

Transferring the Toyota Production System into Australia

Seeking Contextual Congruence

Reynold P. James PhD, MBA

College of Business, Zayed University, P O Box 144534
Abu Dhabi, U.A.E. Tel +71 2 599 3256, reynold.james@zu.ac.ae

Abstract

Toyota Motor Corporation (TMC) is a popular topic in the literature and arguably one of the most extensively researched organizations globally, with the company describing its famed Toyota Way as having the capacity to '*transcend language and nationality, finding application in every land and society*' (TMC, 2001: 3). In like vein, several scholars support the universal transferability across socio-cultural boundaries, of the company's Toyota Production System (TPS), inextricably linked to the Toyota Way. In this paper we question these assumptions by presenting a case study that examines TMC's less than successful attempts to transplant its TPS and the Toyota Way principles, over a fifty year plus period, into its Australian manufacturing facility, Toyota Motor Corporation Australia (TMCA). In doing so, the paper highlights the context bound nature of TPS.

Key words: Toyota Production System; Toyota Way, Transplantation; Lean; TMCA.

Introduction

This paper constitutes a case study of TMC's attempts to introduce over long years, its renowned TPS (Toyota's customised precursor to the lean manufacturing model) into its Australian operations in Altona, near Melbourne. The paper emphasises the necessity for ensuring cultural fit with the host nation as a prerequisite for successful implementation, and adopts the following structure. First, is a summarised description of the global automobile manufacturer Toyota Motor Corporation (TMC) headquartered in Japan, after which is an elucidation of the salient features of lean manufacturing and its more advanced form, the Toyota Production System (TPS), *The Toyota Way*, as well as the historical and environmental factors that influenced development of these philosophies in Japan. Next, is an examination of TMC's attempts to transplant its TPS system into a different socio-cultural context, namely its Australian arm Toyota Motor Corporation Australia (TMCA) in Melbourne, Australia. This is achieved by drawing comparisons between the 'ideal' environment conducive to the implementation of TPS, and the unique Australian environmental context. Provided finally, are the findings and a conclusion.

It is important to note that whereas Toyota's first manufacturing facility outside of Japan was Australia, the considerable literature on Toyota and its overseas transplants tends to underplay this fact, in particular, aspects relating to TMC's unimpressive attempts to transplant its TPS into Australia (with a few exceptions such as James, 2012; Liu and Jones, 2005; Liu, 2009; Jones, Betta and Latham, 2009; Jones, Latham, Betta and Liu, 2008, etc)

‘Toyota has a long history in Australia – celebrating 50 years in 2009. Australia was the first country to manufacture Toyota vehicles outside of Japan and has played a key role in the development of Toyota Motor Corporation globally’ (Toyota Motor Corporation Australia, 2009).

This study facilitates theorists’ and practitioners’ better understanding of the forces inherent within such transplantation situations, leading to smoother introduction of management practices across lean production companies, especially motor vehicle manufacturers in industrialising countries such as China, India and Thailand. The transferability into these nations, of lessons from TMCA –located within an advanced economy- lies in the fact that Australian manufacturing competencies are reportedly comparable to, and at times even lag those of India and China (Management Matters in Australia, 2009)

TMC and ‘One Best Way’

The literature on Toyota Motor Corporation (TMC) is rich [Kamata (1983); Liker (2004); Mehri (2005); Liker and Meier (2007); Magee (2007); Liker and Hoseus (2008); Osono, Shimizu, and Takeuchi (2008); Sato (2008); Rother (2010); Gronning (1997); James & Jones,(2014);Liu and Brookfield (2006); Taylor (2006); Teresko (2006); Towill (2006); James,2012].

