Lean Leadership Values and Behaviour across National Cultures:

A Comparative Study in Japan and the Netherlands

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Abstract

Lean management is widely recognised for its potential to drive organisational efficiency and innovation, yet its implementation can vary significantly across cultural contexts. While research has explored lean practices individually in Western and Japanese settings, limited studies examine how lean leadership values and behaviours differ cross-culturally. This thesis addresses this gap by investigating the influence of national culture on lean leadership styles among Dutch and Japanese middle managers. 20 qualitative interviews with Japanese managers and 14 with their Dutch counterparts and team members were held. These interviews were then analysed using Thematic Analysis, identifying nuanced cultural differences in values such as conservation, self-transcendence, and openness-to-change. Findings reveal both alignment and paradoxes in lean identity adoption: Japanese managers exhibit lean-compatible national values, like customer focus and teamwork, rooted in cultural norms, while Dutch managers embrace lean values, such as continuous improvement, despite a cultural emphasis on individual achievement.

The study extends identity theory, suggesting that lean managers may adopt behaviours aligning more closely with their lean identity than their national cultural expectations. However, this paper also challenges the notion that certain cultures are inherently more or less suited to lean. Instead, the findings suggest that rather than labelling certain cultures as more or less suited to lean, it is essential to recognise that each culture brings unique strengths and "flaws" to lean implementation, meaning each has distinct values that can either facilitate or complicate lean adoption. Hence, managers could actively cultivate values and behaviours that foster effective lean leadership, ultimately allowing team members to recognise and embrace these principles as well.

This study contributes to the literature by expanding on previous research through an underexplored comparison between Japan and the Netherlands, as well as proposing Schwartz's taxonomy as a valuable tool for examining cultural effects on lean using a dialectical approach, thereby offering insights for both researchers and practitioners. Practical implications emphasise the need for organisations to encourage culturally adaptive lean leadership and recognise that alignment with lean values may be more natural in some contexts. Organisations are advised to tailor lean training programs that resonate with managers' cultural backgrounds to help foster their lean identity.

Keywords: Lean leadership, kaizen, national culture, cultural values

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1. Introduction

Customers of today have set a high standard for organisations – they are used to receiving products and services that are specifically tailored to their wants and needs, which has indirectly influenced the increase in convolutedness in the production environment of many organisations (Ejsmont et al., 2020; Westkämper, 2016). Hence, it is no surprise that companies always seek concepts to reduce complexity, reduce waste, and increase customer value (Ejsmont et al., 2020). Lean management has emerged as a critical methodology; by fostering a culture of continuous improvement, lean practices encourage and aid organisations in refining their processes to respond swiftly to market demands (Ejsmont et al., 2020).

The book that introduced the world to lean is 'The Machine That Changed the World', written by Englishman Daniel T. Jones and American James P. Womack (Holweg, 2007). However, lean's creation can be credited to the Japanese organisation Toyota (Liker, 2012). In the genealogy of lean production written by Holweg (2007), he describes how Taiichi Ohno developed the just-in-time (JIT) philosophy at Toyota by analysing Western production systems and creatively integrated elements of the Ford system in his home country, producing the hybrid "Toyota-style system", otherwise known as the Toyota Production System (TPS) (Fujimoto, 1999, as mentioned in Holweg, 2007).

Since then, Western countries have adopted lean, leading to it becoming the most popular concept for organisations to increase value and reduce waste (Esjmont et al., 2020). One of these countries is the Netherlands, where lean and supplemental lean tools have been implemented by many organisations (Timans et al., 2016). However, despite its effectiveness as a concept, lean has been implemented and sustained with great difficulties in organisations throughout the globe (Antony et al., 2020; Chaple et al., 2021; Swarnakar et al., 2021). Several reasons have led to these deficiencies: while technology and tools are more prominently taken into account as plausible causes, the socio-human aspects are often neglected, eventually leading to implementation failures (Martins, 2015; Abrahamsson & Isaksson, 2012; Cadden et al., 2020). One such socio-cultural factor is national culture, which has been shown to influence effective lean adoption. For instance, in their literature review, Erthal and Marques (2018) noted that there seem to be notable differences in lean adoption between managers of different national cultures and that these differences can influence overall effectiveness.

The fact that national culture plays a big role in the effectiveness of lean adoption is unsurprising because culture and cultural values differ vastly between different nationalities. Considering values serve as guidelines for the actions and behaviour of people in a group (Schwartz, 2012), one can imagine how big of an influence these have in an organisational context, especially given the concept of "value transmission" (Brown & Trevino, 2009), which suggests that team leader's values often dominate team dynamics. In addition, researchers Van Dun and Wilderom (2016) have

shown that leaders' values impact effective lean adoption by indirectly impacting lean team performance.

So, since national culture and how these values may influence leaders are such important factors in deciding the effectiveness of lean implementation, one would expect that the country of lean's origin, Japan, will have a high level of effective lean adoption. However, despite the origins of lean, it seems that the concept has not been adopted, nor is it well-known by other Japanese organisations. Emiliani (2003) points out that lean management is not a universal system in Japan and that some of the most successful lean management implementations have been within non-Japanese companies. For instance, Yokozawa and Steenhuis (2014) examined the international transfer of Kaizen in Japanese subsidiaries in the Netherlands, yet no other papers have performed similar comparative studies. Hence, exploring whether or not Japanese managers' values benefit them in effective "lean management" may reveal some additional insights. Furthermore, considering Japan and the Netherlands have distinct national cultures, a study of these countries' managers will allow for a nuanced perspective on how lean management principles may align with or differ from the values inherent in each culture.

When it comes to previous studies in this field, Erthal and Marques' literature review (2018) shows that many papers rely on Hofstede's dimension to depict and summarise the cultural comparison and relate it to lean characteristics (Cagliano et al., 2011; Hofer et al., 2011; Rafferty & Tapsell, 2001), even though Hofstede's work has been widely criticised (Jones, 2007). Following this line of reasoning, performing a similar investigation using different cultural frameworks, such as Schwartz's taxonomy, is essential. In his work, Schwartz (2012) describes two levels of value dimensions: (national) cultural-level and individual-level values. Cultural level values consider values imparted to members of society through everyday exposure to customs and practices shaped by predominant cultural values (Stephenson, 2007). However, individual values are also a product of a person's journey. Schwartz's framework bridges the individual and national levels, which is only one of the several advantages compared to Hofstede's dimensions. Seeing this, performing an investigation using Schwartz's value dimensions offers an alternative way to investigate cultural distance and may be more appropriate in this context. Therefore, this study proposes using Schwartz's framework to study cultural variables.

Thus, combining the scarcity of comparative studies on lean in Japanese and other country contexts (Yokozawa, 2014) with the need to explore the impact of cultural differences and leadership on lean implementation (Erthal & Marques, 2018; Van Dun & Wilderom, 2021) the following research question has been formulated:

“How do values and behaviours overlap or differ between effective Dutch and Japanese lean middle managers?”

By answering the above RQ, this thesis makes two contributions to the existing literature on cultural differences and lean implementation. Firstly, this thesis enriches current research by further investigating the influence of cultural differences on lean implementation by comparing Dutch and Japanese lean organisations – as these countries together are rarely considered. By elaborating on Van Dun et al.’s study (2024), this thesis extends current knowledge on how middle managers may identify with lean values and display lean behaviours. Second, this research contributes to the literature through the use of Schwartz’s taxonomy, a less commonly used framework compared to Hofstede in studies that consider the link between lean and culture. It also overcomes many of Hofstede’s work limitations. It may offer a different view than previous investigations (Drogendijk & Slangen, 2006), thus leading to a more accurate understanding of how a leader’s national cultural values may influence effective lean implementation.

This thesis also has practical implications. This study will aid managers in pursuing effective lean adoption in the organisation by informing them of how one’s values and characteristics could affect lean adoption. The structure of the thesis is as follows: It starts by offering a theoretical background and a solid basis for the phenomenon that is evaluated. Then, the methodology offers insights into the chosen research instruments and the data collection and processing. Afterwards, the results of the data analysis are presented, and the discussion section offers some in-depth insights into the main findings in relation to the literature. The final sections describe possible limitations, future studies, and a conclusion.

