations.

Originality/value – To the researcher’s knowledge at time of publication, this study is the first comparison of these two management philosophies. Ergo, the Lean–Ubuntu analogy is a novel comparison of Lean.

Keywords South Africa, Lean management principles, Ubuntu management principles, Systematic literature review, Literature-based framework, Lean analogy

Paper type Literature review

1. Introduction

The Lean philosophy (from Japan) has become a global phenomenon, due to its organisational benefits for continuous improvement (Stone, 2012). However, it has been noted that there are several implementation problems and failures, such as poor employee buy-in (Amer and Shaw, 2014). Therefore, *Lean implementation success factors and barriers to lean implementation* have been widely investigated by numerous researchers (Achanga *et al.*, 2006; Amer and Shaw, 2014; Fadyly Habidin and Mohd Yusof, 2013; Hilton *et al.*, 2012; Martinez-Jurado and Moyano-Fuentes, 2014).



A 2012 study explained that the transition from traditional management philosophies to Lean philosophy is primarily an organisational culture change matter, as opposed to solely a technical or manufacturing concern (Nordin *et al.*, 2012). This study further stated that various authors (Bamber and Dale, 2000; Bhasin, 2011; Bonavia and Marin, 2006; Crute *et al.*, 2003; Lee-Mortimer, 2008; Nordin *et al.*, 2012; Wong *et al.*, 2009) have indicated that *misunderstanding the concept and purpose of Lean* is a barrier to Lean implementation (Nordin *et al.*, 2012). Additionally, some authors (Melton, 2005; Worley and Doolen, 2006) identified *cultural differences* as a barrier to Lean implementation (Nordin *et al.*, 2012).

Danese *et al.* (2018) found multiple gaps in the literature concerning cultural differences and the misunderstanding of Lean, such as a “Lack of cross-country and cross-national cultural comparisons,” which led to their recommendations for cultural comparisons (Danese *et al.*, 2018). Ahmad (2013) proposed a framework that may be used to structure research regarding the cultural role in Lean manufacturing (Ahmad, 2013). His work illustrates the need for balance among organisational, national and work culture that is required for adaption to Lean culture. This highlights the need for research in adaptation of national cultures into the Lean culture.

Therefore, against this background, there is a need to enhance the understanding of the Japanese Lean management principles in other cultural contexts, to improve the chance of better buy-in during Lean implementation in these different cultural settings.

The key to Lean’s management success in Japan, is due to it being deeply rooted in Japanese culture (Hoogvelt and Yuasa, 1994). But outside of Japan, there are other management philosophies, such as Ubuntu, which is rooted in, for example, the South African culture (Broodryk, 2007). The research aims to investigate the correlations and variations between the Lean management principles and Ubuntu management principles (from the South African culture), through a scoping systematic literature review (SLR), for the first time in print. This will allow for the utilisation of Ubuntu management principles when explaining Lean to South African organisations, thereby increasing the chance of better buy-in during Lean implementations

2. Background

2.1 Ubuntu philosophy

Ubuntu is the African concept of “humanness” or what it means to be human, which is claimed to have predated most of indigenous African knowledge (Broodryk, 2005; Bolden, 2014; Karsten and Illa, 2005; Kelly, 2018; Matolino and Kwindigwi, 2013; Mbigi, 1997; Van Heerden, 1998). The philosophy has only recently, as of the 1990s, entered the literature (been documented in written format). Before that Ubuntu philosophy was passed down from generation to generation, as the foundation for leadership and hope (Broodryk, 2007).

The ancient concept of Ubuntu is reported to have originated in central Africa within the earliest societies, and as certain groups of people migrated to other parts of the continent, they took the Ubuntu philosophy with them (Mangena, 2016; Muxe Nkondo, 2007). As the new groups formed their new societies, the Ubuntu philosophy began to differ slightly among them, whereas seemingly staying true to the core principles (Mangena, 2016). Nowadays, the Ubuntu philosophy can be found in various African countries, such as Zimbabwe, South Africa, Mozambique, Zambia, Malawi, Botswana, Ghana, Angola and the DRC (Mangena, 2016).

With South Africa being a melting pot of rich diversity and cultural wealth, it is composed of several cultures and subcultures. In South Africa, the Ubuntu philosophy often governs the way a great deal of the population live their lives (Broodryk, 2005). Moreover, some South African cultures may unconsciously exercise Ubuntu principles, even without referring to it by name.

The fundamentals of Ubuntu lie in the isiZulu aphorism *umuntu ngumuntu ngabantu*, which means “I am a person through other people” (Broodryk, 2005). The eight basic Ubuntu core values are as follows (Broodryk, 2007):

- (1) *compassion* – humanness, human rights, humanity, spontaneity, friendliness and helpfulness;
- (2) *forgiveness* – understanding and consideration;
- (3) *responsibility* – respect, obedience, giving unconditionally and sharing;
- (4) *honesty* – good versus bad, norms and openhanded-ness;
- (5) *self-control* – order, dignity, informality, redistribution and spirituality;
- (6) *caring* – sympathy, appreciation and empathy;
- (7) *love* – kindness, charity, tolerance and peace; and
- (8) *perseverance* – strength, commitment and cohesion.

