## The development of "lean" (and associated techniques) in public, third and voluntary services

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Ten years ago in Public Money and Management (Volume 28, Number 1), Radnor and Boaden (2008) wrote an editorial entitled: 'Lean in Public Services – Panacea or Paradox?' (pp 3-7) as an introduction to a set of articles examining lean in Public Services. In this themed issue Radnor returns with Bateman and Glennon to reflect on the implementation of lean in public services ten years on. The first point to note is that lean (and associated techniques) is still being implemented and the question is still being asked! Can lean address the challenges of public service delivery (a panacea)? Or is it a distraction for public sector managers (a paradox)? In this editorial, we reflect on the original editorial and issue to understand how far we have (or have not) come, as well as examine the current state of play and introduce the articles in this issue. We will not give a detailed overview of lean, as this was presented in 2008 (Radnor and Boaden, 2008) and can be easily found in other sources (e.g. Liker, 2004; Ohno, 1988; Womack and Jones, 2010; Womack et al., 1990), with Holweg (2007) providing a useful genealogy of lean's production origins.

Public service reform has continued apace across the globe, with spending levels reduced within and across the vast majority of services and countries. A plethora of management tools, techniques, and theories have made the sometimes arduous journey from their origins in the private sector to the public or voluntary sectors, but lean, or the Toyota Production System to give it its original name, remains one of the most intriguing. Simple to understand, yet simultaneously complex to implement; highly specific, yet the fundamental concepts seem eminently translatable to wider contexts. It is these tensions and contradictions that make the study of lean, particularly in public, third and voluntary sector services, so thought-provoking.

The original editorial (Radnor and Boaden, 2008) distilled lean's key points and raised some questions. It asked where was lean being applied and which elements from lean were relevant? The key findings noted that the approach taken was very tool-based especially on lean projects and rapid improvement events (RIEs). A recent survey and report (Bateman et al., 2017) concluded that this was still the case – a strong emphasis on tools with visual management a significant one (Galsworth, 2005). Importantly, the report (Bateman et al., 2017) highlighted that organizations recognised the need to embed lean into organizational strategy, and to have clear teams and resources dedicated to lean, as well as to capture the benefits in order to sustain its implementation and focus. This shows a maturity over the past ten years in the understanding of the complexities and length of time needed to successfully implement lean.

The original editorial (Radnor and Boaden, 2008) also found that the majority of the case studies were in healthcare, and often case studies were carefully selected to demonstrate the benefits. Since then the application of lean (and associated techniques) has broadened across public, third and voluntary services, as the articles in this edition illustrate. Matters of application, as should be the case, has not gone unchallenged, with papers such as Carter et al. (2011; 2017) raising questions over worker autonomy and performance-driven culture. The issue of lean's impact on the worker was highlighted in the editorial in 2008 (Radnor and

Boaden, 2008), as was the process and sustainability of lean. Like the people issue, process and sustainability have been considered in research and articles over the past ten years, with the continuing recognition that lean and associated techniques should be *adapted* not *adopted* within public services. Recognizing that lean is context-dependent has led to further engagement of other disciplines, including service and operations management, thus unpacking some of the key elements needed to implement and sustain lean (and associated techniques) in public, third and voluntary services (see Osborne et al., 2015; Radnor and Osborne, 2013; Radnor et al., 2016).

In order to outline the articles in this issue, it is worth reflecting on the history of lean, which is unsurprisingly dominated by the history of automotive production. Early modes of car production operated as craft processes, where skilled craftsmen painstakingly hand-built small numbers of bespoke cars for the few who could at that time afford them. Ford, inspired by Taylorist scientific management, sought to improve quality and reduce costs – both aims still highly valid today. He did this through 'designing for manufacture', i.e. systematising and standardising the process of manufacturing to reduce reliance on individual skill, and to enable consistent and easily attachable part manufacturing (Womack et al., 1990), culminating in his famous production line. This mass production model spread far and wide and remained dominant for decades, and some would argue is still dominant in some parts of manufacturing.

Lean is often described as a reaction to the failures and weaknesses of mass production – the focus on bulk production and the inherent challenges around maintaining quality at volume, as well as the potential inability to adequately reflect customer need.