2. Theoretical Background

2.1 Lean Management

In an era of complex demands and personalised customer preferences, lean management offers more than just a methodology; it provides a mindset focused on customer value and efficiency (Esjmont et al., 2020; Westkämper et al., 2013). It does so by aiming to increase customer value by eliminating waste, otherwise known as “muda” in Japanese (Arnheiter, 2005). Radical improvement activities (“kaikaku”) and continuous improvement (“kaizen”) are used to eliminate this “muda” (Arnheiter, 2005). Womack and Jones (1997) prescribed a five-step process for the elimination of this “muda” in their book “The Machine That Changed the World”. First, the value must be specified and defined from the customers' point of view. Second, the value stream - which incorporates all actions required to bring the product to the customers, must be identified. Third is to create a flow in one's process, while fourth is to have the customer pull the product as needed. The fifth and final stage is called perfection.

Lean’s development is largely credited to Toyota, who, in an attempt to recover from the economic crisis caused by their defeat in World War II, created an approach which resulted in waste reduction and an increase in production flexibility (Ohno 1988, as mentioned in Erthal & Marques, 2018). A key person in the creation of this approach was Taiichi Ohno, who looked at the western manufacturers and found that they had two logical flaws: firstly, they had extensive inventories, which took up costly warehouse space and resulted in defects; and, secondly, they were unable to accommodate consumer preferences (Holweg, 2007). Although Ohno’s creativity and learning capabilities should not be underestimated, he did not “invent” Just-in-time production (JIT) in the literal sense. Instead, by creatively assimilating elements of the Ford system at Toyota, they were able to produce the hybrid “Toyota-style system” (Fujimoto, 1999, as mentioned in Holweg, 2007). Western manufacturers had high production volumes, large batches, and long queue times between operations, resulting in lower-quality products and more defects (Arnheiter, 2005). The “Toyota Production System”, or TPS, was very successful and increased the company's competitive position in the Western market (Holweg, 2007).

Despite their competitive success, Toyota’s ways were not immediately embraced by Western organisations: one of the reasons was that they thought that the Japanese culture was an essential criterion supporting the method and that they would not be able to replicate the phenomenon in other countries (Holweg, 2007). Nonetheless, this perception was later abandoned, and companies across the globe started implementing lean as an adaptation to TPS in even more significant numbers than Japanese organisations. However, such worldwide implementation was characterised by different results. Erthal and Marques’ (2018) work found that there seem to be notable differences in lean management adoption in different national cultures and that these differences could influence the

overall effectiveness of lean adoption.

A well-known lean method is 5S, whose philosophy of discipline, cleanliness and order was embedded in Japanese living and later applied in Japanese and international business environments (Kobayashi et al., 2008). Seeing that Japanese values of being orderly and neat (Kobayashi et al., 2008), as seen in the 5S method, seem to translate to effective lean operational processes, one might wonder which national cultural values are related to effective lean adoption.

2.2 Differences in National Culture

To better understand how national culture affects these dynamics, two of the most widely recognised models for mapping cultural differences are Hofstede's cultural dimensions theory (Hofstede, 2010) and Schwartz's value theory (1994; 1997). According to Hofstede, culture is the "collective programming of the mind, which distinguishes the members of one group or category of people from another" (Hofstede, 2001, p. 9), while Schwartz describes culture as the organised derivatives of experience learned by individuals of a population (Schwartz, 1992). One core factor that influences the evolution and maintenance of cultures is the environment, so one can imagine countries such as Japan and the Netherlands, which have vastly different geographical locations and climates, also have many distinctive differences in national culture (Davidov, 2008; Hofstede, 2010). These contrasting characteristics are demonstrated in Table 1 below, which shows the interpretations of Hofstede's and Schwartz's taxonomies (Davidov, 2008; Hofstede Insights, 2023).

At first glance, one can already tell that there are tremendous differences in the values and behaviours of people in these two countries. The most notable differences from Hofstede's framework are masculinity, uncertainty avoidance and individualism. These scores indicate that compared to the Dutch, the Japanese emphasise competition, success, and assertiveness, strongly prefer structure and rules to avoid uncertainty, and emphasise group harmony and achieving collective goals. As for Schwartz's framework, hierarchy, egalitarianism and affective autonomy show the biggest differences. This says that compared to the Japanese, the Dutch have a more minor acceptance of more hierarchical roles, a more substantial commitment to equality, social justice and cooperation, and a greater emphasis on individual goals and pleasure.

	Japan	**The Netherlands**
Hofstede's 6D model – Country comparison tool	Power distance: 54 Individualism: 46 Masculinity: 95 Uncertainty avoidance: 92 Long-term orientation: 88	Power distance: 38 Individualism: 80 Masculinity: 14 Uncertainty avoidance: 53 Long-term orientation: 67

	Indulgence: 42	Indulgence: 68
Schwartz's Value orientation scores	Harmony: 4,21 Embeddedness: 3,49 Hierarchy: 2,65 Mastery: 4,06 Affective autonomy: 3,76 Intellectual autonomy: 4,78 Egalitarianism: 4,36	Harmony: 4,05 Embeddedness: 3,19 Hierarchy: 1,91 Mastery: 3,97 Affective autonomy: 4,13 Intellectual autonomy: 4,85 Egalitarianism: 5,03

Table 1 Japan and the Netherlands through different cultural frameworks

2.3 Cultural Values

However, while the above taxonomies describe national culture as a whole, cultural values can be described as those that are shared within a group or community and are legitimate because they are a socially accepted way of assigning value (Stephenson, 2008). Cultural values dictate and guide how individuals select actions and evaluate people and events (Stephenson, 2008). They also represent the implicitly and explicitly shared ideas of what is good, right and desirable in a society (Williams, 2004). They are the basis for specific norms that tell people what is appropriate in certain situations. Consequently, failure to consider the cultural aspect can lead to lean implementation failures (Abrahamsson & Isaksson, 2012; Martins, 2015), so considering how cultural values may impact effective lean adoption is of great interest.

Schwartz is considered one of the most important scholars in the study of cultural values, and his framework is less commonly used in investigations that consider the link between lean and culture (Van Dun et al., 2024; Erthal & Marques, 2018), even though Schwartz's framework overcomes many of Hofstede's limitations and may offer a different view in comparison to previous investigations (Drogendijk & Slangen, 2006). While Hofstede's research is thus more commonly used, common arguments against Hofstede's theory include relevance, cultural homogeneity, national divisions, political influences, the 'one company approach', insufficient dimensions, statistical integrity as well as the fact that the research is now relatively outdated.

Schwartz (2012) distinguishes between two levels of value dimensions: values at the cultural (or national) level and those at the individual level. Cultural-level values refer to the norms and beliefs instilled in members of a society through their daily interactions with customs and practices grounded in the prevailing cultural values (Stephenson, 2007). Conversely, individual values stem from both shared cultural influences and each person's unique life experiences. While individuals may diverge from cultural norms due to personal characteristics and experiences, they still tend to prioritise values that align with broader cultural values, even with personal differences

Schwartz's value taxonomy organises values into a circular model (Schwartz, 2012), which is divided into four value clusters, namely (1) conservation (CON), which values prioritise security, conformity, and tradition, emphasising self-restriction and protecting stability, (2) openness-to-change (OtC), which values focus on independence, self-direction, and receptiveness to new experiences, (3) self-enhancement (SE) which values encourage the pursuit of personal success and power, and finally (4) self-transcendence (ST), which values emphasise universalism and benevolence, highlighting the acceptance and welfare of others. In his model, value categories on opposite sides are bipolar, meaning openness-to-change values oppose conservation values, while self-transcendence values oppose self-enhancement values (Schwartz, 2012). However, value categories can also be congruent, meaning self-enhancement and conservation values are more likely to go hand in hand. For example, pursuing achievement (SE) values typically conflicts with pursuing benevolence (ST) values because seeking success for self tends to obstruct actions aimed at enhancing the welfare of others who need one's help. Meanwhile, pursuing self-enhancement values is more aligned with conservation values because fulfilling self-enhancement goals may align with goals of maintaining social stability and established order (Schwartz, 2012).

The fact that Schwartz's framework bridges the individual and national levels is only one of several advantages compared to Hofstede's dimensions. Other advantages include its theoretical derivedness, comprehensiveness, and the fact that it has been tested with more recent data and two matched samples (Imm Ng et al., 2007). Lastly, data for the investigation were obtained in more diverse regions (including socialist countries) (Imm Ng et al., 2007). Seeing this, Schwartz's value dimensions offer an alternative way to investigate cultural distance and may be more appropriate in this context. Therefore, this study proposes using Schwartz's framework to study cultural variables.