Established prior to World War 2, TMC grew into a MNC auto manufacturer enjoying unprecedented success since its formation. Despite recent setbacks (Liker and Ogden, 2011), it’s still a formidable force, with 52 plus overseas manufacturing companies in 26 countries outside Japan. Widely regarded as the originator of the lean production system, TMC is espoused to TPS, its customised lean production approach, as encapsulated within The Toyota Way and the Toyota Production System (Jones et al 2010). TMC believes this approach is a universal *one-best-way* system for manufacturing environments, reliably transplantable across national boundaries. Consistent with this thinking, TMC expanded its global reach by establishing affiliates initially in Australia in 1959 (TMCA,2009;James,2012) besides USA, Canada, Europe, Australia, Asia-Pacific, China, Thailand, and also India, where it recently commenced operating its second production facility (James and Jones,2014;James,2011;2012). Ironically, despite intensive efforts of several Japanese trainers and executives assigned across facilities, very few overseas affiliates have succeeded in implementing the ‘pure’ form of TPS, with some form of a hybrid system invariably being implemented, thereby considerably compromising the TPS system.

Methodology and Data Collection

A qualitative methodology has been adopted in this study, involving document analysis, an extensive review of secondary data including media reports, internet data, external unions’ official records, diaries and minutes, observation, and several informal conversations with individuals (both serving and sacked) with rich experience and knowledge of the company and its workings, from managerial, supervisory, trades and technical rungs, besides internal and external union activists. The author –along with a senior academic-was granted access to the plant on a few occasions –and was invited to share expertise from an academic viewpoint on Toyota’s Indian transplantation experience, and in doing so, gleaned valuable insights into the current and past state of TMCA’s affairs. All conversations –albeit informal-were recorded and transcribed, and compared for accuracy against publicly

available secondary data. Field notes were written immediately after observation during the plant visits described above.

The Toyota Way and TPS

The Toyota Way:

TMC describes the Toyota Way as ‘an ideal, a standard, and a guiding beacon for the people of the global Toyota organization. It expresses the beliefs and values shared by all of us’. The two pillars of the Toyota Way are Kaizen and respect for people (Source: The Toyota Way, 2001). Liker (2004) demarcates the approach into fourteen principles, categorized under four main headings (*Long-Term Philosophy; The Right Process Will Produce the Right Results; Add Value to the Organization by Developing Your People and Partners; Continually Solving Root Problems Drives Organizational Learning*). Purportedly, the Toyota Way concepts ‘transcend language and nationality, finding application in every land and society’ (TMC, 2001: 3). One could argue from this viewpoint the Toyota Way appears to represent a culture-neutral, prescriptive, one-best-way approach to doing business in manufacturing environments which can be reliably transplanted into different cultures globally. The literature is rich with case studies and analyses of overseas Toyota transplants and the transfer of TPS into other countries and cultures. Examples include: USA (Wilms, Hardcastle, and Zell, 1994; Besser, 1996; Mishina, 1998); UK (Winfield, 1994; Pardi, 2005); China (Liu and Brookfield, 2006); Thailand (Petison and Johri, 2006); Turkey and Czech Republic (Kumon, 2007); India (Das and George, 2006).

Toyota Production System:

Developed by the Vice-President Taiichi Ohno of Toyota during the 1950s, TPS was founded on concepts designed to maximize flow, eliminate waste of all kinds, and ensure respect for people. Ohno (1988) represents the complete exposition of the Toyota Production System (TPS). Spear and Bowen (1999) describe TPS as the secret weapon of Toyota’s competitiveness. Efficient use of resources to produce materials with a repetitive, reliable system constitutes the basis of the concept. It was under Ohno’s guidance and the effort of many others, particularly the company’s founder Eiji Toyoda, that this production system has become deeply rooted within TMC during the past half century. The goal of TPS is achieved through the use of a range of scientific tools and techniques. Various versions of the TPS training programme have been developed during different stages but the following have remained as the essential elements of TPS – customer-first ideology, just-in-time production, jidoka, standardised work, and kaizen (Moden, 1998; Womack and Jones, 1996; Womack et al., 1990; Shigeo and Dillon, 1989; Graham, 1988; Moden, 1983).