Since the formal documentation of Ubuntu philosophy in the 1990s (Karsten and Illa, 2005), it has transcended into the management sphere with the development of the Ubuntu management philosophy (Broodryk, 2005). In the early 2000s, Johann Broodryk (the first person to receive a PhD in Ubuntu) published his book *Ubuntu Management Philosophy* (Broodryk, 2005), which captured the essence of the Ubuntu philosophy and explained how to use it as a management philosophy in modern business (Broodryk, 2005). Later, the principles were also expanded upon by Msila (2015), who stated that Ubuntu is grounded in five levels for management applications – the 5Ps of Ubuntu (people centeredness, permeable walls, partisanship, progeny and productivity).

2.2 Lean philosophy

Lean is a business philosophy, used to eradicate waste that was developed in Japan in the 1930s as part of the Toyota Production System (Holweg, 2007). It gained world attention in the 1980s, due to its quality and efficiency (Liker, 2003). Lean philosophy is described as being based on five key principles (Womack and Jones, 2003), namely:

- (1) value – defined from the customer perspective;
- (2) the value stream – map the set of actions required to create products or services;
- (3) flow – work towards continuous flow throughout the process;
- (4) pull – use a pull system; and
- (5) perfection – continuously strive for the paragon of the product/service.

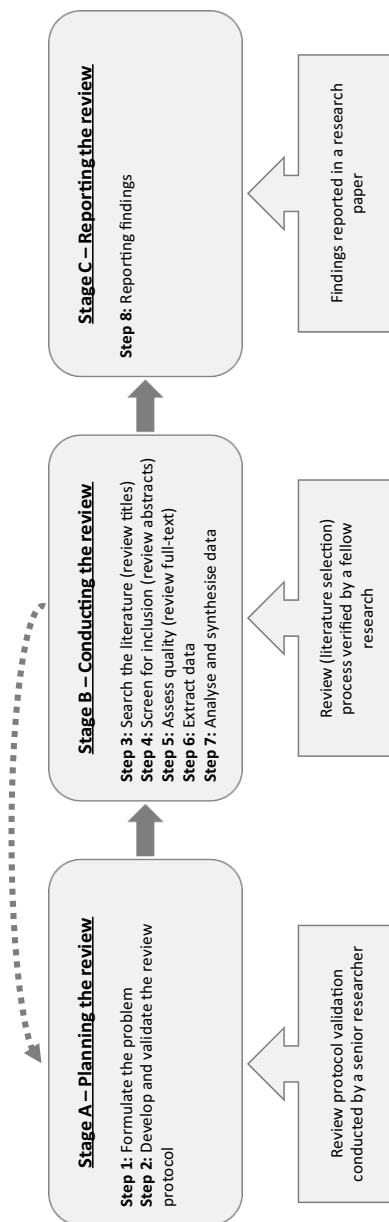
These five principles, subsequently, increased the Lean management philosophy (Satolo *et al.*, 2017). With its origins in the manufacturing industry, this philosophy provides organisations with multifarious tools and quality improvement methods, through the 14 management principles, as described by Liker (2003) in *The Toyota Way*.

3. Research method

SLR was conducted to establish the possible correlations and variations between the Lean management principles and Ubuntu management principles. To achieve this, many articles, journals and books were used from selected data bases.

The investigation entailed conducting a scoping SLR, which falls under the category of descriptive SLRs. This allowed for extracting as much information about Ubuntu and Lean, while giving an overview of the conceptual boundaries of the subjects (Booth *et al.*, 2012; Xiao and Watson, 2019).

Although there are various methods to conduct an SLR, this scoping SLR followed the method described by Xiao and Watson (2019) and is illustrated in Figure 1.



Source: Adapted from Xiao and Watson, 2019

Figure 1. Method of systematic literature review

The research method for conducting the SLR (Figure 1), has validity and verification ingrained within the steps of the process to maintain rigour throughout the process (Xiao and Watson, 2019).

3.1 Step 1 – formulate the problem

The development of narrow research questions was used to steer the entire process going forward (Xiao and Watson, 2019).

3.2 Step 2 – develop and validate the review protocol

The review protocol was developed by identifying the purpose of the study, creating the inclusion criteria, search strategies, quality assessment criteria and screening procedures (Xiao and Watson, 2019). Furthermore, this protocol must be validated by another researcher.

3.3 Step 3 – search the literature

The literature searches were conducted through electronic databases, as it “constitutes the predominant sources of published literature collections” (Xiao and Watson, 2019). The six databases were searched using the advanced search features, as to abide by the inclusion criteria.

3.4 Step 4 – screen for inclusion

For screening the literature, the abstracts were reviewed if the resource meets the inclusion criteria and the full-text were read (Xiao and Watson, 2019). The process followed was verified by a fellow researcher (via checklists) to ensure rigour.