2.4 Lean Leadership Values and Behaviours Across Cultures

Research has indicated that national culture can impact lean managers' values, influencing effectiveness (Erthal & Marques, 2018). Several studies have investigated this aspect. For example, Van Dun et al. (2016), even though they did not study national cultural differences, show that Schwartz's (2012) values of self-transcendence within team leaders are linked to team members' degree of information sharing, which directly translates into lean-team effectiveness. In contrast, Schwartz's conservation value is negatively linked to lean team effectiveness. An investigation similar to the current one explored how cultural values may influence lean by examining Brazilian managers' overlap with lean values (Van Dun et al., 2024). Although the researchers initially theorised that the Brazilian cultural values lie farther from the lean cultural values (and it is atypical from how it was usually done in Brazil), Brazilian managers fully embraced the lean values (identifying themselves more with those that of their own cultural ones (Van Dun et al., 2024).

A leader's values impact effective lean adoption by indirectly impacting lean team performance. This is due to the concept of values transmission, which asserts that team leaders' values will dominate team dynamics, making it so that their values are essential in establishing the right group setting (Brown, 2009). Van Dun and Wilderom's (2016) research has also shown that if a leader's values, which are often influenced by national culture, overlap with values that have been shown to positively influence lean, such as self-transcendence values and non-conservation values (as established by Schwartz), lean adoption can be optimal. Also, values congruence between supervisors and workers also improved team effectiveness (Van Dun & Wilderom, 2021; Brown & Treviño, 2009, as mentioned in Van Dun & Wilderom, 2016). To summarise, if a leader's values align with lean values, which dominate team dynamics, aiming to become congruent with team members' values will improve both lean adoption and team effectiveness.

For values transmission to happen, subordinates should be exposed to their manager frequently, which brings us to the importance of behaviours. After all, besides lean values, culture can also influence lean behaviours (Erthal & Marques, 2018). Van Dun and Wilderom (2017) found that effective lean managers demonstrate specific behaviours. For example, effective lean middle managers in their sample engaged more often in positive relations-oriented behaviours, such as "active listening" and "agreeing", while showing significantly less "task monitoring" and counterproductive work behaviours, such as "providing negative feedback" and "defending one's own position" (Van Dun et al., 2017).

Interestingly, while the effect of national culture on lean practices has been studied in various countries—like Brazil and several Western cultures—there is very little research on how Japan's own culture affects lean management, even though that is where lean philosophy's roots stem from. Given this gap, focusing on Japan and comparing it with the Netherlands could show interesting results.

3. Methodology

3.1 Research Design

Combining Schwartz's works with lean studies considering leaders' values, this study uses a qualitative and primarily deductive approach while keeping an eye open for distinctive observations. This research is inspired by Van Dun et al.'s (2017) and Van Dun et al.'s (2024) studies and uses thematic analysis and the Q-sort methodology to compare Dutch and Japanese lean managers.

Qualitative research is rich in contextual detail and offers descriptive and explanatory data that aid analysis and interpretation. Its' interactive nature allows themes, patterns, and relationships to emerge organically during data collection and analysis, making this approach ideal for exploring complex, dynamic phenomena (Saunders et al., 2019). Considering the information scarcity on this research topic, using a qualitative approach will help gain new, in-depth insights. To help maintain data integrity, this research will use thematic analysis to search for themes or patterns across the data set (Braun & Clarke, 2006).

3.2 Sampling Strategy and Sample Description

This study uses purposive sampling, which intentionally selects participants based on specific characteristics, ensuring that the sample includes individuals who can provide relevant and in-depth insights into the study topic (Palinkas et al., 2015). Our investigation focuses on middle managers who are "responsible for a particular business unit at this intermediate level of the corporate hierarchy" (Uyterhoeven, 1989, p. 136). In the Netherlands, a call for participants was distributed to a network organisation that shared knowledge in the field of lean with members across several branches and sectors. In Japan, several organisers and speakers were contacted at a large, nationwide lean conference to participate in the study. Dutch managers took part in an intake by the author, while the third supervisor selected Japanese managers. Since participants were known to have effectively implemented lean for at least some time, a base effectiveness rate could be established. Participants in the sample received the findings of this study and a benchmark of their lean effectiveness compared to their industry peers to thank them for their cooperation. Participation was voluntary and in line with the ethical rules of the University of Twente.

For this investigation, 5 Dutch and 7 Japanese middle managers were selected. They were each asked to bring 1-2 subordinates, meaning thirty-four interviews were held (see Table 2). While managers could be from the same organisation, they had to be from different departments. The type of industry these leaders operated in could be mixed, while the organisations had to have more than 250 employees, including only large enterprises (OECD, 2022). Approximately 20% of the final sample were women, but considering the sample mainly consisted of manufacturing companies, the majority

of participants being men reflects the actual distribution between men and women in this industry (World Manufacturing Foundation, 2024). Industries covered include Automotive, Healthcare, Manufacturing, Transport, Education, and Telecommunications, with departments ranging from Lean and Logistics to Clinical Pharmacy and Service Development. A noteworthy difference between interviewees is that while many Dutch team members had a specific job title (for example, logistics supervisor, workshop manager, operations manager, support manager, process operator, and kaizen team leader), their Japanese counterparts did not. Instead, they described that they were a part of the department they were in. Lastly, while many of the Japanese organisations were only recently acquainted with the concept of lean, they were familiar with and have implemented "kaizen" (which translates to "continuous improvement" and is a fundamental principle within lean management) in their department for many years.

No.	Country	Industry	Department	Gender	Experience with Lean/Kaizen in Department (in Years)
Man 1	NL	Automotive	Lean department	Man	28
Sub 1	NL	Automotive	Lean department	Woman	28
Man 2	NL	Automotive	Logistical department	Man	23
Sub 2	NL	Automotive	Logistical department	Man	23
Sub 3	NL	Automotive	Logistical department	Man	23
Man 3	NL	Healthcare	Clinical Pharmacy	Woman	3
Sub 4	NL	Healthcare	Clinical Pharmacy	Woman	3
Sub 5	NL	Healthcare	Clinical Pharmacy	Woman	3
Man 4	NL	Manufacturing	Special Products department	Man	20
Sub 6	NL	Manufacturing	Special Products department	Man	20
Sub 7	NL	Manufacturing	Special Products department	Man	20
Man 5	NL	Manufacturing	Injection Moulding department	Man	11
Sub 8	NL	Manufacturing	Injection Moulding department	Man	11
Sub 9	NL	Manufacturing	Injection Moulding department	Man	11
Man 6	JP	Transport and courier services	Supply Chain department	Man	18
Sub 10	JP	Transport and courier services	Supply Chain department	Man	18

Sub 11	JP	Transport and courier services	Supply Chain department	Man	18
Man 7	JP	Education	Training department	Man	>20
Sub 12	JP	Education	Training department	Man	>20
Sub 13	JP	Education	Training department	Man	>20
Man 8	JP	Manufacturing	Technical department	Man	5
Sub 14	JP	Manufacturing	Technical department	Man	5
Sub 15	JP	Manufacturing	Technical department	Man	5
Man 9	JP	Manufacturing	Business Planning department	Woman	5
Sub 16	JP	Manufacturing	Business Planning department	Man	5
Sub 17	JP	Manufacturing	Business Planning department	Man	5
Man 10	JP	Manufacturing	Technical Sales department	Man	5
Sub 18	JP	Manufacturing	Technical Sales department	Woman	5
Sub 19	JP	Manufacturing	Technical Sales department	Man	5
Man 11	JP	Telecommunications	Service Development department	Man	10
Sub 20	JP	Telecommunications	Service Development department	Woman	10
Man 12	JP	Telecommunications	Service Development department	Man	10
Sub 21	JP	Telecommunications	ICT department	Man	7
Sub 22	JP	Telecommunications	ICT department	Man	7

Table 2 Overview of participants and organisations

3.3 Research Instruments

While more time-consuming than structured interviews, using semi-structured interviews, two-way communication was expected to allow more in-depth information from respondents and ease the comparative thematic analysis in a later stage of the research (Adams, 2015). Other benefits included the better exploration of the perception and opinions of respondents on complex issues while also allowing further probing for information and clarifications (Barriball & While, 1994). In most cases, interviews took place at the organisation themselves, during which a shopfloor visit was also held. However, considering COVID-19 impacted some rules and regulations within organisations, four Japanese interviews took place through an online meeting.

