The Relevance of the Human Resource Management (HRM) to Lean in the Service Sector: Evidence from Three Exploratory Case Studies

Araz Zirar
Loughborough University. Email: A.Zirar@lboro.ac.uk

Zoe Radnor (Supervisor)
Loughborough University. Email: Z.J.Radnor@lboro.ac.uk

Andy Charlwood (Supervisor)
Loughborough University. Email: A.Charlwood@lboro.ac.uk

Abstract

The aim of this research is to explore the relevance of the Human Resource Management (HRM) to lean in the service sector. In particular, the focus is to further understand the HRM bundle which is one of the four main bundles of lean: Just-In-Time (JIT), Total Quality Management (TQM), Total Preventive Maintenance (TPM), and Human Resource Management (HRM) (Pont, Furlan, and Vinelli, 2008; Shah and Ward, 2003). In this context, a bundle (whether a lean or a HRM bundle) means a set of interrelated and internally consistent practices (Pont, Furlan, and Vinelli, 2008). The study uses case study research because it allows a rich coverage of the area of investigation (Yin, 2009) via the utilisation of multiple sources of evidence (Gillham, 2000). Case study research studies a phenomenon in its real context and has the ability of reporting and documenting events in their practical nature (Yin, 2011). Its researchers' understanding that lean influences certain HRM practices (HRM bundle); however, the degree and nature of the influence is yet to be further explored.

Keywords: *Lean, HRM, Lean and HRM relationship.*

Introduction

Lean creates and delivers value for the customers of an organization (Womack and Jones, 2003). Similarly, normative theories of HRM posit that HRM systems can also be a source of value creation and delivery for employees of an organisation (Ulrich and Dulebohn, 2015). Accordingly, lean and HRM share the same expectations: To create and deliver value. Thus, lean provides HRM an opportunity to review its internal architecture and design to prove more useful in a lean context (Sparrow, Hird, and Cooper, 2014).

A quantitative study of lean implementation in manufacturing has found evidence that despite a positive role of HRM on the operations of an organisation in a lean context, its role is indirect and mediated through two main bundles of lean: Just-In-Time (JIT) and Total Quality Management (TQM) (Pont, Furlan, and Vinelli, 2008; Ward and Shah, 2003). However, this type of research can only identify statistical associations between HRM and Lean, it cannot identify the nature of the relationship between them. Do HRM systems have a causal influence on lean, with HR practices like recruitment and selection, training and performance management systems contributing to workers having the skills and orientations to make lean work (a proposition that makes theoretical sense), or is lean implemented in a way that is largely independent of traditional ways of doing HR (a proposition which fits with the evidence that HR practices often develop in a piecemeal fashion without being integrated with either strategic context or with other HR practices (Armstrong and Taylor, 2014). Therefore, it is crucial to understand the review of the internal structure and design of HRM as part of a process of lean adoption. While this study does not intend to question the benefits of lean, it further explores the relevance of Human Resource Management (HRM) to lean.

The use of case study research is appropriate as it scrutinises detailed contextual analysis of a limited number of cases and their relationships (Yin, 2011). This method is used to depict contemporary problems that need to be examined in their contexts and deals with problems that their boundaries are not yet defined (Yin, 2009). It is complex and evolving as a study progresses, carries hallmark of context, and might embrace various methods and methodologies (Compton-Lilly, 2013). The choice of the method is mainly because HRM and lean relationship needs to be scrutinised using detailed contextual analysis of three case studies. It is researchers' understanding that this method defines the boundaries of HRM and lean relationship and examines the review of the internal structure and design of HRM as part of the process of lean adoption in the context of the three case studies.

Literature Review Lean and HRM Relationship

Lean lacks a concise definition to cover its characteristics and human-related issues (Demeter and Matyusz, 2011; Sparrow, Hird, and Cooper, 2014; Taylor, Taylor, and McSweeney, 2014). One of the definitions in the extant literature, which tries to capture lean concisely, is by Radnor (2012): Lean is a philosophy that promotes change in the organisational culture through the use of techniques and tools and follows good practices such as waste reduction, a flow process, and customer focus. However, 'change in the organisational culture', 'use of techniques and tools', 'waste reduction', 'a flow process', and 'customer focus' do not happen in the absence of employees of an organisation i.e. human resource of the organisation.