3.5 Step 5 – assess quality

A predetermined quality check was conducted to evaluate the resources that meet the inclusion criteria and full-text read (Xiao and Watson, 2019). This entailed checking the resources against the exclusion criteria and for validity of the source.

3.6 Step 6 – extract data

The information found in resources, which meet the quality assessment, was read and manually coded (Xiao and Watson, 2019). This allowed for the emergence of themes and patterns.

3.7 Step 7 – analyse and synthesise data

The codes were used to organise the data and highlight correlations and variations between Lean and Ubuntu (Xiao and Watson, 2019).

3.8 Step 8 – report findings

The findings are document in Section 4, which encompasses the methodology followed, particularly the inclusion criteria, and the conclusions of the study (Xiao and Watson, 2019).

4. Findings

4.1 Step 1

The developed narrow research questions (RQ) were stated as follows:

- RQ1. What are the correlations or compatibility between Lean management principles and Ubuntu management principles?

RQ2. What are the variations or gaps between Lean management principles and Ubuntu management principles?

4.2 Step 2

The developed review protocol is detailed in Table 1. After the establishment of the protocol, it was validated by a senior researcher during iterative discussions and deliberations.

4.3 Step 3 to 5

Section 4 illustrates the detailed selection process of resources for Lean management principles and Ubuntu management principles, as described in steps 3 to 5 of the method.

4.3.1 *Lean management principles – resources found* When reviewing Lean literature, it became apparent that some authors confuse Lean concepts and tools for Lean principles. This creates some confusion among scholars and industry personal. Moreover, various authors had mixed Lean philosophy principles with Lean management principle. Therefore, conducting an SLR on Lean management philosophy was important in establishing the real Lean management principles, as opposed to stating the incorrect ones.

Purpose of the study	To establish correlations and variations between Japanese Lean philosophy and the South African Ubuntu philosophy
Inclusion criteria	<ul style="list-style-type: none"> • Literature including “Lean” or “Ubuntu” in their title, abstract or keywords • Literature on Ubuntu management philosophy • Literature on lean management philosophy
Exclusion	<ul style="list-style-type: none"> • Theology/religious-based Ubuntu literature (as opposed to the management philosophy of Ubuntu) • Ubuntu in terms of legislative principles • Ubuntu literature referring to software/programming • Lean literature related to obesity/weight loss • Lean literature that only discusses the five principles of Lean philosophy (as opposed to management principles) • Non-English literature
Search databases	<p>Searches were conducted on six databases, namely:</p> <ul style="list-style-type: none"> • ScienceDirect • Scopus • IEEE Xplore • Web of Science • EBSCOhost (<i>Academic Search Premier, Africa-wide information, Applied Science and Technology Source, Business Source Premier, eBook Collection, E-journal, MasterFILE premier, Philosophers Index with full-text</i>) • Emerald Insight Journals
Keywords	<p>All the selected databases were searched using the following keywords:</p> <ul style="list-style-type: none"> • “Lean Philosophy” and “Management Principles” • “Ubuntu Philosophy” and “Management Principles”
Quality assessment criteria	<ul style="list-style-type: none"> • All duplicate literature was excluded • Recovered literature will be checked for relevance (besides inclusion and exclusion criteria)

Table 1.
Review protocol

The process of identifying literature was conducted over a period of two weeks on six databases. The initial search of the databases proved to be challenging, as searching “Lean philosophy” and “Management principles” yield several results that illustrated misinterpretation and confusion of principles. Multiple sources listed lean tools and techniques as management principles, instead of listing the actual 14 management principle of Lean (Liker, 2003). Additionally, several results found confused the five principles of Lean philosophy (Womack and Jones, 2003) with the 14 management principles of Lean (Liker, 2003).

To filter through the resources found, a second search was conducted. Where an additional search term was added: “Toyota,” because the 14 management principles of Lean were originally developed by Toyota (Liker, 2003). After the second search, 185 results screened, thereafter six articles were filtered through the screening and quality check steps.

Finally, the six articles were deemed eligible for use after a full-text assessment. The aforementioned selection process is depicted in Figure 2.

The process followed was verified by a fellow researcher, through a checklist to ensure rigour. To achieve this, this independent researcher followed the process depicted in Figure 2 over a period of three months and got similar results. The only discrepancy picked up was that an additional article was added to the Emerald Insight database, between the time of conducting the search and conducting the validation search. Upon picking up the discrepancy, the researcher reviewed the additional article and found that it did not meet the inclusion criteria for this study, thus it was excluded.