Interviews were taken with Japanese respondents in June of 2022. The researcher was accompanied by a Japanese student and a professor at Yokohama National University, who could ask

interview questions in the respondents' native language and interact with them.

The semi-structured interviews took around one hour and used primarily open questions to learn about their lean leadership views. Since the middle managers were the focal point of this investigation, during the interview, middle managers were asked to describe themselves, while subordinates and supervisors were asked to describe the middle managers' values and behaviours. Appendix I provides the full interview protocol for the Dutch sample (as replicated by Van Dun et al., 2017 and Van Dun et al., 2024). Interviews with Dutch managers were held in the Dutch language, while the interviews with the Japanese managers were held in the Japanese language. All interviews were recorded, transcribed verbatim, and coded. Only relevant quotes in Japanese and Dutch interviews were translated into English, keeping as close to the original quote as possible. The effective lean managers' values were extracted during the interview through the open-ended Critical Incidents Technique (Bonesso et al., 2014; Edvardsson & Roos, 2001; Flanagan, 1954). For example:

> ***Interviewer****: Can you remember a time when you were leading your team, and you thought, "Right now, I'm being an effective manager. I've done this well. Can you describe this situation to me?"*
>
> ***Manager****: "We had a visit from a 'higher in command', as we call it, who came to see what we had done. And then, in a short time, we did quite a lot. ... The most important thing, I think, is that you bring people along in terms of how, what, where, and why. Yes, my team leaders are all very experienced people who have been working here for longer than I have, so you don't; how should I put it? You can't fool them, so to speak."*
>
> ***Interviewer****: "Right. And you say, "Okay, it's important to bring people along in your thinking, explaining how, what, where, why." How did you do that in that particular situation? How did you handle that?"*

This technique allowed the researcher to perceive the respondents' subjective impressions of the shopfloor environment. Then, the respondents were subjected to a Q-sort methodology (Fu et al., 2010), in which they were asked to sort 24 leader-related work values (as derived from Van Dun *et al.,* 2017) using a forced-distribution procedure which considered how the respondents perceived the principal managers' work values on a 9-point scale. These values were in accordance with Schwartz et al.'s (2012) four value clusters: self-transcendence, openness-to-change, self-enhancement, and conservation. Finally, it is essential to note that the study received ethical approval from the Ethics Committee at the University of Twente in 2022.

3.4 Data Analysis

The transcriptions derived from the Dutch and Japanese interviews have been analysed through thematic analysis (Braun & Clarke, 2006). Through this method, researchers can systematically identify, organise, and gain insights into “themes” or patterns of meaning across a data set (Braun & Clarke, 2012). The author first transcribed, read and re-read the interview documents, thus familiarising oneself with the data. Second, the data was coded into ‘first order’ codes, intentionally staying close to the interviewee’s wording (Gioia et al., 2013). In the third phase, codes were ordered into second-order themes before then assigning these to overarching aggregate dimensions (Gioia et al., 2013), aligning with Yukl’s (2012) task-, relations-, and change-oriented behavioural, and Schwartz et al.’s (2012) four values clusters: self-transcendence, openness-to-change, self-enhancement, and conservation categories. The fourth step was to compare the Q-sort answers between the Dutch and Japanese managers by calculating the mean and standard deviation scores, and Schwartz’s values were then compared to the average Dutch and Japanese scores (Schwartz, 1992; Schwartz, 2012). Finally, self-reported Q-sort data was compared to observed values in behaviours from the interviews.

4. Results

This study addresses the research question, “How do values and behaviours overlap or differ between effective Dutch and Japanese lean middle managers?”. In the next section, the observed similarities and differences in lean management practices and cultural influences between these two cultural groups are examined by considering lean manager’s values (based on Schwartz *et al.’s* (2012), four value clusters) and behaviours (based on Yukl’s (2012) task-, relations-, and change-oriented behavioural categories). This observed data is then compared to the manager’s and subordinate’s self-reported data to see how these might align or divert.

4.1 Self-reported Data

First, we consider the middle manager’s and team member’s self-reported values, which were portrayed very differently between the Dutch and Japanese interviewees, as seen in Table 3.

Values (cluster)	*Dutch (n=14) Mean (std. dev.)*	*Values (cluster)*	*Japanese (n=20) Mean (std. dev.)*
1. Respect for people (CON)	*7,43 (2,13)*	*1. Responsibility (ST)*	*7,00 (1,90)*
2. ***Continuous improvement*** *(OtC)*	*7,36 (1,11)*	*2. Customer focus (ST)*	*6,65 (1,85)*
3. Honesty (ST)	*7,21 (1,97)*	*3. Respect for people (CON)*	*6,20 (1,96)*
4. Integrity (ST)	*6,93 (1,94)*	*4. Trust in people (ST)*	*6,00 (2,49)*
5. Trust in people (ST)	*6,57 (2,16)*	*5. Integrity (ST)*	*6,00 (2,00)*
6. Responsibility (ST)	*6,29 (1,39)*	*6. Honesty (ST)*	*5,85 (2,06)*
7. Customer focus (ST)	*6,14 (2,59)*	*7. High-quality (SE)*	*5,85 (2,01)*
8. ***Participation/teamwork*** *(ST)*	*5,93 (1,62)*	*8. Achievement-orientation (SE)*	*5,75 (1,73)*
9. Constructive feedback (OtC)	*5,86 (1,30)*	*9.* ***Persistence*** *(CON)*	*5,75 (1,95)*
10. Justice (ST)	*5,57 (1,45)*	*10.* ***Creativity*** *(OtC)*	*5,55 (2,18)*
11. Achievement-orientation (SE)	*5,21 (2,27)*	*11.* ***Continuous improvement*** *(OtC)*	*5,25 (1,97)*
12. High-quality/Performance (SE)	*5,00 (2,04)*	*12. Information sharing (ST)*	*5,20 (1,69)*
13. Self-reflection (SE)	*4,86 (1,81)*	*13. Open-mindedness (OtC)*	*5,10 (2,49)*
14. Information sharing (ST)	*4,64 (1,29)*	*14. Constructive feedback (OtC)*	*4,85 (1,96)*
15. Innovation (OtC)	*4,50 (1,30)*	*15. Innovation (OtC)*	*4,80 (2,18)*
16. Equality (ST)	*4,36 (1,54)*	*16. Helpfulness (ST)*	*4,30 (2,47)*
17. Helpfulness (ST)	*3,86 (1,68)*	*17. Freedom of choice (OtC)*	*4,15 (2,74)*

18. Potential of the ordinary employee (ST)	*3,86*	*(1,96)*	*18. Self-reflection (SE)*	*4,15*	*(1,65)*
19. Courage (OtC)	*3,36*	*(1,91)*	*19. Humility (CON)*	*4,00*	*(2,32)*
20. Freedom of choice (OtC)	*3,36*	*(1,39)*	*20. Courage (OtC)*	*3,85*	*(2,13)*
21. Open-mindedness (OtC)	*3,36*	*(2,09)*	*21. **Participation/teamwork** (ST)*	*3,85*	*(1,71)*
*22. **Persistence** (CON)*	*3,29*	*(1,83)*	*22. Justice (ST)*	*3,75*	*(2,09)*
*23. **Creativity** (OtC)*	*2,93*	*(1,67)*	*23. Equality (ST)*	*3,60*	*(1,69)*
24. Humility (CON)	*2,21*	*(1,42)*	*24. Potential of the ordinary employee (ST)*	*2,60*	*(1,69)*

Table 3 The division of values according to Schwartz's four value clusters (2012)

This data shows the results of the Q-sort, during which participants ranked various values in order of their importance to the manager. They are categorised by Schwartz's four value clusters, which were mentioned earlier: Self-Transcendence (ST), Self-Enhancement (SE), Openness to Change (OtC), and Conservation (CON), and were derived from the Q-sort part of the interviews. As can be seen, respect for people (CON) and continuous improvement (OtC) are highly valued by Dutch participants. In contrast, responsibility and customer focus (ST) are the top values of Japanese participants. Overall, mean scores for conservation, openness-to-change and self-enhancement values were more prominent in the Japanese Q-sort results, whereas the Dutch participants showed more self-transcendence values. The values in bold represent the four Q-sort items with the biggest difference in mean values between the two countries. For example, Dutch participants seemed to value continuous improvement (7,36) greatly – an essential lean value, whereas their Japanese counterparts did not value this as much (5,25). Similarly, participation and teamwork were emphasised in both the Dutch and Japanese Q-sorts and the interviews, but again, with very different rankings. On the contrary, the Dutch managers were unenthused when it came to **persistence** (3,29) and **creativity** (2,93), whereas the Japanese managers valued these more (5,75 and 5,55, respectively).

