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Can Lean Management Change the Managerial Culture in Higher Education?

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Can Lean Management change the managerial culture in Higher Education?

Problems associated with managerialism are well established in Higher Education. Driven by pressures of funding cuts, league tables and the associated competitive environment, Higher Education followed other public sector bodies in adopting Lean Management principles. While there is scepticism about Lean Management because it is seen as an instrument of managerialism, it is a philosophy that can resolve issues created by the managerialism movement. It offers ways of working with reduced resources without increasing pressure on staff. This paper proposes a Lean Management framework for Higher Education that focusses on creating value for stakeholders rather than cost-cutting. This framework was developed through a grounded theory approach, examining key features, successes and lessons learned from established programmes. This study shows that the framework could benefit universities and resolve some of the problems associated with managerialism.

Keywords: Managerialism, Lean Management, Higher Education.

Word count: 6648.

Introduction

Higher Education (HE) in the United Kingdom is provided by 164 institutions (As of 2nd February 2020, UK Universities, <https://www.universitiesuk.ac.uk/facts-and-stats/Pages/higher-education-data.aspx>) within a diverse and changing sector that has seen rapid growth, from 400,000 students in the 1960s to 2.3 million currently (Adnett 2010; Greenway and Haynes 2003). Governments require justification of public funds, and HE institutions (HEIs) are required to demonstrate value for money (Deem, Mok and Lukas 2008; Deem 1998).

These pressures have driven the adoption of managerialism or new managerialism, as seen within the New Public Management movement in HE (Shepherd 2018, Pitcher 2013; Deem, Mok and Lukas 2008). Although managerialism is hard to define (Shepherd 2018), Deem and Brehony (2005) describe it as emphasising management above all other activities, monitoring staff performance, attaining financial and other targets, and implementing service quality audits.

In the HE sector, this becomes synonymous with external accountability through performance, indicators, league tables, target-setting and benchmarking (Erickson, Hanna and Walker 2020; Naidoo and Williams 2015; Winter 2009; Ferlie, Musselin and Andresani 2008; Deem, Hillyard and Reed 2007; Deem 2001). This has resulted in a change from a collegial to a hierarchical bureaucratic management culture. Power has shifted from senior academics and departments to centralised university management, and systems have dominance over academic values (Winter 2009; Ferlie, Musselin and Andresani 2008). This has diminished the involvement of academic staff in decision making (Andresani and Ferlie 2006) and resulted in a deep divide between academic staff and senior managers (Erickson, Hanna and Walker 2020). This argument is supported by Kolsaker (2008, 513), who claims that ‘academic staff on the whole now function within performative systems of accountability embedded in managerialism’.

Sectoral growth and funding cuts reinforce the need for audited accountability and quality assurance (Erickson, Hanna and Walker 2020; Winter 2009) and drive HEIs to pursue performance improvements and adopt principles and techniques from the private sector (Balzer 2020; Balzer, Brodke and Kizhakethalackal 2015; Greenway and Haynes 2003).

Lean Management (LM) is one such approach that has been embraced by the sector to provide performance improvements, operational efficiencies and cost

reductions. However, despite examples of success, LM, implemented and interpreted in this context of a managerial culture with the HE sector, has not solved all problems. The focus of most LM projects is often on cost reductions and efficiencies. Yet LM philosophy, based on respect for people, is the antithesis of managerialism. However, it can still provide a solution by facilitating the smoothing of bureaucratic administration processes, services and systems. LM has the potential for freeing up staff time and offers a possible re-alignment with core academic values.

Whilst LM will not solve all the problems created by managerialism in HE, improved value can be achieved by refocusing on people. This paper presents a LM implementation framework that facilitates mitigation of pressure on staff through a unique portfolio, programme, and project management approach. It guides management on efforts that support staff, by resourcing process improvements that free up academic time, to deliver better value and the desired efficiencies.

In the following section the relevant literature is reviewed followed by the presentation of the methodological approach used in this research. The findings are then presented, and discussed, along with the developed theoretical framework for LM implementation in HE. Finally, the concluding remarks are outlined along with the limitations of the applicability of the framework.

Lean Management in Higher Education

LM has been defined as a programme of continuous improvement that encourages uninterrupted production flow through the elimination of waste in the system (Womack, Jones and Roos 1990). These wastes have been summarised as overproduction, excess inventory, unnecessary transportation, defects, over processing, motion and waiting (Ohno 1988). Liker (2004) also includes 'unused employee add necessary part of improvement and is aligned with five LM principles: identify value to

the customer, identify and understand the value stream, make the process flow, pull production from customer demand and introduce continuous improvement (Womack, Jones and Roos 1990).