The lean concept lends itself to two interpretations in the literature (i) lean production is an efficient, humanistic machine - a viewpoint popularised by ‘apologists’ (eg, Liker and Hoseus, 2008); and (ii) the critical theorists’ view that lean is a very sophisticated prison (eg, Parker and Slaughter, 1988, 1994). Both however, claim that the lean model is transferable - as technical objects- across cultural settings (ie sans cognisance of contextual elements), for example Japan to the USA (Florida and Kenney, 1991). Countering this, are several scholars who emphasise the role of the social context within which lean systems operate, and who argue that the efficacy of the latter is dependent on the former (Sugimore, Kusunoki, Cho and Uchikawa 1977; Womack and Jones 1996; Liu and Jones 2005; Jones, Betta and Latham.2009).

Transplanting TPS into TMCA: Barriers and Yet More

Several scholars (e.g., Liu and Jones,2005;James,2012; Liu,2009; etc) maintain that TMC's attempts to transplant TPS within the Australian (TMCA) context was riddled with problems since its inception in March 1959 through its association with AMI (Australian Motor Industries). For purposes of brevity, only two key barriers -of several others- that hampered implementation of the TPS approach and the Toyota Way, are being discussed in this paper, under two broad headings: (i) Industrial relations and (ii) Organizational Culture.

(i) Industrial relations (IR): Strained union-management relations punctuated TMCA's operations since decades, with a deteriorating situation in recent years arguably contributing to TMC's decision to wind up its Australian manufacturing operations in 2017(The Sydney Morning Herald,2014). Incessant confrontations between the unions and management punctuated TMCA's operations since the 80's, with the union's mistrust of management and the latter's recalcitrance towards recognition of, and willingness to contend with the former (Jones et al.,2009; AMWU, 2010). Only in 1999, after decades of strife and being left with little choice, did the company recognize the Electrical Trades Union (ETU), as well as the Australian Metal Workers Union (AMWU). Research of James (2012); and Jones et al, (2009) reveal that by around 2005, TMCA managers were '*sick and tired of the union*', and that pessimism was rife about achieving a breakthrough on any front, since '*the place is run by the union*'. These sentiments prevailed at the same time that Action Learning Teams (ALTs), commonly alluded to as '*arse-licking teams*' (AMWU, 2010) by worker representatives, were being established to address the adverse effects that had arisen out of the confrontationist approach to unionism at TMCA. Corrective actions against team members taken by supervisory levels were often not supported by management, due to their fear of industrial action (Liu,2009: 76; Kinsey,2007: 8). HR staff were often made scapegoats for managerial failings in handling the worsening IR scenario, with the HR leadership suffering from poor credibility, and assigned nicknames including '*smiling assassin*' and '*young liberals*' etc (James,2012).

The essence of TMCA's adversarial IR scenario within its maintenance department is captured by the following extract from the research by Liu (2009).Considerable similar evidence pertaining to the rest of TMCA's operations are available, but not provided here, for purposes of brevity:

'...the general perception was that in response to the smallest issue, the union or the senior employee representatives would call a mass meeting and instruct the maintenance staff to go home. Plant operations had to stop on many occasions due to disruptions and disputes emanating from maintenance which added much additional cost to the business. The widely held view was that maintenance employed the tactic of threatening strike action in order to get what they wanted. The relationship between management and employee representatives was fragile and volatile. The perception amongst the middle management, general forepersons, and group leaders was that the union had more power than them because senior management was too willing to compromise in order to avoid a strike or lose production. The informal network and grapevine between the employee representatives and shopfloor employees was strong. Rumours and information could travel extremely fast sometimes generating confusion and misunderstanding. This made managers and supervisors feel powerless because their channels of communication and networking are slower and weaker..'
(Source: Liu, 2009: 73).