It is important to underline that while managers and subordinates chose these values to reflect the manager's values, the manager's behaviours may have shown a different picture. For example, while the value of **participation and teamwork** was emphasised by Dutch managers (5,93) but not emphasised by Japanese managers (3,85), that does not mean that the Japanese subordinates did not perform well when it comes to teamwork – on the contrary.

The interpretation of these values may also differ vastly between the two cultures. Take the self-enhancement value – results showed that Japanese managers have more self-enhancement values than their Dutch counterparts. However, while the values of achievement, high quality and self-reflection may fit into the self-enhancement category, they seem to be interpreted differently between

the two nationalities. See the example below, where a Japanese manager explains why they prioritise the value of 'achievement'.

> *"…to actually respond to the customers in the most effective way, that's our achievement. It's customer focused. It's customers that start their jobs, and the achievement is to answer the customer." (Man 8)*

So rather than 'achievement', which is technically a self-enhancement value, this seems more closely related to 'customer focus', a self-transcendence value. With that in mind, one can see how the additional information from the interviews, which hold the observed values and behaviours, may help better understand these values' nuances.

4.2 Observed Data

4.2.1 Schwartz's Value Clusters

4.2.1.1 Conservation

Focusing now on each specific cluster, conservation values are portrayed differently between Dutch and Japanese interviewees. For example, Dutch interviewees do not seem to prioritise creativity and courage much in their departments. In contrast, their Japanese counterparts show more conservative behaviours by not prioritising freedom of choice in their departments. See here an example of a Japanese subordinate who explains that their manager does not prioritise freedom of choice:

> *"So as an individual, Mr. (manager)… I think he leaves a strong impression… he thinks that it's better- not better, but that for some work or jobs, it's better that people are very strict and make sure they're putting in certain efforts." (Sub 12)*

In Dutch organisations, managers and employees feel limited in their freedom of choice and creativity. But while the Japanese quote reflects the idea that the manager is the one who has put these boundaries and restrictions on subordinates, the following Duch quote underlines that the limitations on their creativity are due to safety regulations and industry restrictions, which is also reflected in the data:

> *"We always strive for the best way- and initially safest way and then the most effective way. And that's a good thing. But of course, sometimes that can come at the expense of choice, and I find it hard to say whether that is something bad or… I find it hard to make a judgment about that." (Sub 7)*

At the same time, some Dutch interviewees also mention that the greying workforce makes it difficult to enact change:

"Yes, but that doesn't work either because what some older people say is "Well, yes, we've always done it like that". Yes, but I think it could be better. Is that good, is that not good? Hard to say. As a young colleague I say: yes, but I don't have the wisdom either, of course. Right?" (Sub 9)

Hence, while Dutch managers' conservation values seemed to manifest by placing less emphasis on creativity and courage—also due to limitations from their environment—for Japanese managers, they seemed to manifest by limiting freedom of choice in the workplace.

4.2.1.2 Openness to Change

The data shows some interesting similarities between the Dutch and Japanese managers' value of openness-to-change. In contrast to what people may think of Japanese society, many Japanese managers underline that they do not prioritise humility in their departments. On the contrary – this data shows that not being humble is stimulated by managers, even if the power does seem more centralised. Take the following quote, in which a Japanese subordinate describes why their manager does not encourage humility in their department:

"Humility, it can be also translated as humbleness and that's why I think the humbleness and the courage are kind of opposite things… (the manager wants them to think of it) like a challenge. If you're too humble you don't want to challenge anything. 'Humble' can be interpreted as listening to others, you don't challenge the status quo." (Sub 21)

Similarly, their Dutch counterparts also seem to have a rather negative view of being humble. Two managers describe their thoughts on being humble:

"Yes, of course, this (Q-sort card) says relative to the employee, but humility, that to me is … If I have respect for my employee, you don't have to be humble. I think that's a somewhat negative word. It's not that if you're not humble that you're a bad employer or something, or that you do very strange things, I don't believe that." (Man 2)

"Now if it (the card, during the Q-sort) had said 'humbly' I might have placed it higher, because I find a certain degree of modesty I can appreciate, and humility to me comes across as if you don't value yourself enough and place yourself equal to the other, and that's exactly something I wouldn't, I would like to use that as a starting point for my behaviour, yes." (Man 3)

These findings thus point to the fact that leadership does not value humility. Japanese and Dutch managers both emphasise the importance of balance—excessive humility is seen as a potential hindrance to innovation and leadership rather than a virtue to be upheld. Interestingly, Japanese

managers seem to intentionally deviate from traditional cultural norms and instead encourage employees to challenge the status quo.

4.2.1.3 Self-enhancement

Another difference between the Japanese and Dutch organisations is their focus on teamwork. Before interviews were held, due to their collectivistic it was thought that the Japanese organisations would have a bigger focus on teamwork, but the opposite was true. Conversely, the Dutch managers put a much higher emphasis on increasing teamwork. For example, multiple organisations have used Insights Discovery training to help team members better understand each other. However, there still seems to be some difficulty in achieving this. Take these examples from two Dutch subordinates, who both explain how a focus on KPIs and incentives related to those KPIs negatively impacts teamwork in their organisations:

> *"For example, one thing, what they do here, for example, is they register certain teams, performance, and that and that is then on the basis of certain KPIs is then registered and that causes teams to steer very much on those KPIs. And in a certain sense that does encourage a bit of teamwork within the teams because that is also something that, yes, team leaders can steer by... For example, the standard of the machine is looked at (as a KPI). For example, I can then make sure in my shift that that machine runs very fast for a while. If that then has fallout for the shift that comes after me... and then again, I don't think that's teamwork. But if a team strives to achieve the highest possible performance at that moment, that is teamwork, so yeah." (Sub 6)*

> *"As a supervisor, the tricky thing is that you also have it in your performance agreement, which means that you can indeed be very KPI-driven because at the end of the year, your evaluation depends on it, and your salary increase depends on your evaluation. So that does mean that sometimes people do not say, "Hey, there is a deviation (in the process), let me pick it up", people just say, "No way, that is not mine". That is, if they are too KPI-driven, as we see in some places, then we are no longer concerned with customer value and high quality, then we are only concerned with wiping your own street clean and saying, "That is not my problem". And that is a pity. That does get in the way of cooperation." (Sub 3)*

This problem seems to occur in multiple Dutch organisations, where instead of working together for the organisational benefit, team members focus on ensuring they achieve certain goals. Here, one subordinate mentions how the KPI-driven way of working is negatively impacting their organisation:

> *"When I talk to (Manager) about this (the KPI driven way of working), that if we do this as an organisation, it will result in this, then I notice that (Manager) is extremely annoyed about this*

on all sides and also thinks that we should do things differently. But he also sees that we have a group of managers who are used to doing things this way and are not very eager to let go. So therein lies a challenge for (Manager) but also for us as a support service to train managers in such a way and to provide them with such insight into what they are creating with it that they are actually creating their own problem. They say, we actually have to cooperate more, but if you judge someone on something, you get in the way of that cooperation; that's a bit of a vicious circle." (Sub 1)

While their Japanese counterparts do not specifically mention stimulating teamwork as much, teams seem to work together quite well. Based on interview data and experiences from shopfloor visits, it seems that instead of reaching certain performance indicators, Japanese team members seem to be much more of a whole, working not towards a KPI but one common goal – the customer. When asked about ambitions and goals, nearly all Japanese interviewees mentioned that the customer is at the centre, which is reflected in how they talk. Here are a few examples:

"So, the task or job is to make or create a system. And make a system which is requested by customers, but we also want to be appreciated by the customers, so if we created- I mean we cleared the requirement for the customer, but if the customer interface is not user friendly then even though we clear the minimum requirements, but it doesn't make the customer happy, we don't think the project is successful." (Man 11)

"So, in this case, it is data that we provide to the customer, but it could also be actual products, but to actually respond to the customers in the most effective way, that's their achievement, it's customer focused. Its customers that start their jobs and the achievement is to answer the customer." (Sub 17)

"So, there's a system which is used in dealerships, car dealerships, and this system will affect the customer as well, so if we always keep the distinction in mind of how we can keep the customers happy, then we will always keep that in mind when developing that system." (Man 12)

"And the second point is they're (the manager) really good at time management, it can be strict sometimes, but it's really for the customers, so we got to do something faster and better, the faster the better, and to... so it's probably for the customer, so it can be strict sometimes, but it's the correct decision, the right decision for the customers." (Sub 18)

This data underlines the contrast in terms of teamwork between Dutch and Japanese organisations. Dutch managers emphasise improving teamwork through tools like Discovery Insights but find it

challenging to foster genuine collaborations due to a strong focus on KPIs and individual incentives. This leads to superficial teamwork, where employees prioritise their performance over collective goals. In contrast, while not explicitly emphasising teamwork, Japanese teams show a more natural unity by having a shared objective: the customer. This customer-centric approach aligns efforts and enhances collaboration to work together and ultimately deliver value to the customer – one of the key objectives of the lean methodology.