On the other hand, Human Resource Management (HRM) comprises people-related guidelines, policies, programmes, philosophy, systems, and practices that organisation implement to manage and improve their human resource and bring flexibility to a workplace (Armstrong and Tylor, 2014; Boxall and Purcell, 2011; Shah and Ward, 2003). As a function, HRM has existed as early as employee and employer relations, in any forms, has existed (Cohen, 2015). And, this function does not disappear anytime soon in the future as long as employees work in organisations (Cohen, 2015).

At least, in statistical terms, HRM is a pre-requisite to lean adoption (Furlan, Vinelli, and Pont, 2011; Pont, Furlan, and Vinelli, 2008). As one of the four main lean bundles, HRM is a source of synergy among the other lean bundles: Just-In-Time, Total Quality Management (TQM), and Total Preventive Maintenance (TPM) (Furlan, Vinelli, and Pont, 2011; Shah and Ward, 2003). However, as Beauvallet and Houy (2010) observe, since HR is the decisive element in lean adoption, the relevant model of HRM (people management activities) to lean requires further exploration.

The attempts of scholars to establish the relevance of HRM to lean in the extant literature is evident (Liker, 2004; Sparrow, Hird, and Cooper, 2014; Shah and Ward, 2003; Shah and Ward, 2007). For instance, Liker (2004) allocates three principles to HRM:

> Principles 9: Grow leaders who thoroughly understand the work, live the philosophy, and teach it to others.
> Principle 10: Develop exceptional people and teams who follow your company's philosophy.
> Principle 11: Respect your extended network of partners and suppliers by challenging them and helping them improve. (Liker, 2004)

The three principles do set the general guidelines with regard of the importance of developing people and managing their behaviour. Furthermore, as Sparrow, Hird, and Cooper (2014) note, the application of lean into service sector has further increased the relevance of HRM in a lean context. They find that lean is an opportunity for HRM to review its internal architecture and design to prove more useful in a lean system. Thus, HRM is relevant to lean for mainly three reasons: It aims to bring lean an integration of business strategy with quality (Guest, 1987), a committed workforce and increased flexibility in terms of organisation and job design (Wilkinson et al., 2001), and positive employee attitudes (Guest, 1987).

Lean and HRM in the Service Sector

Since, the service sector is not concerned with making a hard product, the application of lean in a manufacturing context is not expected to be the same as in a service environment. Despite resistance

from 1980s to 1990s to adopting lean principles to service sector, because of considering lean principles as manufacturing principles (Bowen and Youngdahl, 1998), lean in the service industry is getting increased popularity (Sparrow, Hird, and Cooper, 2014). It is a popular approach to reform public services, at least, in the UK (Radnor and Osborne, 2016). And, the attempts to improve the performance and effectiveness of the service sector in the UK through the use of lean is noticeable in the extant literature (Radnor, 2012; Radnor, 2010; Radnor and McGuire, 2004; Radnor and Lovell, 2003).

The service sector accommodates various industries such as medical services, legal services, restaurants, banks (McClean and Collins, 2011). The extant literature does not question the applicability of lean on the service sector (Radnor, 2012; Radnor, 2010; Radnor and McGuire, 2004) or the link of HRM to the sector (Boxall and Purcell, 2011). The preconditions for lean in the sector are: management commitment, organisation culture change, effective and open communication, training employees, and team-working (Sparrow, Hird, and Cooper, 2014).

The HRM practices that fit the context of a service sector are not duplicates of the HRM practices of a manufacturing context. A number of HRM practices, which are considered to be the appropriate practices for the sector, are: staffing, training, employee involvement and participation, performance management and appraisal, compensation and rewards, and caring (Lu et al., 2015). In particular, the HRM practices of training, empowerment, and teamwork are reported to strengthen the adoption of lean in the sector (Sparrow, Hird, and Cooper, 2014). So, it is not surprising to note that service firms, in particular those who target customers with the desire of quality, invest and pay noticeable attention to development of their workforce through training (Boxall and Purcell, 2011).