Douglas, Antony and Douglas (2015) give examples of these eight wastes in HE, such as unnecessary movement of staff and students, inputting wrong grades and timetabling errors. Balzer (2020) however, categorises waste as people waste, process waste, information waste and asset waste, and provides an extensive list of examples for each.

Migrating LM principles to public sector organisations has not been without problems (Balzer, Brodke and Kizhakethalackal 2015; Radnor and Osborne 2013), but for HE, Balzer (2020) suggests to:

- define the value of the process from the perspective of the beneficiary;
- identify the flow of the process from both the beneficiary and the provider perspectives, looking at added value;
- eliminate waste activities that add no value;
- make the process flow smoothly with activities ‘pulled’ as needed by the beneficiary not ‘pushed’ by the provider;
- pursue perfection through continuous improvement and radical transformation.

These guiding principles form a conceptual framework which can arguably reduce waste in the system and achieve desired efficiencies.

However, Liker and Hoseus (2010) argue that by defining lean as a programme to eliminate waste most companies miss the point of LM. They warn that the limited view of ‘leaning operations’ presents a philosophy focussed more on cost reductions rather than continuous improvement and respect for people.

Although LM implementation outside manufacturing is still in its infancy (Gupta, Sharma and Sunder 2016), there are a number of examples of LM implementation in HE. Over the last two decades, predominantly in the USA, implementation of LM has demonstrated some success (Balzer 2020. Yorkstone 2019, Alves, Flumerfelt and Kahlen (2016), Waterbury 2015; Doman, 2011; Radnor and Bucci, 2011; Comm and Mathaisal 2005; Emiliani 2004; Comm and Mathaisal 2003). However, in most cases the focus is predominantly, but not exclusively, on leaning transactional and administration processes. These processes are easily measured, and since managerialism involves control techniques, such as performance measures and target setting (Shepherd 2018; Deem, Hillyard and Reed 2007) they become the primary focus of LM in HE.

Although efficiency measures such as cost savings are easily captured, LM should not be thought of only in terms of cost reductions (Liker and Hoseur 2010). Understandably, it is however, more difficult to capture and measure some of the other benefits (Balzer *et al.* 2016; Johnes and Johnes 2013). Balzer *et al.* (2016) recognise the need for measures which capture the wider benefits and the usually forgotten people and partnership element (Coetzee, Van Dyk, and Van der Merwe 2019). If this is not pursued, implementation of LM could potentially miss the main requirement of goal attainment of services and may create an efficient but not effective system as supported by Tsui and Cheung (2004).

Furthermore, LM is often viewed as a collection of tools (Alves, Flumerfelt and Kahlen 2016) applied to localised administration processes in HE (Hines and Lethbridge 2008). Lean tools that have been applied to HE include Value Stream Mapping (VSM), 5S (Hess and Benjamin 2015) and rapid improvement or Kaizen blitz as part of continuous improvement (Sunder 2016). A kaizen blitz, or rapid

improvement, is a focussed activity on a particular process or activity. The basic concept is to identify and quickly remove waste.’ (Sunder 2016 1097). Literature on the application of these tools within HE is limited. Examples, do exist for VSM for new course proposals (Balzer 2020) and academic advising (Fisher, Barman and Killingsworth 2011). VSM is used to identify the processes that add value and those that do not (Hess and Benjamin 2015). Maciag (2019) however, recommends that VSM be adapted for HE while Thomas *et al.* (2015) found that it was often used without considering value and with no understanding of value from the customer perspective. However, ‘simply mapping a value stream does not constitute Lean’ (Hess and Benjamin 2015 252) nor should LM be thought of in terms of its tools. Rather, ‘Lean is a culture, a way of thinking, a practical philosophy’ (Gupta and Sharma 2016 1026). Furthermore, Liker (2004) claims most organisations fail to go beyond the process improvement stage.

Other challenges, such as a lack of top management commitment to the full LM philosophy, an institutional culture resisting change and improvements, and poor project selection can also affect implementation efforts. These challenges can also be viewed as critical success factors for LM implementation in HEI (Waterbury 2015). Naslund (2008, p.278), whilst agreeing that these factors are vital, questions ‘*the practical application of such general success factors. For example, what does top management support really mean?*’

Additionally, Balzer *et al.* (2016, 456) recognise the need for ‘a common conceptual LHE (Lean Higher Education) framework to define, design and evaluate LHE programmes’. It can be concluded that a framework is needed to ensure implementation of the LM philosophy, focussing on people as well as process improvement.