Official acceptance that union-management relations have been fragile and antagonistic is evidenced from statements in company documentation. One report states that *'historically and psychologically, the union has difficulty in supporting or accepting changes proposed by TMCA management. This kind of relationship if not being managed well, is a threat to the business. Turning confrontation into partnership is an essential task for TMCA management. A balance of empowerment and control needs to be well handled'* (Change Leaders Report, 2000).

Research of Liu and Jones (2005), Liu (2009), and the Australian government report (Management Matters in Australia, 2009), strongly cement the foregoing, and demonstrate the strong links between the wider IR context within Australia, and the rub off of the same on TMCA. Underlying this, is the more fundamental issue of TMC (Japanese) unitarist, anti-union disposition, facing off with Australian pluralist pro-union leanings.

Within the foregoing climate of mis-trust and adversarial IR, any attempts to implement TPS practices were met with stiff resistance, whether they were less important aspects, such as wearing hard hats or performing morning exercises, or relatively more critical ones, such as incorporating quality checks on the line, not at the end of it, ie accepting quality as being every individuals responsibility, rather than that of the quality department.

(ii) Organizational Culture: Since aspects relating to national culture (and its rub off on TPS) are dealt with in the latter part of this work, only TMCA's organizational level culture and its impact on TPS implementation are discussed under this heading.

According to several sources (e.g., Latham et al.,2009; Jones et al, 2008; Liu,2009; Kinsey,2007; to name a few) 'cultural issues' at the plant level severely hampered the implementation of TPS into Australia. According to these scholars, the period between 1959 (when TMC commenced operations in Australia) and 1988 (when it acquired 100% ownership of its operations), was a 'no-TPS' period (barring patchy, staccato pickings), owing to TMC's reluctance to share intellectual capital / TPS practices until 100% ownership was effected. It's only after 1988, that the piecemeal adoption of TPS was replaced by more rigorous, consistent attempts to implement the system. This besides, the company's Australian journey between 1959 and 1994, was punctuated by associations with other manufacturing entities such as AMI, GMH etc for varying periods of time, shutting down of old plants to move into new ones, and its hiring several workers from other plants that shut down, who were fully unfamiliar with Japanese work culture and methods. What eventuated was an accumulation of considerable old baggage, requiring significant cultural unlearning to be effected for over two decades, before any real (TPS) learning could take place.

During the earlier years (owing to memories of the last war), resentment for the Japanese by the Australians ran large, with other forms of resistance to Japanese 'impositions' in the plant, clearly evident to date. A few examples of such 'cultural resistance' include Australian production workers refusal to use Japanese words such as Kaizen and Gemba, refusing to perform morning exercises to Japanese music, and address their Japanese colleagues as 'San', etc. The extent of cultural resistance and unlearning that was experienced during these years, is detailed extensively by Kinsey (2007).An excerpt from this author's work regarding the antipathy of Australian workers' to the use of the word Kaizen is as under :

'This is Australia. We don't speak Japanese here. If you want to talk about 'improvement' then use the word 'improvement.....not Kaizen.'

The extremely heterogeneous composition of TMCA's workforce (as opposed to Japan based plants), and associated varying levels of capacity to speak in English, further hampered workers' ability to understand or read TPS related instructions, thereby acting as a further barrier.

TPS-Facilitating Environment vs The Australian Environment

Japan versus Australia: cultural conduciveness to TPS and lean : Research undertaken by various scholars on aspects relating to the transplantation of TPS practices to countries outside Japan often consider cultural similarities and contrasts between Japan and the various countries hosting Toyota affiliates. According to Liu and Jones (2005); Engels (1985); Yokozawa et al. (2010), with respect to the Japanese-Australian context, some issues relating to the transplantation of TPS into the Australian socio-cultural environment are as follows.