4.3.2 Ubuntu management principles – resources found. In a similar vein to the Lean search process, this process of identifying literature was conducted over a period of two weeks on the same six databases. The initial search of the databases proved to be challenging, as searching “Ubuntu philosophy” and “Management principles” yield only four results (i.e. too few results due to specific key words searched). To expand the search, a second search was conducted on the same databases, but “philosophy” was removed from the keywords. This allowed for 45 results to be found, as it was not restricted by the concept of Ubuntu being a philosophy. However, it was determined that 45 results were too minimal,

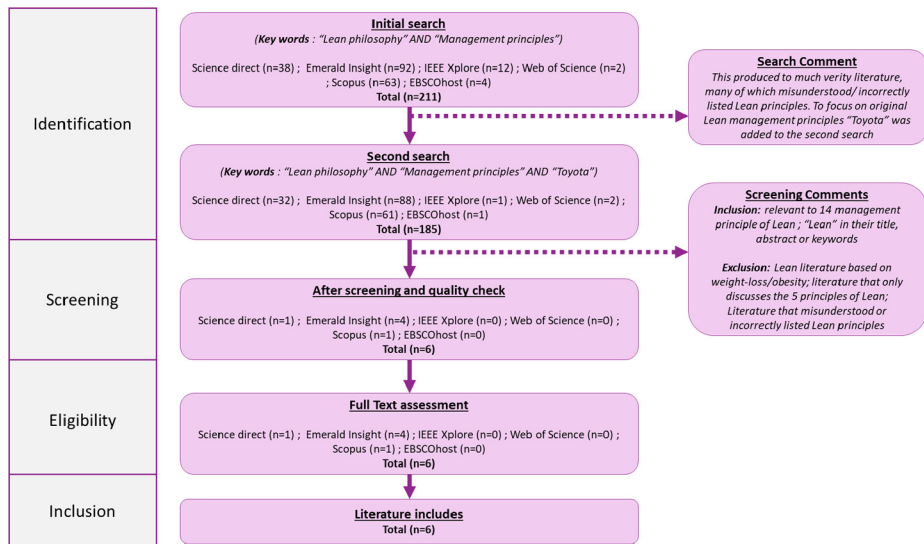


Figure 2. Selection process chart for literature on Lean management principles

so a third search was to be done. This was conducted on an eBook database, to expand the search once more to textbooks in the field. In sum, the second and third searches resulted in 70 resources.

After screening and quality checking the 70 resources, it was determined that four results met the criteria set. Finally, the four resources were deemed eligible for use after a full-text assessment. The aforementioned selection process is depicted in Figure 3.

In accordance with Lean search verification, this process was also verified by the same fellow researcher, through a checklist to ensure rigour. With the intention of achieving verification, this independent researcher followed the process depicted in Figure 3 and reached the same results, thus no discrepancies were found.

4.4 Step 6

After conducting the unbiased searches, as discussed in subsection 4.3, ten literature sources met the criteria to be included in this study. The literature sources on Lean management principles and Ubuntu management principles that was included in this study is listed in Table 2.

4.5 Step 7 to 8

All the resources listed in Table 2 were analysed for common trends and patterns in their principles, this is discussed in depth in subsections 4.5.1 and 4.5.2.

4.5.1 *Lean management principles.* Upon analysing the literature source found, Table 3 was developed on the bases of Lean management principles (Liker, 2003), summarising the meaning of each of the principle, while categorising the principles into the 4 P sections.

4.5.2 *Ubuntu management principles.* Upon analysing the literature source found relevant to Ubuntu, Table 4 was developed based on the Ubuntu management principles. From the literature it was observed that although authors may differ in the naming of the principles, the core value and meaning behind the principles remained the same. Therefore, for this study, the naming structure described by (Msila, 2015) was used to summarise the