Methodology

The aim of this research was to provide a framework for LM implementation that could counteract the impact of managerialism, but still enable an HEI to gain the required efficiencies. The grounded theory approach by Strauss and Corbin (1998) was employed to inductively generate a LM framework for HE. This involved collecting and analysing interview data and, through constant comparison, check for repeatability and avoid bias (Strauss and Corbin 1998).

The grounded theorist is focussed on how subjective experiences can be abstracted into theoretical statements about causal relationships, rather than the subjective experience itself (Suddaby, 2006) and '*how structures and processes influence how things are accomplished through a given set of interactions*' Starks and Trinidad (2007, p.1374). Thus we have avoided using a theoretical framework to guide the data collection.

By adopting theoretical sampling (Glaser and Strauss 1967), fifteen participants, with experience of LM in HE, were recruited for interviews. These included:

- Two LM sponsors – one Finance Director and one Head of Planning;
- Four improvement managers (BIM);
- Four LM practitioners;
- Five experts.

The interviews lasted between 30 and 90 minutes and were transcribed prior to coding. Open, axial and selective coding (Glaser and Strauss 1967). The open coding was used to determine the concepts, axial coding to reassemble the fragmented codes and selective coding to integrate and refine the framework. Through a number of iterations, the theoretical framework was developed, capturing the core relationships

between emerged categories and sub-categories. The proposed framework was validated by a comparative process with current literature into a generalised form. This is further explained in the following section.

Findings and Discussion

Extracting information from interviews relies on coding. Open coding of the transcribed interviews identified twenty-six codes, such as 'leadership/top management commitment' and 'use of tools'. However, through axial coding, the codes aligned into four core categories. Context is the embracing category with, Leadership, Staff buy-in and Lean Operations being formed from a number of sub-categories. Figure 1 depicts this alignment in the form of a theoretical framework with integrated categories and sub-categories. It also shows the relationship of stakeholders in the LM process for delivery of value to the beneficiaries. The following sections discuss this framework in more detail under the headings of the identified categories.

[Insert Figure 1]

Leadership

The inductive nature of grounded theory allows, through open coding, to identify a number of concepts. These include the concepts of understanding/misunderstanding of LM value by top management, communication strategy and support that includes intervention, involvement and conflict management. Through axial coding, these concepts are aligned into the sub-categories of leadership commitment. This process has also yielded another two sub-categories, budgets and resourcing, as shown in Figure 2 together with the related concepts. Additionally the concepts of governance and portfolio management are also included for reasons discussed below.

[Insert Figure 2]

Commitment

Examples were offered where commitment from leaders appeared on the surface but was not followed through in allowing staff time to work on projects: ‘they might be ok about saying I’m going to give this my support from afar but I am looking for them to give their support right close up and that is a factor that is crucial’ (BIM). When a LM initiative was fully supported by a Vice-Chancellor, it was given a high profile within the institution, which helped to gain acceptance of staff. There was the opinion that it was harder to get top management to see the importance of the non-financial benefits of LM.

‘Some people [at the strategic level] didn’t understand [LM] or only wanted to know about the money and didn’t want to accept or understand that these other benefits about value added, freeing up people’s time to do other things, was of equal value to cash savings’ (Sponsor).

Literature suggests that there is often a lack of top management commitment and support for lean initiatives within HEIs (Balzer *et al.* 2016; Thomas *et al.* (2015). However, the findings showed that even with commitment, misconceptions about what constituted a lean project caused conflict and confusion. Often cost-cutting projects or technology improvements were called LM projects and one BIM spoke of conflict in reporting cost savings where departments wanted it accounted against operational savings rather than LM. This suggests a need for a portfolio oversight of projects to differentiate between types of project and eliminate misunderstanding. Aligned with a governance system that can capture and quantify the benefits and value of the projects.

Budgets

The budget was referred to in terms of the costs of training, programme and project operations, consultancy and staff. One expert stated that people underestimate costs and suggested that management have to be 'prepared to spend resources, money and time which are the key things' and that many 'underestimate the indirect costs as well as the direct costs.' However, others were of the opinion that the '*benefits far outweigh the investment*'.