Similarities: Both Australia and Japan possess a strong masculine cultural dimension

Differences:

- Australia's strong individualistic culture, small power distance, and moderate uncertainty avoidance vs Japanese weak individualistic culture, moderate power distance, and high uncertainty avoidance scores
- Australians' daily living, generally speaking, is centered around family and leisure rather than work, whereas Japanese are more centered around work
- Australia is a multi-cultural society with large numbers of migrants and a multiplicity of ethno-cultural and language barriers resulting in unique challenges to communication and cultural blending at the workplace, whereas Japanese society is largely homogeneous
- The Australian industrial relations scenario is relatively more volatile and unions are much stronger, especially in the manufacturing sector whereas Japanese unions are more cooperative and relatively weaker.
- Australians possess a distinct set of cultural characteristics (casual, direct, competitive, achievers, independent, individualistic, questioners, gamblers, leisure-oriented, and xenophobic) whereas Japanese possess traits of hard work, discipline, and 'hungry mentality' (eagerness to do work which is above and beyond responsibility).

Jones et al. (2008) argue that Japan's lack of natural resources, environmental constraints, and socio-cultural factors provided an environment naturally conducive to the development of lean systems. The primary motivation towards striving for waste minimization in all forms was their organic response to achieving a fit with the environment. The values, beliefs, and behaviours of the Japanese workforce, and their common industry-wide collective dedication towards striving for excellence from senior executives down to shop floor workers, is mainly attributable to the factors described. Liu and Jones (2005) emphasize the role of the social context within which TPS operates and argue that the efficacy of the latter is dependent on the former. They advocate that culture is central to TPS as a system and that lean production depends on Japanese cultural institutions. Womack and Jones (1996) and Sugimore et al. (1977) are others who share similar thinking. They argue

that the needs of TPS are complimented by the existence of a homogeneous culture, a single language, and a religious background which facilitates close familiarity between Japanese people and family unity that extends itself into the larger community and workplace. Furthermore, a 'command and control' culture ingrained in Japan involves obedience by subordinates to the instructions of superiors.

These (TPS-complementary) qualities seem conspicuous in their absence within Australian society which could be described as being positioned at the opposite end of the spectrum relative to Japan. These authors substantiate their line of reasoning by arguing that the core of Australian society is characterized by the spirit of freedom, individuality, and casualness. Control and discipline are also not favoured aspects in Australia with shop floor workers preferring not to be disciplined, controlled, or standardized. This contrasting situation also explains the 'adversarial approach' (Cooney and Sewell, 2000) of industrial relations within TMCA. These researchers describe TMCA's use of lean production systems as 'control processes'.

Lending credibility to this aspect of the contextual embeddedness of lean production concepts is the argument of Yokozawa et al. (2010) who regard the successful transfer of kaizen as being a function of two national characteristics: first, 'discipline' (people who follow what they are asked to do by keeping to deadlines, quality control, and following standard operating procedures; second, 'hungry mentality' (eagerness to do the work which is above and beyond their responsibility). The extent of 'belief and indoctrination' in the system within Japan often fails to obtain in the Australian context, characterised by its proverbial '*she'll be right*' attitude, and with Australians' daily living broadly centered around family and leisure rather than work.

Findings, Conclusions And Implications

This paper attempts to contradict TMC's assumptions regarding the context-free, universal applicability of its Toyota Production System, and guiding principles enshrined in The Toyota Way. The key argument put forth, is that the Toyota Production System was conceptualised, designed, and grew out of Japan's unique cultural, social, historical, and environmental factors. However, when transplanted overseas the efficacy of TPS and tenets of The Toyota Way are contingent upon the unique cultural, social, historical, and environmental factors peculiar to the host country. This is consistent with claims of Liu and Jones (2005) and Recht and Windorom (1998) who posit that TPS evolved from its inception to the current state of being deeply entrenched within Japanese industry, and its institutions mainly on account of the cultural strength of Japan and its need to overcome shortages of natural resources. Attempting to transfer TPS practices to countries outside Japan, where cultural and environmental factors are different, would result in problematic outcomes. The claim of Robbins (1996) regarding the powerful influence of national culture on workplace culture serve to explain the average Australian's disposition to work.