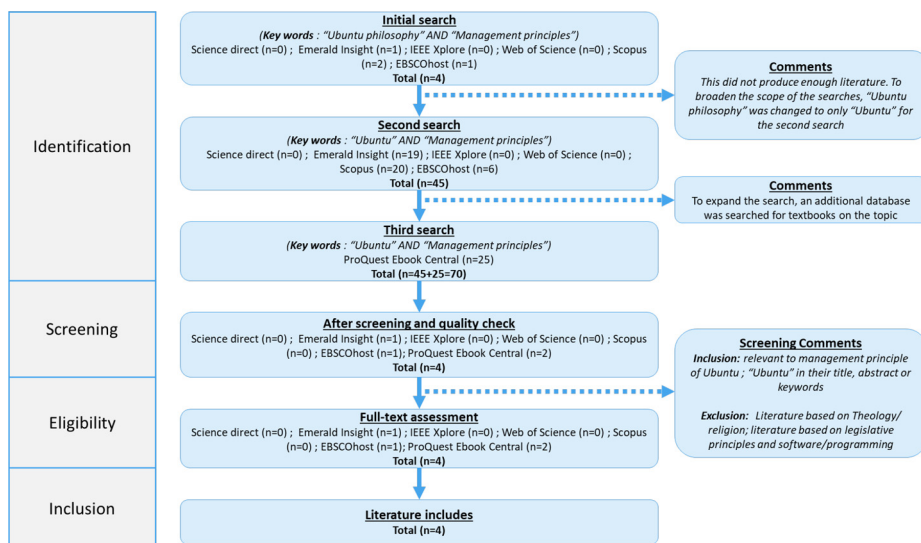


Figure 3. Selection process chart for literature Ubuntu management principles

Table 2.
Literature used in
this study

	#	Author(s) and year	Title	Type of source
Lean	L1	Ljungblom (2014)	Ethics and Lean management – a paradox?	Journal article
	L2	Gelei <i>et al.</i> (2015)	Lean production and leadership attributes – the case of Hungarian production managers	Journal article
	L3	Satolo <i>et al.</i> (2017)	Lean production in agribusiness organisations: multiple case studies in a developing country	Journal article
	L4	Meiling <i>et al.</i> (2012)	Managing for continuous improvement in off-site construction: evaluation of lean management principles	Journal article
	L5	Moeuf <i>et al.</i> (2016)	Strengths and weaknesses of small- and medium-sized enterprises regarding the implementation of lean manufacturing	Journal article
	L6	Saurin <i>et al.</i> (2013)	A complex systems theory perspective of lean production	Journal article
Ubuntu	U1	Broodryk (2005)	UBUNTU: management philosophy	eBook
	U2	Msila (2015)	Ubuntu: shaping the current workplace with (African) wisdom	eBook
	U3	McFarlin <i>et al.</i> (1999)	South African management development in the 21st century	Journal article
	U4	Van Heerden (1998)	The application of post-war Japanese management principles to post-apartheid South African information services: a viable option?	Research article

findings, as it was the most descriptive yet concise. [Table 4](#) summarises the meaning of each of the principle, while categorising the principles into the 5 P sections.

5. Discussion

The correlations and variations between Lean management principles and Ubuntu management principles are captured in [Figure 4](#) and [Table 6](#). It was found that Ubuntu and Lean share many similarities, such as being people focused with foundations in respect, teamwork, leadership, collective decision-making and continuous improvement. However, Ubuntu management principles do not account for several of the Lean principles, such as continuous process flow, pull systems, levelling out the workload, building a culture of stopping to fix problems and visual control.

An additional difference is that Lean philosophy is based on four categories, the 4Ps of Lean (philosophy, process, people and partners and problem-solving), whereas Ubuntu management philosophy is based on five categories, the 5Ps of Ubuntu (people-centeredness, permeable walls, partisanship, progeny and productivity).

To provide a visual representation of the relationship between Lean and Ubuntu management principles, the Lean–Ubuntu analogy diagram was designed and constructed ([Figure 4](#)). To ensure that the Lean–Ubuntu analogy was aesthetically appealing and was able to convey the relationship between Lean and Ubuntu, design requirements were established. [Table 5](#) states these design requirements and discusses how each one was achieved in the final design, thereby illustrating the methodical procedure and design specifications used to design the literature-based framework.

The Lean–Ubuntu analogy diagram ([Figure 4](#)) depicts the relationship (correlations and variations) between Ubuntu management principles and Lean management principles. The pyramids on the left and right sides represent the

Section	Principle	Summary
I – Long-term philosophy	1 – Base your management decisions on a long-term philosophy even at the expense of short-term financial goals 2 – Create continuous process flow to bring problems to the surface 3 – Use “pull” systems to avoid overproduction 4 – Level out the workload (Heijunka) 5 – Build a culture of stopping to fix problems, to get quality right the first time 6 – Standardised tasks are the foundation for continuous improvement and employee empowerment 7 – Use visual control so no problems are hidden 8 – Use only reliable, thoroughly tested technology that serves your people and processes	Align the entire organisation and grow towards a bigger goal than making a profit. Be responsible as the organisation generates value for society, customers and the economy Processes should be re-designed to accomplish value-added, continuous flow, while reducing the idle time to zero Only produce what the customer wants, how much they want, when they want it. (Function on a just-in-time basis, which will minimise your work-in-process and inventory) Eliminate wastes, overburden to resources and unevenness in production scheduling Equipment should have built in features that allow it to stop itself when an issue has been detected Thereafter, visual management should be utilised to indicate the support type need Use of constant, replicable methods throughout the organisation to maintain predictability, timing and outputs. Ergo, creating the foundations of pull and flow within the system Design simplistic visual indicators to aid employees in determining whether they are deviating from standard conditions or not. This will support pull and flow Use technology that supports your employees and does not replace them. It is best to manually work out a process before adding the supporting technology Additionally, conduct annual test on the technology, while not being afraid to reject or modify it
III – Add value to the organisation by developing your people and partners	9 – Grow leaders who thoroughly understand the work, live the philosophy, and teach it to others 10 – Develop exceptional people and teams who follow your company’s philosophy 11 – Respect your extended network of partners and suppliers by challenging them and helping them improve 12 – Go and see for yourself to thoroughly understand the situation (genchi gembutsu) 13 – Make decisions slowly by consensus, thoroughly considering all options; implement decisions rapidly 14 – Become a learning organisation through relentless reflection (hansei) and continuous improvement (kaizen)	Leaders should be role models within the organisation, which understands the daily work in great detail, such that they can best teach the company’s philosophy to others Develop a robust, firm culture, through which company values and beliefs are widely shared and transcends over the various years. Cross-functional teams will improve quality and productivity, while enhancing flow by technical problem-solving Treat your partners and suppliers with veneration, like there is an extension of your organisation. Moreover, challenge them to develop by setting targets and helping them achieve it Personally, observe and verify data, by going to the source of the problem and seeing it for oneself. This will allow managers to have more than a superficial understanding of the issue Do not select a single direction until you have meticulously considered the alternatives. Use the Japanese principle of Nemaawashi, which is a collective decision-making among all those affected by an issue After establishing all the process, use continuous improvement tools to address inadequacies. This will allow for the exposure and elimination of waste Moreover, reflect on crucial milestones and develop best practices going forward
IV – Continuously solving root problems drives organisational Learning		