4.2.1.4 Self-transcendence

There also seem to be some notable differences between the managers when it comes to the self-transcendence value. As was reflected in the Q-sort results, Dutch participants place much emphasis on honesty and integrity. Managers are equal to members of the team, and communication is open. Team members are cared for, both emotionally and by being supplied with tools and opportunities to grow. Take, for example, these two subordinates, whom their manager supported in a personal manner:

> *"Yes, I had some personal problem myself and then he actually took that very well. But that does not really have that much to do with lean, I guess, but just. He does take you into account and if you have a problem, he is willing to help you think about how to support you." (Sub 8)*
>
> "Yes. Yes, I can say anything to him, including private things and he is also very understanding in those situations." (Sub 6)

While Japanese managers value honesty and integrity, they are not ranked as high as their Dutch counterparts. In Japan, self-transcendence is reflected by the amount of responsibility the Japanese managers seem to feel in their positions. The interview data suggests there is a big emphasis on the manager being a strong leader who steps up and makes decisions. Responsibility as a value seems like a very broad, all-encompassing concept to Japanese managers. When asked why managers prioritise responsibility, they link it to the customer, generating high quality and taking ownership of one's work. This responsibility seems to extend to subordinates as well.

> *"So (the manager) is solving what the customer's concerns are, and choosing what's important to do, and not do to help the customer's requirement. And not everything that the customers are saying, but what their concern is, they reply to the requirement, and he (the manager) is very responsible." (Sub 15)*
>
> *"So, he (the manager) is in charge of the group, because he's the head of the technical department, and he needs to manage all those activities that he has under his management, so*

he's responsible for the achievements that the departments are having. And he also needs to manage who is doing what, how far they are in the job." (Sub 16)

"Yes. Well, the company itself is evaluating people based on how much responsibility they have towards work, and that they achieve high-quality products. So, if the (manager) doesn't have responsibility himself), he cannot evaluate it, Mr. (Manager)." (Sub 22)

In conclusion, the data suggests that self-transcendence is perceived quite differently by Dutch and Japanese managers. Where Dutch managers are seen as equal members of the team and foster open communication and opportunities for personal growth of employees, Japanese managers seem more authoritative. They maintain a greater distance from their team but also feel a great sense of responsibility in their work.

	Japanese managers	**Dutch managers**
Conservation values	Manifest by limiting freedom of choice in the workplace.	Conservation values manifest by placing less emphasis on creativity and courage.
Openness to change values	Manifests by not prioritising humility and stimulating team members to challenge the status quo.	Manifests by not prioritising humility and stimulating team members to challenge the status quo.
Self-enhancement values	Self-enhancement values are manifested less because team members focus on an overarching goal – the customer.	Unintentionally manifests by focusing on KPI driven way of working, which limits teamwork (which is a self-transcendence value, and the opposite of self enhancement).
Self-transcendence values	Manifests by feeling a great sense of responsibility as a leader.	Manifests by having open communication and opportunities for personal growth of team members.

Table 4 Differences in observed values between Dutch and Japanese managers

4.2.2 Yukl's Behavioural Categories

4.2.2.1 Task-oriented Behaviours

Clarifying

From our interview data on clarifying, it emerges that Dutch managers placed a significant emphasis on open communication between managers and team members, while in Japanese organisations, clarifying behaviours seemed more focused on standardisation and ensuring employees adhere to quality standards. For example, Japanese managers often provide clear instructions and feedback on how tasks must be performed.

> *"When he has feedback, it's usually on the business, it's very specific, he would say to me "That was added to the customer", "That wasn't correct". And then he points out those things and make the rest of the employees think a little bit more about what kind of improvements they could have. I'm also very close to Mr. (Manager) and we would go for drinks a lot of times and at those times we would talk about some advice he had, or kind of like future dreams, or like an ideal system or structure that we would want to achieve in the future, those talks were normally when we were drinking and enjoying ourselves." (Sub 10)*

And it seems that subordinates appreciate these clear directions. This subordinate has the following response when asked what they think makes their manager an effective leader:

> *"So, for each job or task, Mr. (manager) gives some feedback, and for all those jobs he will teach you how to do the job, which way is correct and effective and what is not effective, and how to get rid of the waste. So, every day is a learning day, is how I perceive Mr. (manager). I'm learning a lot from each of the jobs." (Sub 14)*

For Dutch managers, the nuance is slightly different. Note how this Dutch subordinate expresses that they are not told what to do, but rather approaches the manager on their own accord:

> *"With (manager), I know pretty well where I stand, and he is very clear and direct in what he expects from us. If we can't figure it out, we can just speak about things openly. So yes, I, I just know with (manager) exactly what he expects from me. And if it is not good, then he is, he is also clear in what- how he would like to see things differently. And there is always room for that, for consultation, and I myself like to know where I'm going, what is expected of me." (Sub 9)*

Therefore, it could be underlined that in comparison to Japanese managers, Dutch managers have more of a consultatory role, while Japanese managers have a more directive style when it comes to clarifying how tasks need to be performed. Dutch managers may provide direct feedback as tasks are

being performed, too, but are more often consulted when employees can not figure things out by themselves.

Monitoring Operations
As for monitoring operations, participants pointed out interesting differences between the Japanese and Dutch managers. One Dutch manager highlighted the importance of being a facilitator rather than a direct overseer, focusing on supporting the team while monitoring resources and outcomes:

> *“As a manager with a pretty big responsibility for money and resources, I think - and that's a vision and that also fits with what I'm good at myself, that everything starts with being able to be the right facilitator, towards your own team, towards the department… And in addition, of course, it is necessary to monitor funds and make analyses.” (Man 3)*

> *“I think keeping structure, a bit of follow-up of what are you doing and is it working. Not so much checking whether you are doing something, but what are you doing and is it working or are you still running into something. Partly advising, partly keeping a finger on the pulse of how the process is going.” (Sub 3)*

These perspectives seem indicative of a management style that prioritises team well-being and is slightly more detached from the actual shop floor. Conversely, Japanese managers showed a more hands-on approach, in which they carefully checked employees to make sure tasks were performed correctly. As one Japanese manager explained:

> *“So again, they’re leading with the intangible things, the services, and I think my role is to fix their wrong choices, so they have a goal, and they chose the right path then it’s good, but sometimes they choose the wrong path, so my role is to bring them back to the right path.” (Man 12)*

This seems to reflect a more directive style of leadership, in which the manager plays an active role in guiding employees and correcting them when deviations occur. It fits with the Japanese lean or kaizen practice of ‘Gemba‘, which means to visit the shop floor. Hence, it could be argued that Dutch managers tend to take a more facilitative approach, focusing on supporting the team from a slightly more detached standpoint, while Japanese managers are more prone to take a more hands-on, directive approach.

Planning
Planning behaviours are also notably different between Dutch and Japanese managers. In the Dutch organisations involved in this study, a wide array of lean tools were used to help structure and organise work processes. Both managers and subordinates rely on the tools to ensure a methodical and

systematic way of planning. In this particular organisation, the lean tools are available on the employee intranet, and subordinates are encouraged to use them:

> "*Yes, and then they then…continued to roll out that methodology and the day board meetings and the A3 methodology that does come back everywhere, as well as the OBEA." (Sub 4)*

In contrast, Japanese organisations mostly made use of Japanese lean tools (5S, 5G, Gemba walks, etc.), and they were not explicitly mentioned by interviewees, even if they did occur on the shop floor (as were noticeable during shopfloor visits). Instead, Japanese managers emphasised the strategic placement of personnel, which is something subordinates also expected of managers. A subordinate at a Japanese organisation noted the following when asked whether they thought they were effective as a manager:

> *"She is very effective with moving people just in the right time, with just the right person." (Sub 16)*

Overall, Dutch organisations seem to place more emphasis on using lean tools to structure and organise work, with managers and subordinates actively using the methodology. In contrast, when it comes to planning, Japanese organisations focus more on the strategic placement of personnel. Lean tools may be implemented but less explicitly highlighted, and instead, there seems to be a greater emphasis on the role of managers in optimising human resources.