Assumptions that TPS is a context-free technical object transferable globally have proven wrong in the case of Australia. Environments with unitarist leanings, characterised by union-free culturally homogeneous settings, are most conducive to successful implementation of TPS. Conversely, countries with strong pluralistic inclinations and with strong traditions of unionism, such as Australia, are not naturally amenable to TPS (James,2012; Cooney and Sewell, 2000; Liu and Jones, 2005). In such situations trust and commitment are usually replaced by suspicion and resistance (Jones et al, 2009) unless specific actions are taken by management to alleviate such tendencies. Unitarist considerations are very important in lean systems that exist within organizations that 'see themselves as families', characterized by

high levels of trust, commitment, involvement, and concern for the company's success, as a consequence of pulling together in the same direction. Resultantly, groups with a differing agenda, including external trade unions, are inconsistent with the environment of lean.

Furthermore, it can be argued that TMCA failed to proactively and specifically address the significance within Australian society of the role and history of trade unions on workplace culture and the impact this would have on the difficulties of implementing TPS within the company. Also, cultural dissimilarity between the Japanese and Australian cultures have acted as restraining forces, hindering the transference of TPS into TMCA. Jones et al. (2008) contend that the Australian scenario is relatively lacking in motivation and urgency to eliminate wastage of material and space, as compared with Japan. Australia is endowed with an abundance of resources and space, which combined with its attendant qualities of low motivation and high consumption, is counter-productive to the ideal environment of lean thinking and TPS. Further, the cultural blending within the largely homogeneous Japanese workforce is not comparable with the highly multi-cultural and ethnically diverse workforce of Australia. This heterogeneity poses unique challenges in cultural blending and communications.

References

- AMWU (2010), *Labour notes: union shop stewards in conversation (automobiles)*, Australian Manufacturing Workers Union: Melbourne
- Berggren, C.(1994), "NUMMI vs Uddevalla" , *Sloan Management Review* ,35/2, 37-45
- Besser, T (1996), *Team Toyota*, State University of New York Press, New York
- Burnes, B. (2000), *Managing Change. A Strategic Approach to Organisational Dynamics*. Pitman Publishing, London
- Change Leaders Report (2000), Toyota Motor Corporation of Australia, TMCA: Melbourne
- Chatterjee, S (2007), "Human resource management in India: where from and where to?" *Research and Practice in Human Resource Management*, 15/2, 92-103
- Cooney, R. and Sewell, G.(2000),'Lean Downunder : Reflections on the implementation of an epoch-making model in Australia', International Workshop, University of Calabria, Rende (Italy)
- Das, K and George, S (2006), "Labour practices and working conditions in TNCs: the case of Toyota Kirloskar in India", in Chang, D. (ed.), *Labour in globalising Asian corporations: a portrait of struggle*, Asia Monitor Resource Centre: Hong Kong, 273-302.
- Engels, J W (1985), "Protestant work ethics: a comparison of Japanese and American working men", paper presented at the Annual Conference of the American Psychological Association (APA), Los Angeles, CA
- Florida, R and Kenney, M (1991), "Transplanted organizations: the transfer of Japanese industrial organizations to the US", *American Sociological Review*, 56/3, 381-398
- Graham,I.G.(1998), *Just-in-Time Management of Manufacturing*, Technical Communications: Letchworth