Lean, or rather the Toyota Production System (TPS), emerged out of a highly specific context: not just manufacturing, but automotive manufacturing, and from one country and one specific company. Toyota's story is quite remarkable, yet as revolutionary as TPS / lean is, it has proven to be much harder to translate into similar success elsewhere with any surety. Lean principles have informed much of the practitioner world, as well as the academic sphere. Drawing our understanding together, if we consider the 'turns' in the lean field, we may observe a series of broad phases:

- Toyota's development and implementation of TPS defining the approach that emerged from Toyota's practices
- Attempts to develop lean in other automotive manufacturers
- Lean's development into broader manufacturing applications (and subsequent influence in the operations management literature)
- Early application to healthcare and public services, characterised by localised successes and contrastingly failures to embed lean in public services highlighted in the 2008 PMM themed issue (Vol 28, Number 1)
- Recognising the benefits of lean and its context dependency, so drawing on service and public management – engaging it within the emerging disciplines of public service operations management and public-service dominant logic

Thus far, we have discussed lean's historical roots in automotive manufacturing, and its wider transmission into the product-dominated manufacturing world. Thinking from the private

sector, and particularly that of manufacturing practices, has been part of a hegemonic paradigm influencing much of the earlier literature concerning services, and public-sector management.

Yet here, too, lean has been influential, making the transition into service management, and becoming part of the developing body of work that includes co-production, and the creation of public-service dominant logic (Osborne et al., 2013). A public-service dominant logic embraces the differences between products and services (i.e. their intangibility, immediacy of consumption, and inability to be stored) but also poses significant questions about the distinctiveness of public services and how this should be considered as a critical facet of public service management.

As the phases represent for applied concepts such as lean, the 'practice turn' is a strong one, and a primary driver of development. As such, it features significantly in this issue, as we begin to examine the current status of lean within the public sector.

It is thus appropriate to consider lean as current practice (where we are now) and as future directions (where we think it should go). Cycles of experimentation and operationalization of lean have led to maturation in terms of the spread and sophistication of some organizations, yet these are not without problems (Radnor and Osborne, 2013), and failure rates are perhaps as high as 90% (Bhasin and Burcher, 2006).

This leads us to use this themed issue to consider implementation issues such as the centralization/ decentralization tension in the Holmemo and Ingvaldsen paper (p xxx) and consideration of new implementation models of lean such as Bateman, Esain, and Lethbridge (p xxx).

Research about the current state of lean usage, such as that reported by Fournier and Jobin (p xxx) indicate that many of the well-known problems of implementation in large public service sectors such as health endure across many different countries. Even though lean cases have been well-reported, it is striking how these ideas are still not well understood in many parts of the public service sector.

The UK (and many other Western economies) have suffered in the post-2008 global financial crisis, and this has led to extensive cuts in public funding. These cuts may have simultaneously increased the need to public services to reduce waste and refocus their efforts on providing lean services, whilst also harming the capacity of those same organizations to implement lean. In this issue, Martin (p xxx) draws together these challenges in the UK setting, highlighting an opportunity to rethink lean implementation for UK public services, as well as addressing the fundamental notion of what we want public services to be; an effective approach to lean may hold some of the answers to these questions.

It may also be that many of these organizations will thus need to draw on external advice and expertise if they are to adapt and develop lean for the range of contexts. Bateman, Esain, and Lethbridge (p xxx) articulate some of the pitfalls of implementation approaches in their exploration of platforms and pillars, and Williams and Radnor's (p xxx) concept of operating bandwidth addresses the challenges facing public sector organizations in retaining sufficient operating capacity to be able to adopt lean in pressured operating environments. Leggat, Stanton, Bamber, Bartram, Gough, Germann and Sohal (pxxx) continue to reinforce the need for a whole implementation approach with their 4Ps, emphasizing the need for both good

leadership through the development and engagement of an effective and comprehensive plan, and good management through performance evaluation (following up through measurement).

Thus, as we take this reflective examination of lean, in terms of experiences, concepts, and implementation, it may feel natural to consider how lean has influenced public services; certainly, on this question the evidence is mixed. Some have considered how lean's application may have been flawed initially (Radnor et al., 2012; Radnor and Osborne, 2013), and whether these failures are due a lack of fit between lean and public service, or whether inadequate management lies at the heart of these situations. It is hard not to conclude that much of lean's potential remains an unfulfilled promise: for some a panacea, and others still a paradox. Yet perhaps we could also ask a more appropriate question: how public management has influenced lean, or how it should?

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