Resourcing

While linked to Budgets this sub-category was about Leadership decision making in setting up teams and resourcing staff with time and opportunity for improvements. The general consensus was that a dedicated LM team was needed to oversee the implementation of LM and to facilitate projects. '*I believe that if you really wanted to be really serious about it (LM) you really need, something like, a dedicated department*', as conflicting work priorities and lack of line management support mean that the projects were delayed and benefits not realised.

The evidence pointed to a general top management misperception of LM being a tool to achieve cost savings. For LM to be successful, leaders need to acknowledge that, as part of a portfolio of change, it can offer significant benefits of added value and needs to be differentiated from other projects. Governance is required also to pursue benefits beyond cost savings.

Staff Buy-in

The Staff Buy-in category emerged axially from sub-categories communication, teamwork, training and the role of the HR department; these were informed by codes and the overall representation is depicted in Figure 3.

[insert Figure 3]

Staff buy-in and engagement were seen as critical to the success of the LM initiative by all interviewed: 'I would say staff engagement is the absolute, without that you are struggling' (practitioner).

There was recognition that managing the people aspect of implementation was as important as the technical aspect. One BIM felt that their role in implementation was to, 'work with people and allowing people to have a voice in terms of making the organisation better for the people that it is supposed to serve'. Supported by others who felt that buy-in was easier when employees could see they were 'making things better' (BIM) rather than just saving on costs.

Communication

Communication was found to be key, with one practitioner stating that 'Getting out there and communicating' was a lesson learned. In communicating LM thinking, a common language, relevant to HE, was felt to be important in overcoming attitudes among HE staff who feel it is not relevant to their sector. Participants said examples need to be contextualised and terminology used needs to be appropriate for HE. Communication of early successes helped to engage staff and overcome resistance: 'If it is successful these people then become advocates for the benefits of the process. Once you take away the fear that this is just about trying to reduce the number of people'.

Participants discussed resistance across all levels, which arose from a misunderstanding that LM was about cost cutting projects, and potential redundancies, being attributed to LM projects. This can be attributed to poor communication. 'We eventually got [the message] out to some people but probably not all'. This finding reinforces that top management need to develop an understanding of the LM portfolio and distinguish between LM projects and cost cutting projects. Additionally, they need

to realise the importance of a communication strategy and deployment to address negative perceptions.

The role of Human Resources Departments

Two experts and one practitioner suggested that LM efforts should be included in the staff appraisal system to engage staff in the process. However, one BIM felt that in HE appraisal was a ‘system of reward which does not support staff in a senior level to help each other’ and ‘doesn’t encourage you to collaborate with others’. This contradicts the findings of Thirkwell and Ashman (2014) who felt that there was a perception that the reward system operated well in the two HEIs considered. Roffe (1998) also argues against appraisal schemes, describing them as short-termism, causing a decrease in employee satisfaction and motivation, and destroys teamwork. Therefore, the role of HR is critical in the LM implementation process, and Sparrow and Otaye-Ebede (2014) argue that as LM moves from a manufacturing to a non-manufacturing environment, the HR function should take a more strategic role in the implementing LM. This view is supported by Thirkwell and Ashman (2014) who felt that HR should play a central role in LM. Additionally, the data shows that lean initiatives fell under the remit of finance or strategic planning departments, but did not involve HR. This is explained by the view of some participants who felt that accountants understood the concept of waste and were willing to finance LM projects. Others, however, felt that this focussed LM projects towards cost savings.

Another argument for the involvement of the HR department is that, as one expert cautioned, LM could put staff under pressure. This is also recognised in literature by Procter and Radnor (2014, 2980) who, citing Vidal (2007), argue that ‘empowerment and autonomy is also related to higher levels of stress’. Rodriguez et al. (2016, 160), however, suggest ‘the integration of human resource practices and lean production to

engender a positive effect on employees' perceived work characteristics and job attitudes'. Hasle (2014), also recognised implementers, when failing to consider the human elements of LM, often fall back to a Tayloristic approach.

Team Set-Up

The team approach was shown to build motivation and satisfaction, particularly where the project focus was to create value. The team approach however, varied across institutions, with the more successful initiatives having dedicated teams, as opposed to individuals and departmental champions running the programme. The people recruited onto the dedicated teams was also a factor: 'You also need to have great people within the team to start this. You know really good facilitation skills and you've got to have those people who really can be leaders and bring others along' (BIM).