- Gupta, S (2008), "Indian and Japanese HRM practices: similarities and differences with analysis of automobile sector in India", http://www.aima-ind.org/ejournal/articlesPDF/Shruti_Gupta_692320081433269.pdf, viewed 3/6/2009
- Gronning, T (1997), "The emergence and institutionalization of Toyotism: subdivision and integration of the labour force at the Toyota Motor Corporation from the 1950s to the 1970s", *Economic and Industrial Democracy*, 18/3: 423-455
- Jain, H (1987), "The Japanese system of human resource management: transferability to the Indian industrial environment", *Asian Survey*, 27/9, 1023-1035
- James, R (2012) "International transference of lean production systems: managerial lessons from Toyota transplants in the USA, Australia and India." PhD Thesis, Swinburne University, Melbourne Australia.
- James R and Jones R, 2014, "Transferring the Toyota Lean Cultural Paradigm into India: Implications for Human Resource Management", *International Journal of Human Resource Management*, vol 25, no. 15
- Jones, R.; Betta, M. & Latham, J (2009) 'The lean empire strikes back: Employing the discourse of 'learning' to suppress pluralism in a lean system' , *Critical Management Studies Conference-CMS6 University of Warwick, July 2009*
- Jones, R, Latham, J, Betta, M, and Liu, L (2008), "Discourse strategies in lean manufacturing: transforming others in an overseas affiliate company", 24th EGOS Colloquium, Amsterdam, July
- Jones R, Latham J, James R and Mathew S, (2010) "Using Discourse to Justify Failure: The Crisis at Toyota India". 7th International Conference on Organizational Discourse, Vree University, Amsterdam, July
- Kamata, S. (1983), *Japan in the passing lane: an insider's account of life in a Japanese auto factory*, Allen and Unwin: London
- Kinsey, P (2007), *Reflections on a career in automobile manufacturing*, Australian Manufacturing Workers Union: Melbourne
- Kumon, H (2007), "Toyota Motor's plant operation in the Czech Republic and Turkey – transfer of the Toyota production system", 15th GERPISA International Colloquium, Paris
- Latham, J, Liu, L, Betta, M, and Jones, R (2009), "Incorporating action learning within organizational learning: a novel application of strategic renewal within the motor vehicle industry", 25th EGOS Colloquium, Barcelona
- Liu, L (2009), *Building an organisational learning architecture for strategic renewal*, Lambert Academic Publishing: Saarbrücken, Germany
- Liu, L. & Jones, R. (2005) 'Embedding TPS within the Australian Culture', European Academy of Management 2005, Munich
- Liu, R-J and Brookfield, J (2006), "Japanese subcontracting in mainland China: a study of Toyota and Shanghai Koito", *Supply Chain Management: An International Journal*, 11/2: 99-103
- Liker, J (2004), *The Toyota Way*, McGraw Hill: New York
- Liker, J. & Hoseus, M. (2008), *Toyota Culture*, McGraw Hill: Boston
- Liker, J and Ogden, N. T. (2011), *Toyota under fire: lessons for turning crisis into opportunity*, McGraw Hill: New York