Concluding Remarks

A clear call in the literature is evident to define the characteristics of the lean and HRM relationship (Beauvallet and Houy, 2010) and to understand the HRM bundle in a lean context (Shah and Ward, 2003). This attempt is expected to minimise disappointment efforts of lean, at least, in the service sector. Although the number of the cases are limited to a maximum of three, it is hoped that they represent the bigger pool in the service sector. This is because organisations tend to imitate what works in their industry including people-management practices (Boxall and Purcell, 2011).

References

Armstrong, M. and Taylor, S. (2014) *Armstrong's Handbook of Human Resource Management Practice*. 13th edn. United Kingdom: Kogan Page Ltd.

Beauvallet, G. and Houy, T. (2010) 'Research on HRM and lean management: a literature survey', *International Journal of Human Resources Development and Management*, 10(1). doi: 10.1504/ijhrdm.2010.029444.

Bowen, D. E. and Youngdahl, W. E. (1998) '"Lean" service: in defense of a production‑line approach', *International Journal of Service Industry Management*, 9(3), pp. 207–225. doi: 10.1108/09564239810223510.

Boxall, P. and Purcell, J. (2011) *Strategy and human resource management*. 3rd edn. China: Palgrave Macmillan.

Cohen, D. J. (2015) 'HR past, present and future: A call for consistent practices and a focus on competencies', *Human Resource Management Review*, 25(2), pp. 205–215. doi: 10.1016/j.hrmr.2015.01.006.

Compton-Lilly, C. (2013) 'Case Studies', in Trainor, A. A. and Graue, E. (eds.) *Reviewing Qualitative Research in the Social Sciences*. United Kingdom: Routledge, .

Demeter, K. and Matyusz, Z. (2011) 'The impact of lean practices on inventory turnover', *International Journal of Production Economics*, 133(1), pp. 154–163. doi: 10.1016/j.ijpe.2009.10.031.
Furlan, A., Vinelli, A. and Pont, G. D. (2011) 'Complementarity and lean manufacturing bundles: an empirical analysis', *International Journal of Operations & Production Management*, 31(8), pp. 835–850. doi: 10.1108/01443571111153067.

Gillham, B. (2000) *Case Study Research Methods*. United Kingdom: Continuum.

Guest, D. E. (1987) 'Human Resource Management and Industrial Relations', *Journal of Management Studies*, 24(5), pp. 503–521. doi: 10.1111/j.1467-6486.1987.tb00460.x.

Liker, J. K. (2004) *The Toyota Way: 14 Management Principles from The World's Greatest Manufacturer*. New York: McGraw-Hill.

Lu, C.-M., Chen, S.-J., Huang, P.-C. and Chien, J.-C. (2015) 'Effect of Diversity on Human Resource Management and Organizational Performance', *Journal of Business Research*, 68(4), pp. 857–861. doi: 10.1016/j.jbusres.2014.11.041.

McClean, E. and Collins, C. J. (2011) 'High-commitment HR Practices, Employee Effort, and Firm Performance: Investigating the Effects of HR Practices Across Employee Groups within Professional Services Firms', *Human Resource Management*, 50(3), pp. 341–363. doi: 10.1002/hrm.20429.

Pont, G. D., Furlan, A. and Vinelli, A. (2008) 'Interrelationships among lean bundles and their effects on operational performance', *Operations Management Research*, 1(2), pp. 150–158. doi: 10.1007/s12063-008-0010-2.

Radnor, Z. (2010) *Review of Business Process Improvement Methodologies in Public Services*. London: Advanced Management Research (aim).

Radnor, Z. (2012) *Why Lean Matters: Understanding and Implementing Lean in Public Services*. London: Advanced Institute of Management Research (aim).

Radnor, Z. J. and Osborne, S. B. (2016) 'Operationalising lean in services: Rediscovering service blueprinting', in Radnor, Z. J., Bateman, N., Esain, A., Kumar, M., Williams, S. J., and Upton, D. M. (eds.) *Public Service Operations Management: A Research Handbook*. United Kingdom: Routledge, .