Table 3. Summary of the meaning of the 14 Lean management principles

Section	Principles	Summary
I – People centeredness	1– People-centred work culture – community, solidarity, commitment	By placing focus on all employees, it fosters a feeling of responsibility to elevate the organisational culture. When employees are happy, it boosts team commitment to achieve organisational goals
	2 – Empowering people – team leadership and shared responsibility	Once all employees share leadership traits, it is easier to achieve the organisation’s goals. Employees use their skills to continually develop the organisation, as responsibility is shared by all
	3 – Transformational leadership – inspire, motivate, influence, support	It reinforces trust and respect in an organisation, as leaders are treated with honour by fellow employees. This allows the leaders to bring about valuable changes in the organisation
	4 – Mentoring – supportive environment	To strengthen people centeredness within an organisation, Ubuntu recommends mentoring. As it aids in developing employees, such that they can grow the organisation
	5 – Shared vision – goal directed	People-centred companies are efficacious, due to employees trying to achieve one vision. This is based on common ground with the interest of the company at the heart
II – Permeable walls	6 – Openness and honesty – supporting relationships and communication	To achieve coordination within an organisation, clear communication is key, which is supported by openness and honesty. This requires the full participation of everyone in the organisation
III – Partisanship	7 – Loyalty to the organisation	Loyalty must be built through strong organisational values. This is achieved by cultivating and promoting collegiality, while reinforcing commitment within an organisation. Organisations should perform the African tradition of “sharing a calabash”, by providing employees with the platform to share their ideas to build the organisation
IV – Progeny	8 – Collective decision-making	Ubuntu uses consensus among employees in arriving at decisions within an organisation, as it based on the need for a
	9 – Sharing power and teamwork	“village to survive”. Ergo, all employees need to participate in decision-making Power sharing within an organisation creates a sense of equality among employees. It fosters the importance of
V – Productivity	10 – Continuous employee support and development	solidarity, responsibility and effective teamwork Continuously develop employees and provide them with constant support, while magnifying the brand and goals
	11 – An effective team is a team with the right tools	To magnify production, effectiveness and efficiency within an organisation, employees should have access to the correct tools and equipment needed
	12 – Strong organisational value	Effectively organisations will shape and intensification the positive values, which lead to strong employee commitment
	13 – Rewarding employees for the application of the “right culture”	Encourage employees by introducing a reward system, ergo illustrating the benefits the organisational culture to employees

Table 4.
Summary of the meaning of Ubuntu management principles

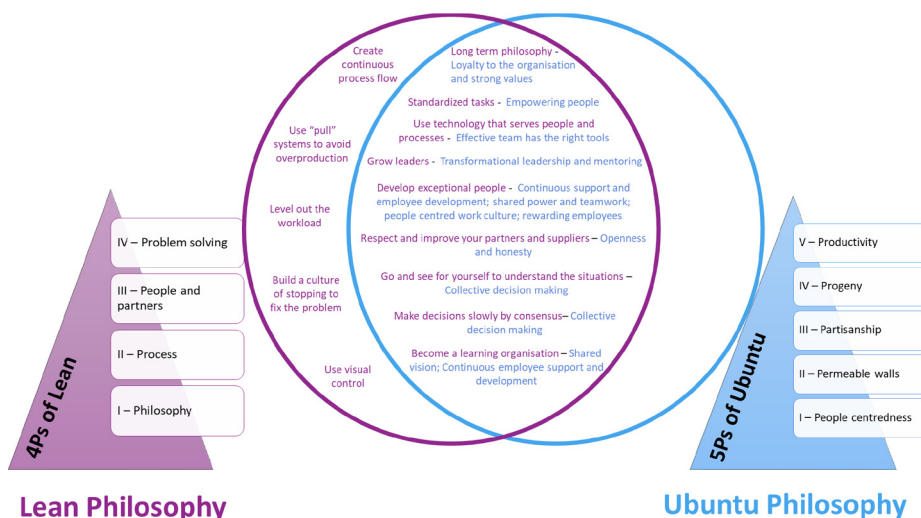


Figure 4. Lean-Ubuntu analogy diagram

#	Design requirements	How it is addressed in the framework
1	The framework must be simple in structure	A simple two-dimensional framework with minimal complexity or levels is used
2	The framework must be coherence among all the elements	A standard Venn diagram is used to indicate the relationship between two different sets of principal correlations are indicated by the overlap and variations are shown "outside" the overlap, but still within the separate circles, creating coherence
3	The framework must be visually intuitive	The Venn diagram is intuitive, since correlations are indicated by the overlap and variations are shown in the separate circles "outside" the overlap
4	The framework must be legible	The framework uses basic colours and fonts, in sufficient font size
5	The framework must incorporate aspects of the original works	The pyramids within the framework incorporate the original P-levels of Lean and Ubuntu
6	The framework must adopt a standard procedure for explaining relationships	A standard Venn diagram is used to depict the relationship (correlations and variations) between the two philosophies