- Liker, J and Meier, D (2007), *Toyota talent*, McGraw Hill: New York
- Magee, D. (2007), *How Toyota became # 1: leadership lessons from the world's greatest car company*, Penguin Group: New York
- Management Matters in Australia (2009), "Just how productive are we?" Findings from the Australian Management Practices and Productivity global benchmarking project [www.innovation.gov.au/.../Management Matters in Australia Report.pdf](http://www.innovation.gov.au/.../Management%20Matters%20in%20Australia%20Report.pdf) retrieved on 10 July 2010
- Mehri, D. (2005), *Notes from Toyota land*, Cornell University Press: New York
- Mishina, K (1998), "Making Toyota in America: evidence from the Kentucky transplant, 1986–1994", in R. Boyer, E. Charron, U. Jürgens, and S. Tolliday (eds), *Between imitation and innovation, the transfer and hybridization of productive models in the international automobile industry*, Oxford University Press: Oxford, 99–128
- Moden, Y. (1983), *Toyota Production System: Practical Approach to Production Management*, Industrial Engineering and Management Press; CA
- Moden, Y. (1998), *Toyota Production System: an Integrated Approach to Just-in-Time (3rd ed)*, Industrial Engineering and Management Press; CA
- Osono, E, Shimizu, N, and Takeuchi, H (2008), *Extreme Toyota: radical contradictions that drive success at the world's best manufacturer*, John Wiley: Hoboken, NJ
- Pardi, T (2005), "Where did it go wrong? Hybridisation and crisis of Toyota Motor Manufacturing UK, 1989–2001", *International Sociology*, 20/1: 93-118
- Parker, M. & Slaughter, J. (1994), "Lean production is mean production" *Canadian Dimension*, 28/1, 21-22
- Parker, M. & Slaughter, J. (1988), "Management by stress", *Technology Review*, 91/7, 36-44
- Change. Complex Organisations and Urban Communities, New Delhi: Sage, pp. 29–50.
- Petison, P. and Johri, L.M. (2006), "Driving harmony: philosophy of Toyota Motor Thailand", *Strategic Direction*, 22/11: 3-5
- Recht, R and Wilderom, C (1998), "Kaizen and culture: on the transferability of Japanese suggestion systems", *International Business Review*, 7/1: 7-22
- Robbins, S.(1996), *Organizational Behaviour*, 97th ed), Englewoods Cliffs NJ
- Rother, M (2010), *Toyota kata: managing people for improvement, adaptiveness, and superior results*, McGraw Hill: New York
- Sato, M. (2008), *The Toyota leaders*, McGraw Hill: New York
- Schwartz, S. (1999), "A theory of cultural values and some implications for work", *Applied Psychology: An International Review*, 48/1, 23-47
- Shigeo S. and Dillon A. P. (1989) *A Study of the Toyota Production System from an Industrial Engineering Viewpoint - Norwalk, Conn: Productivity Press*
- Spear, S. and H. K. Bowen. 1999. Decoding the DNA of the Toyota production system. *Harvard Business Review* (September-October): 97-106.
- Sugimori, Y., Kusunoki, K., Cho, F. and Uchikawa, S., Toyota production system and Kanban system: materialisation of just-in-time and respect-for-human system. *International Journal of Production Research.*, 1977, 15(6), 553-564).
- Taylor, A. III (2006), "How Toyota does it: the birth of the Prius", *Fortune*, 153/4: 61-72
- Teresko, J (2006), "Learning from Toyota – again", *Industry Week*, 255/2: 34-41

- The Sydney Morning Herald (February 11, 2014) Toyota shutdown highlights shift to services (<http://www.smh.com.au/business/the-economy/toyota-shutdown-highlights-shift-to-services-20140211-32fqj.html#ixzz3BmeMHCgM> (retrieved on 29th Aug'2014)
- TMC (2001), *The Toyota Way*, Tokyo: Toyota Motor Corporation.
- Towill, D.R (2006), "Handshakes around the world", *Manufacturing Engineer*, 85/1: 20-25
- Toyota Motor Corporation Australia Limited (2009) "Sustainability Report", retrieved 10 January 2010 from www.toyota.com.au/toyota/.../pdf/2009_Sustainability_Report.pdf
- Wilms, W, Hardcastle, A. J, and Zell, D.M (1994), "Cultural transformation at NUMMI", *Sloan Management Review*, 36/1: 99-113
- Winfield,I (1994), "Toyota UK Ltd: model HRM practices", *Employee Relations*, 16/1: 41-53
- Womack, J, Jones, D and D Roos (1990) *The machine that changed the world*, Harper Perennial: New York
- Womack, J and D Jones (1996), *Lean thinking*, Free Press: New York
- Yokozawa, K, Steenhuis, H, and de Bruijn, E. J (2010), *The influence of national culture on Kaizen transfer: An exploratory study of Japanese subsidiaries in the Netherlands*, paper presented at the 15th Cambridge International Manufacturing Symposium, Cambridge, UK.