Problem-solving

Lastly, when it comes to problem-solving behaviours, the data suggests that obstacles are approached slightly differently. Dutch managers seem a little more hands-off, encouraging employees to evaluate and address issues independently. Managers typically only intervene during crises or conflicts, showing a culture of self-reliance among employees.

> *"I think it's essential then that as a manager you then stay calm. Radiate a tremendous amount of poise, even if you yourself think "Oh, shit this is really going to cause a lot of problems". Make sure that you are calm, make sure that your employee, that you get the information, that you take the time at that very moment, and to, in the first instance, to get the information. I don't want to say that you already have something like a crisis manager by then, but it's definitely urgent." (Man 1)*

That managers seem to use a more crisis management type of leadership is reaffirmed by this subordinate, who recalls an accident that involved an employee in their department and is bolstered by a second subordinate in the same organisation:

“We established new guidelines right before that for when something like that happens… Before when something like this happened, we would go to a supervisor and then investigate. Now we agreed we would freeze things, call the workshop manager - and it just so happened that (manager) was there at the time, so he came along, and then you do notice that you start to look at things from a different angle because he is there, and he also asks the right questions, which you may not have thought about at the time.” (Sub 1)

“And I'm not saying we wouldn't have managed that without him, but that was immediately of, I'm there, okay, “(Subordinate name), what are you doing”, “What are they doing?”, etcetera… And what I like about that is that he directs people, so he delegates, which means that he can say to me, “(Subordinate name), you take on that task”, but he also put me in my role, because I am also a supervisor.” (Sub 2)

So, it seems that during this crisis, as their new protocol required of them, subordinates and shopfloor members were working to handle this situation by themselves, and seeing their manager was a helpful surprise. In contrast, in Japanese organisations, problem-solving is seen as primarily the responsibility of the manager, who is expected to make quick decisions and communicate closely with team members during this process. Take these two examples by Japanese managers:

“So, when the earthquakes happened- well a lot of earthquakes happened in Japan, but with the big one. so, I was leading the employees outside and the machines… With the earthquake, those were moving everywhere, and the oils came out. It was a mess, but then I started calling all those suppliers, asking if they can make it, fix it, if they can clean it, even cleaning companies, whether they can come as soon as possible so we can restart our business, and be there for the customers’ sake. So, then I looked at what needed to be done and then told people what to do- “You do this”, “You do that”, so looking at the reality, pointing out stuff, I thought that’s when I had some good leadership there. With the clients.” (Man 9)

“So, for example – there was a situation when we needed to develop a system for the customers, and we thought that maybe the system could be three possibilities. But if that’s the case, then of course, you have to develop an estimate of all three possible systems, but if our CEO for example decides that option three isn’t a good fit for that customer’s organisation or he makes a decision that this product doesn’t really match the corporate requirements, then we don’t have to spend time thinking about the third possibility. We wouldn’t have to put time into thinking about this system or making estimates, which means we can eliminate things like that. So that’s what I mean by his quick decisions can lead to less waste.” (Sub 21)

Thus, the data suggest a distinct difference when it comes to handling these types of situations – the Japanese managers seem to use a more directive approach, taking action and telling people what needs to be done, while Dutch managers ask their subordinates the right questions and put people in their power in order to handle these types of situations.

4.2.2.2 Relations-oriented Behaviours

Supporting

Supporting employees also seemed to be approached differently when comparing the Dutch and Japanese managers. Dutch managers seemed to focus on subordinate well-being, providing them with the necessary tools, training, and resources to perform effectively. Multiple Dutch managers explained that they see it as their responsibility to create an environment where employees feel motivated and supported. This holistic approach to support is exemplified by a Wavin manager:

> *"I have always learned, well not learned, but learned over the years, that it is important for a manager, no matter if you are Lean or not... an employee has to want to work for you... and the overall well-being of an employee and everything around it is going to make the employee work very effectively and be motivated and take things on." (Man 5)*

This sentiment illustrates the importance placed on employee satisfaction as a driver of productivity. Interestingly, the term 'support' is seen a little differently by managers and subordinates in Japanese organisations. Managers seem to serve as intermediaries between employees and external pressures, such as customer demands. Japanese leaders are seen as protectors who shield their teams from excessive stress or unreasonable requests. It is in this way that an employee feels supported in their work. A subordinate in one Japanese organisation notes the following about their manager:

> *"... but for Mr. (manager) he listened to both management opinions customer opinions AND shopfloor employee opinions, and then he also tried to protect the employees from too much high requirements or this kind of thing. So, I think that Mr. (manager) becomes a shield to protect their own employees." (Sub 11)*

To conclude, both nationalities' approaches reflect a commitment to support employees, but in a different way. Dutch managers seem to prioritise employee well-being by providing tools and training, whereas Japanese managers seem to take on the role of a protector, shielding their team from external pressures.

Developing

Interviews have revealed a notable difference between Dutch and Japanese managers when it comes to helping employees develop. In Dutch organisations, a strong emphasis on personal development can be seen. Managers not only provide feedback but also both encourage and facilitate opportunities

for the skill development of subordinates. For instance, a subordinate at one Dutch organisation shared their experience about how their manager stimulated their personal growth:

> *"Yes, that, I can then from my own- I can be then- from my own experience, they (the organisation) always encourage me to take steps. He coaches me then, also, and I- I'm going to start studying again in or in September. That is also something he encouraged me to do. It very much stimulated me. So, I do know that he- so I know from my own experience that's just something that he thinks is important (referring to the value 'potential of the ordinary employee'), and I also like that. And of course, he also benefits from that." (Sub 10)*

When it comes to the growth of Japanese subordinates, that seems to be stimulated mainly by giving subordinates more responsibility. Take, for example this situation when a Japanese manager had a subordinate temporarily lead the team:

> *"Once I lead the team a little bit… And I was going over and checking what the work members made with the schedules, and I was advising the members, and fixing a little bit. And then (manager) was looking at me while I was advising the members, and then they advised me what kind of words I should be using, what kind of timing or how to express or how to explain my advice." (Sub 18)*

Hence, in Japan, there appears to be less focus on a subordinate's individual growth but rather on the department as a whole. Answers given by Japanese interviewees regarding opportunities for growth also seem to be less about someone's personal achievements and more about contributing to the greater good, which is departmental success. In contrast, Dutch managers seem very keen on helping their subordinates develop and actively promote and support them in this endeavour.

Recognising

The interview data suggests that recognising behaviours are seemingly very different between Dutch and Japanese managers as well. In the Netherlands, managers seem to place a strong emphasis on 'celebrating small wins' and providing positive feedback. Managers go out of their way to use this approach to encourage and boost morale. Two organisations' team members describe how their manager acknowledges a person or team's efforts:

> *"And yes, well, if someone does something or yes does special things or does extra things, you can compliment them for that (through a printed, green tree on the wall in the corridor, called 'the compliment tree')." (Sub 8)*

> *"But with (Manager), last year I did a project for him, and he really wants to finish it in a nice way – he makes time for that, to have a pastry together and say, "Guys nice that you finished*

this project, great". So, he is good at celebrating success. At such times he also gives feedback: "Hey, I saw the team do this"." (Sub 3)

In Japanese organisations, recognition seems to be more material. Managers might reward outstanding performance with tangible gifts. For example, a manager at a Japanese organisation would personally purchase gift cards for subordinates to encourage further learning and provide a small token of their appreciation. The manager describes the situation:

> *"So, per month I actually chose one of the very good ones, like made it a sample, that I can show as a very good example, so I set a gold award, silver award, so second first place per month… and using my own pocket money I bought some… we have this gift card for bookstores, we call it 'Tosho card' in Japanese, so it's a gift card just of the bookstores and I gave it to them and then I said you can buy manga or comics, but maybe you can also study with this money." (Man 6)*

In conclusion, whereas Dutch managers focus on celebrating small wins and providing positive feedback, by means of compliments or team celebrations, Japanese managers tend to offer more material rewards, like gift cards to acknowledge outstanding performance.