Table 5. Table of design requirements

foundation of each management philosophy, showing the 4Ps of the Lean management principles (left-hand side of figure) and 5Ps of the Ubuntu management principles (right-hand side of figure). In the centre of the figure a Venn diagram illustrates the principles that correlate (overlap) between the two management principles. Principles from one management philosophy that do not have a corresponding principle from other management philosophy lies in the outer edges of the circles (that do not overlap).

From the pyramids in Figure 4, it can be observed that Lean philosophy has its foundation in building long-term philosophy first, whereas the Ubuntu management

philosophy has its roots planted in people-centeredness. It is imperative to note, that Lean too, addresses the people factor, in the third tier of philosophy. Thus, these philosophies share similar foundational values, with differing prioritisation.

The overlapping area of the circles, in the centre of the Venn diagram, illustrates the principles that correlate with the two management philosophies. It was possible to match nine principles from the Lean philosophy with 13 principles of Ubuntu philosophy. Since most principles could be matched, it suggests that it is possible to use Ubuntu as an analogy to explain Lean principles to South African employees before and during Lean deployments.

In [Figure 4](#), the correlations and variations between Lean philosophy and the Ubuntu philosophy are illustrated. By taking those relationships into consideration companies can explain the value of Lean principles to their South African employees. In the centre of the Venn diagram, nine matching sets of principles can be seen:

- (1) Referring to the top of the Venn diagram, with the first set of matching principles, Lean implementations started by initiating decisions based on a long-term philosophy, as to align the entire organisation with growing towards a goal and being responsible. In an organisation that understands or practices Ubuntu, this basis of Lean deployment can be introduced and aligned with the employee values of being loyal to the organisations and having strong values. This is because employees know that they have to build loyalty to through organisational values, by cultivating and promoting shared respect and reinforcing commitment.
- (2) In a similar vein, referring to the second set of matching principles, Lean emphasises task standardisation as the foundation for continuous improvement and employee empowerment. This Lean principle directly aligns with the Ubuntu principle of empowering people, so that employees will obtain skills to continually develop the organisation. Therefore, among employees in a South African organisation, this Lean principle will be understood and received better during Lean deployment when explained in the Ubuntu context.
- (3) Lean values using only reliable technology that supports employees and processes. This principle can be introduced to South African employees by equating it to the Ubuntu principle of an effective team is a team with the right tools, which emphasises that access to correct tools and technology will support the production in the organisation. This understanding may reduce resistance to Lean during deployment.
- (4) Both Lean and Ubuntu advocate leadership and mentorship, Lean highlights how leaders will teach others the company's philosophy; correspondingly, Ubuntu believes that leaders will bring about valuable changes because they are from the organisation. Therefore, by emphasising this comparison to South African employees during Lean deployments, organisations may get buy-in from employees on Lean leadership programmes.
- (5) Developing exceptional employees, who follow the company's philosophy is an important part of Lean, By the same token, Ubuntu develops exceptional people by providing continuous support, sharing power, having a people-centred work culture and rewarding the use of the "right culture". Thus, during Lean deployment, one could use these Ubuntu principles to explain how Lean will develop the employees. Once employees can see the parallels, they will be less resistant as it falls in with the current Ubuntu culture.

- (6) Respecting the extended network of partners and supplies is a vital principle of Lean, which allows for challenging one's partners and helping them improve, thereby seeing them as an extension of the company. Comparably, Ubuntu believes in supporting relationships and communication through openness and honesty. Therefore, by using openness and honesty, an organisation can teach employees to respect their partners during Lean deployment.
- (7) Decision-making is an integral part of both Lean and Ubuntu. Lean explains how employees must "go and see" the problems to thoroughly understand the situation and that the decision should be made slowly, through consensus. Ubuntu shares this idea, as it values collective decision-making, explaining that "it takes a village to survive." Ergo, by using the Ubuntu understanding of collective decision-making, South African employees may be more willing to participate in Lean decision-making initiatives.
- (8) Lean has become famous due to its organisational improvement initiatives, such as continuous improvement and reflection. This allows for Lean organisations to use continuous improvement tools to address problems and reflect on best-suited solutions. In a similar fashion, Ubuntu is of the view that organisations should endorse shared vision and continuous employee support. By doing this, employees can continuously grow and develop the organisation, with their skills and understanding towards the vision. Moreover, when the Ubuntu idea frame is used as a base for understanding during Lean implementations, employees are more likely to buy-in to Lean deployment.