Training

Analysis showed that while the people aspect was important, the training of staff focussed on the tools and awareness sessions rather than change management and the softer skills required. 'We need to bring change management and teambuilding and the softer aspect of culture into the Lean environment, because we can be over critical and say we have trained them so why isn't it working' (Expert). 'You also need to think about training people in facilitation, brainstorming meetings, group team meetings' (BIM). This was also seen by Sim and Rogers (2009, 46) who caution that, 'If training is only about new techniques and metrics, workers who fear for their jobs tend to lack motivation for these forms of programs'. The findings suggest that LM training should be reviewed, with more involvement from HR departments, and should also include the softer skills required.

Lean Operations Management for Higher Education

Whereas the previous two categories were concerned with the people and leadership aspects of LM, this category covers the technical and operational aspects of continuous improvement and process management within LM. The sub-categories included tools, measurement, lean operations, and programme management.

[Insert Figure 4]

Tools for LM

Two tools were shown to be the most popular in all cases due to their simplicity. Kaizen Blitz or Rapid Improvement Event which involves taking a problem process, investigating, generating and implementing solutions within a week, and process mapping. As one expert advised, ‘find the worst problems and show them the tools to help them’, while another felt that ‘the really useful ones, I think, have turned out to be the fairly simple problem solving tools and data collection’ such as process mapping. Although process mapping or flow charting was popular, no example was given of this being developed further into Value Stream Mapping. This suggests that adoption of VSM is not evident and as Maciag (2019) highlights VSM needs to be adapted for the HE environment. This lack of development of the VSM may also be a training issue.

Measurement

Measurement focussed on diagnostics, assessment in-line with KPIs. The importance of a ‘quick win’ was identified in the interviews with experts and BIMs: ‘people can start to bank some savings immediately, keeping enthusiasm up, keeping things going’.

One BIM felt that ‘we do employ and want to employ people because of their innovativeness and their creativity and you can’t put a stop watch on these. So it’s

understanding how you are able to deal with that sort of tension'. This highlighted the problems with the current managerial measurement systems within HE. An expert cautioned, 'The unfortunate thing is in business we are always measured in the short term', adding that this is, 'complete anti-lean from day one'. Participants felt that if value-add and 'making things better' were the focus, there could be a positive impact on league table rankings in the longer term. LM should be a long-term programme, focussing on value creation (as specified by the beneficiary), not only performance measures and as was recognised '*how do you quantify creativity in higher education?*' This requires to be built into the measurement system within a programme of change which, according to one expert, captures success in terms of non-financial measures.

Programme Management

From the analysis, it seems that many of the LM projects (projects for improvement) were not selected strategically as such and were not part of an overall programme of improvement within the portfolio. Many of the examples showed that projects were generated *ad hoc* or fragmentally from staff suggestions, without looking at the overall impact. There was also evidence of top-down suggestions, but many of these were based on projected cost savings rather than value-based improvements. One example from a practitioner was in a finance department, where time for one staff member was saved as the result of leaning the expense claiming process. A similar benefit was reported for an HR department's recruitment process.

This suggests that a programme approach is needed, as identified by an expert, due to the 'knock on effect', where projects could potentially save in one area but might also have a negative impact on another.

Overall, there was evidence of governance directed to individual projects and not as the overall programme for change. A programme approach will ensure that the

identification and mitigation of potential negative impacts and risks, as well as alignment with customer value and strategic goals. This would also provide a solution for the challenges of project scheduling in line with the findings of Waterbury (2015).

Project selection should not discourage staff from coming up with ideas. What is needed is the provision of framework for ensuring benefits from projects are in line with an overall strategy. Project selection, as one BIM pointed out, should be based on a strategy of ‘doing the right thing’ rather than on its potential impact on league tables and that LM enabled ‘doing things right’.

The participants also identified the need for reviewing the full student journey in terms of LM, however felt that this holistic approach was challenging. Indeed, participants referred to projects mainly in terms of isolated process reviews and improvements. To move away from the isolated *ad-hoc* approach, the findings suggest the need for LM to be viewed as a programme of change within the HEI portfolio.

Process and service reviews

This sub-category unites a number of concepts such as value, flow and beneficiaries. The participants identified the need to review the full student journey. However, as this holistic approach was considered challenging, there was only evidence of isolated process reviews in practice.