Radnor, Z. and Lovell, B. (2003) 'Success factors for implementation of the balanced scorecard in a NHS multi‑agency setting', *International Journal of Health Care Quality Assurance*, 16(2), pp. 99–108. doi: 10.1108/09536860310465618.

Radnor, Z. and McGuire, M. (2004) 'Performance management in the public sector: fact or fiction?', *International Journal of Productivity and Performance Management*, 53(3), pp. 245–260. doi: 10.1108/17410400410523783.

Shah, R. and Ward, P. T. (2003) 'Lean manufacturing: context, practice bundles, and performance', *Journal of Operations Management*, 21(2), pp. 129–149. doi: 10.1016/s0272-6963(02)00108-0.

Shah, R. and Ward, P. T. (2007) 'Defining and developing measures of lean production', *Journal of Operations Management*, 25(4), pp. 785–805. doi: 10.1016/j.jom.2007.01.019.

Sparrow, P., Hird, M. and Cooper, C. L. (2014) *Do We Need HR?: Repositioning People Management for Success.* United Kingdom: Palgrave Macmillan.

Taylor, A., Taylor, M. and McSweeney, A. (2013) 'Towards greater understanding of success and survival of lean systems', *International Journal of Production Research*, 51(22), pp. 6607–6630. doi: 10.1080/00207543.2013.825382.

Ulrich, D. and Dulebohn, J. H. (2015) 'Are we there yet? What's next for HR?', *Human Resource Management Review*, 25(2), pp. 188–204. doi: 10.1016/j.hrmr.2015.01.004.

Wilkinson, B., Gamble, J., Humphrey, J., Morris, J. and Anthony, D. (2001) 'The New International Division of Labour in Asian Electronics: Work Organization and Human Resources in Japan and Malaysia', *Journal of Management Studies*, 38(5), pp. 675–695. doi: 10.1111/1467-6486.00254.

Womack, J. P. and Jones, D. T. (2003) *Lean Thinking: Banish Waste and Create Wealth in Your Corporation.* United States: Free Press.
Yin, R. K. (2009) *Case Study Research: Design and Methods.* 4th edn. United States: SAGE Publications, Inc.

Yin, R. K. (2011) *Qualitative Research from Start to Finish.* United States: The Guilford Press.

Author Biographies

Araz Zirar
Araz is a Doctoral Researcher in the School of Business and Economics at Loughborough University, UK. He earned a Postgraduate Diploma in Business and Management Sciences from the University of Kurdistan Hewler (UKH), Iraqi Kurdistan and a Master of Arts degree in Public Administration from the American University of Beirut (AUB), Lebanon. His professional career include a number of HRrelated positions including the post of Director of HR from 2011 to 2014 at the University of Kurdistan
Hewler (UKH). Currently, he is on study leave from his position as an Assistant Lecturer in the Business Management Department/College of Administration and Economy at the University of Salahaddin, Iraqi Kurdistan.

Professor Zoe Radnor
Zoe holds a Chair of Service Operations Management at Loughborough School of Business and Economics. Her area of interest is in performance and process improvement and, service management in public sector organisations.
Zoe has recently been a Management Practice Advanced Institute of Management (AIM) Fellow considering sustainability of Lean in public services. She has led research projects for the Scottish Executive, HM Revenue and Customs, HM Court Services, HealthCare, Local Government and Higher Education organisations which have evaluated how 'lean' techniques are and could be used in the public sector. She has developed a House of Lean for Public Services.
She has published over 80 articles, book chapters and reports as well as presented widely on the topic to both academic and practitioner audiences. Zoe also advises and sits on a number of boards and committees for organisations such as the Welsh Assembly Government, National Audit Office and Cabinet Office.

Professor Andy Charlwood

Before joining Loughborough in December 2013, Andy was Reader in HRM at the University of York. He has held academic positions at the universities of Warwick, Leeds and Kent. He has extensive experience of teaching Human Resource Management, Strategic Human Resource Management and Employment Relations at undergraduate, Masters and MBA level. Andy has served as an editor of the British Sociological Association's journal Work, Employment and Society and is an academic member of the Chartered Institute of Personnel and Development.