Although most principles could be matched between the two philosophies, five principles from the Lean philosophy did not have corresponding principles from Ubuntu philosophy (left-hand side of the Venn diagram). The principles that could not be matched were the practical principles of the Lean philosophy that specifically focusses on the manufacturing industry, e.g. principles that focus on continuous flow, pull systems, workload distribution, problem solving and visual management. The lack of matching principles from the Ubuntu philosophy for these principles, could be attributed to the fact that the Ubuntu management philosophy can be viewed as a general management philosophy, whereas Lean management philosophy is also geared towards providing practical continuous improvement and waste reduction management principles. All of the aforementioned comparisons are summaries in [Table 6](#), showcasing the correlations and variations between Lean management principles and Ubuntu management principles.

6. Conclusions and opportunities for further research

Lean philosophy is widely known for its organisational benefits of continuous improvement. However, the transition from a traditional management philosophy to Lean philosophy primarily requires an organisational culture change, as opposed to solely a technical or manufacturing adjustment. It is during such a cultural change that the *misunderstanding* of the concept and purpose of Lean is seen as a barrier to successful implementation.

During this research, a novel Lean–Ubuntu analogy was developed for the South African context (via a SLR), illustrating the correlations and variations between Ubuntu and Lean. The study offers a fulsome understanding, by connecting Japanese Lean management principles to their respective South African Ubuntu versions. By using these similarities found, South African organisations can use the concepts from the Ubuntu philosophy to explain Lean concepts to employees, The Lean–Ubuntu analogy therefore gives South

Lean management principles	Ubuntu management principles
1 – Base your management decisions on a long-term philosophy even at the expense of short-term financial goals	7 – Loyalty to the organisation
2 – Create continuous process flow to bring problems to the surface	12 – Strong values
3 – Use “pull” systems to avoid overproduction	None
4 – Level out the workload (Heijunka)	None
5 – Build a culture of stopping to fix problems, to get quality right the first time	None
6 – Standardised tasks are the foundation for continuous improvement and employee empowerment	2 – Empowering people – team leadership and shared responsibility
7 – Use visual control so no problems are hidden	None
8 – Use only reliable, thoroughly tested technology that serves your people and processes	11 – An effective team is a team with the right tools
9 – Grow leaders who thoroughly understand the work, live the philosophy, and teach it to others	3 – Transformational leadership – inspire, motivate, influence, support
10 – Develop exceptional people and teams who follow your company’s philosophy	5 – Mentoring
	10 – Continuous employee support and development
	9 – Sharing power and teamwork
	1 – People-centred work culture – community, solidarity, commitment
	13 – Rewarding employees for the application of the “right culture”
11 – Respect your extended network of partners and suppliers by challenging them and helping them improve	6 – Openness and honesty – supporting relationships and communication
12 – Go and see for yourself to thoroughly understand the situation (genchi gembutsu)	8 – Collective decision-making
13 – Make decisions slowly by consensus, thoroughly considering all options; implement decisions rapidly	8 – Collective decision-making
14 – Become a learning organisation through relentless reflection (hansei) and continuous improvement (kaizen)	5 – Shared vision – goal directed
	10 – Continuous employee support and development

Table 6.
Comparison table of
lean and Ubuntu
management
principles

Africans the platform to understand Lean management principles, thereby increasing the chance of better buy-in and contributing to more effective Lean implementations.

While conducting this study certain methodological challenges occurred, such as realising the importance of conducting parallel selection process verification. While the researcher conducted the selection process over a period of two weeks, the independent fellow researcher conducted their selection process over a period of three months. This resulted in more resources being added to the databases in this time, thereby skewing the verification process. Also, when designing the literature-based framework, the challenge of design requirements was brought to light. As no established design requirements for creating a Lean framework were found in the literature, it is recommended that further research be done on establishing design requirements for Lean framework creation.

While findings on Lean–Ubuntu analogy are promising since Ubuntu and Lean share many similarities, it was also discovered that Ubuntu principles do not account for a few of the Lean principles. It is recommended that further investigations be conducted on the lack of corresponding Ubuntu principles, to find suitable comparisons. Further explorations should also be conducted on validating

this literature-based framework, for example, by practical implementation of the framework.

Considering that this study illustrates the comparison between the Lean philosophy and a local South African philosophy; it is recommended that future research also be done on developing analogies for comparing other countries' philosophies to Lean.

Additionally, pedagogical research is suggested on how to teach the Lean–Ubuntu analogy to employees within organisations prior and during Lean deployment, to increase understanding of Lean principles and improve buy-in from South African employees.

When employees understand the value and contribution of Lean, they are more likely to contribute to the improvement of the organisation. This research illustrates using a concept that one is familiar with (Ubuntu) to introduce a new concept (Lean), in an attempt to better understand the new concept. The study therefore, addressed the need to enhance the understanding of Japanese Lean management principles in the South African context, to improve the chances of better buy-in and successful implementation in these different cultural settings. This study is the first comparison of these two management philosophies.

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