Within the philosophy of LM it should be noted that value is specified by the ‘beneficiary’ of the process or service (Balzer 2020); that is, the person receiving the output from a process may well be the academic. For almost all the participants in this study the beneficiary was the student. Two of the experts also used the term internal customer. This suggests that the recognition of the ‘internal’ customer in the specification of value, is not as evident as in other sectors.

For many processes and services teaching and research staff should be involved as internal customers. Thirkwell and Ashman (2014) argue that academics should learn to become customers of the lean process. Although, one project sponsor felt it was difficult to engage academics, the findings in this research suggest, that academics should be seen as internal beneficiary by implementers and administrators.

The analysis also showed that operational issues resulted from complex processes and bureaucracy. It was recognised by participants that, in HEIs, different departments, schools and faculties often operated their own systems and processes, thus adding to the difficulty.

Participants felt that implementing LM should involve simplifying, defining and standardising complex processes and also referred to the need for ‘unpicking the process’, as part of the improvement effort. However, a practitioner felt that not all functions could be ‘leaned’ and an expert did question whether education itself should be ‘lean’. If the argument is that in education certain processes like teaching, cannot be lean, then standardisation can only apply to overarching and supporting processes. There was also acknowledgement by a BIM that, in terms of pedagogy and teaching, improvements and methods were evolving naturally. Giving academics more time, through streamlined administration processes, could increase opportunities for developing new materials, experimenting with new technologies and pedagogies and potentially improving teaching practices. If LM can reduce the administrative burden on academic staff then, as one BIM argued, this is the ‘gold in the mine’. Erickson *et al.* (2020 14) cite the ‘progressive recommendations’ of Halfman and Radder (2015), who suggest that academics should spend no more than 10% of their time on administrative overheads. With leaner administration and supporting processes this could be possible.

LM efforts should therefore focus on overarching and supporting teaching processes as well as administration processes which service the student journey.

Context

The previous sections have described the main categories that have emerged from the results. However, what became apparent, issues related to the categories are influenced by the context of the overall operational environment of HE. The context category is presented in Figure 1 as a super category encompassing the other three.

There was concern among the participants that, in the HE sector, ‘the business of what we do’ was seen as financial and ‘how we manage budgets’ rather than ‘helping students, what we teach and leveraging research outcomes’ (BIM). All participants felt that the real driver of LM from top management was cost savings, promoting the misperceptions around LM, and reinforcing the argument of the dichotomy between academic and corporate values caused by managerialism.

It was also recognised, by many of the participants, that HEIs are not set up to encourage cooperation and collaboration that is required by LM. Driven by the nature of corporate measures and targets, imposed by the adoption of managerialism, departments tend to operate in ‘silos’ and avoid cooperation. They also felt that a culture of improvement was needed, to achieve the benefits that LM can offer. Top management should therefore promote cooperation and collaboration of staff, and move away from viewing LM as a tool for only achieving cost savings and efficiencies.

Conclusions

The purpose of this paper was to present a framework to support HEIs in adopting LM principles and address the challenges of managerialism. Adopting grounded theory as

the method of enquiry, four key categories for implementing LM in HE were identified and formed the theoretical framework presented in Figure 1.

It is anticipated that the theoretical framework will serve as a reference point for the implementation of LM in HE. It will provide the basis for mitigating the current problems arising from managerialism.

The framework will allow HEIs to focus on a number of critical success factors as concluded below.

Leaders should embrace the Lean philosophy and ensure that it is part of the change portfolio and separate from cost cutting projects.

The HR function should be involved in the LM implementation and promote a culture for improvement. The development of a culture for improvement is key, with a shift from managerial to lean principles that requires commitment from leaders and staff.

Under managerialism, respect for people can be secondary to the drive for savings and efficiencies. The framework brings the focus back to people, through involvement and participation, and promotes improvement through team-work, cooperation and collaboration.

Process and service reviews should be carried out which consider value as defined by the beneficiaries, including the academics. These reviews should consider effectiveness as well as efficiency.

Implementers need to consider the use of tools in line with LM principles and the project requirements.

A portfolio, programme and project approach should be developed to provide a cohesive and holistic approach to improvement efforts. Portfolio oversight allows for

project differentiation between LM and other projects within the HEI so that they are not considered cost cutting exercises.

LM has been an instrument of managerialism to achieve cost savings and efficiencies. However, a change in culture, away from managerialism values, is required for wider benefits. The framework presented here offers guidance on making that shift in thinking. However, as it was developed from primary data collected in the United Kingdom (UK), the applicability of the framework for HEIs outside the UK could be limited.

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