Empowering

Our data also shows a clear contrast between the Dutch and Japanese managers regarding empowering employees. The Dutch managers place a big emphasis on delegating tasks. Each person has their own set of tasks and is expected to take ownership and responsibility for said tasks. Subordinates seem to have a lot of autonomy, and managers respect decisions made by team members. Only if additional guidance is needed subordinates will approach their managers, who will help them on their way:

> *"And he also does give people a lot of leeway. So, he gives an assignment and then gives you the freedom how to tackle it. So, in that respect that is sometimes pleasant, and sometimes it is too free, that you think, "Yes, we can go in all sorts of directions; I still need a little bit of guidance". If you talk that through with him, he takes it very well. It's not that he says, "You have to know that", no, then he starts working with you again, to see where I want to go." (Sub 1)*

In Japan, while employees are encouraged to propose ideas and take initiative, there is still a need for managerial approval, especially for significant decisions. Team members seem to be granted some flexibility in how they approach their tasks but are still expected to adhere to established standards. A subordinate from a Japanese organisation illustrated this dynamic:

“Suppose I want to tell them this kind of thing and I’m planning to tell them (the customer) in this kind of way. And then Mr. (manager), he sometimes advises like maybe you can think of this point of view and maybe they will say this kind of stuff so maybe you can add this stuff beforehand. And he never really denies or disagrees with my ideas, so he said that he doesn’t have negative thoughts towards Mr. (manager).” (Sub 12)

Hence, it seems Dutch managers delegate tasks and grant subordinates autonomy, having them seek guidance only when necessary. In contrast, data from Japanese interviews suggests a management style that balances employee initiative with oversight, where the managers stay in control and allow creativity within set boundaries.

4.2.2.3 Change-oriented Behaviours

Advocating Change

Managers of the two nationalities seem to take different approaches to advocating for change in their organisations and departments. In the Netherlands, managers appear to lead by example when it comes to advocating change, but they do not always actively champion it. For example, a manager may be committed to fostering diversity within the organisation, but this commitment is more observed by subordinates than actively promoted or discussed. This subtle approach reflects a preference for quiet leadership rather than overt advocacy.

“(I see the role of a leader as) directing and leading by example… A lot of people have worked here for a very long time, and you do get stuck in certain working methods, and yes, well, something does need to change… There may be a lot of people who don’t want to go along with it, and then it’s my job to get people to go along with it and talk to them about it. Sometimes that is difficult.” (Sub 7)

In contrast, at one Japanese organisation, the CEO actively advocates for change by regularly assembling employees to discuss future directions and the changes he believes will benefit the company.

“I also think that TMS plays an important role in creating the basis of our thinking, and I started to understand what the CEO has been continuously saying. and what he wants for the employees. And therefore, I could also kind of digest what the CEO says, and also spread it to other employees.” (Sub 15)

Overall, it seems that whereas Dutch managers more often lead by example, promoting change through more quiet leadership, Japanese leaders seem to play a more active and direct role, frequently communicating their vision and encouraging employees to align with organisational goals. This

underlines the more top-down approach in Japan, compared to the more bottom-up approach seen in Dutch organisations.

Envisioning Change

Concerning how change was envisioned between Dutch and Japanese managers, data suggested a slightly divergent leadership style. In Dutch organisations, managers seem to see lean not just as a set of tools but as a guiding philosophy that they strive to embed within the organisational culture. One Dutch manager noted:

> *"So that combination of, on the one hand, a clear philosophy of what kind of culture we want to have in the company and, on the other hand, providing the tools to be successful in that. To me, that's very much part of it." (Man 2)*

This approach reflects a long-term vision where change is seen as a cultural shift, not just a series of initiatives. Interestingly, as mentioned previously, Dutch organisations seem to be quite keen on using a wide array of lean tools.

In Japan, envisioning change can be linked to the ability of managers to inspire their teams through motivational speeches. Although these speeches may not always directly focus on change, they play a role in maintaining morale and motivating employees to adapt to challenging circumstances, such as working late hours. A subordinate at a Japanese organisation mentioned:

> *"He sometimes gives a very moving speech... so I get a strong feeling that Mr. (Manager) is very persistent." (Sub 13)*

To conclude, while Dutch managers seem to try and integrate change through a shift in philosophy, Japanese managers seem to prefer a more inspiring type of leadership style to maintain morale and encourage adaptability.

Encouraging Innovation

When it comes to encouraging innovation, the data indicates that both countries' managers seem to take a slightly different approach. Dutch managers seem to try and foster an environment where employees are encouraged to find their own solutions before seeking managerial input. This approach emphasises autonomy and critical thinking, as managers refrain from providing answers directly, instead encouraging employees to develop their problem-solving skills. This empowerment aligns with the Dutch emphasis on independence and self-reliance in the workplace.

> *"He automatically took the lead in that right away and took us along by asking questions to get us to think about a situation and especially follow-up actions to prevent this in the future." (Sub 2)*

At the same time, some other Dutch interviewees have mentioned that they felt that their industry placed a boundary on their creativity and innovativeness:

> *"… innovation we are much less concerned with, internally. At least not very much on the shop floor. The engineers are sometimes working on that. And for the rest innovation of our product is done by design and that's in (Foreign country). We just make what is asked for." (Sub 3)*

In Japan, innovation often originates from team members who may identify opportunities for improvement. While these innovations are welcomed, the process is somewhat collective, with ideas likely emerging through team discussions rather than from individual initiatives alone.

> *"So, you can't just think, 'Oh my gosh, I'm going to create some innovations,' and then expect them to happen. That is not how it works. You have to make decisions, which are connected to the freedom of choice. You have to choose and decide on something. Then, as you go through the challenges and the process, in some cases, it may turn into innovation. When you look back, you might realise that what you did became an innovation." (Man 8)*

In fact, individual inventiveness even seems to be somewhat of a threat to the collective. Here, a manager describes why he thought prioritising the potential of the ordinary employee could have a negative influence on the organisation:

> *"For the potential of the ordinary employee, the image I have of that card, that value is that if there are a couple of employees with a high potential and high skills, and the company relies too much on this potential, then the organisation can not develop… So, the current issue with our organisation is that we tend to rely on this person with a higher skill, and if that person is not there, or is absent then the project… the company cannot respond to the customers, currently." (Man 11)*

In conclusion, the data suggests that Dutch managers encourage innovation by promoting autonomy and critical thinking in subordinates, which seems to reflect their preference for independence and self-reliance, whereas Japanese managers seem to view innovation as a more collective process, where innovations are a product of teamwork rather than individual inventiveness. It also seems that this may be one of the reasons why the personal development of subordinates is not encouraged and supported by Japanese managers.

Facilitating Collective Learning

Finally, when going through the data concerning facilitating collective learning, there seems to be a noteworthy distinction between the behaviours of Dutch and Japanese managers. In the Netherlands, there seems to be a strong emphasis on facilitating collective learning as part of the change process.

Dutch organisations frequently offer training days and opportunities for reflection, with some even dedicating entire departments to researching and reviewing new lean developments. Additionally, lean coaches are employed to assist other departments in integrating lean practices. The Dutch organisations in our sample are part of a lean network, which this subordinate talks a bit about:

> *"That's nice too. Through (Lean Network) we also visited (other lean organisation) several times. I don't know if you know that company, but they are also very far with lean and they also mention that yes, you think that we're very different from each other, but you also see that the methodology is possible to copy and that you can learn from each other." (Sub 4)*

In contrast, the Japanese interviews provide little evidence of a formal approach to facilitating collective learning. This may suggest that collective learning, while present, is less structured and possibly more integrated into daily operations rather than a distinct activity. The lack of explicit mention in the notes could reflect a cultural tendency to view learning as an ongoing, informal process rather than something that needs formal facilitation.

	Japanese Managers	**Dutch Managers**
	Task-oriented Behaviours	
Clarifying	Take on a directive role by telling team members how tasks need to be performed.	Take on a consultatory role and provide feedback while also being consulted by team members when needed.
Monitoring operations	Have a more hands-on, directive approach, playing an active role in guiding employees.	Take a facilitative approach, focusing on supporting the team from a slightly more detached standpoint.
Planning	Focus on strategic planning of personnel and optimising human resources.	Place a big emphasis on the use of lean tools in the department.
Problem-solving	Work through crises by taking a more directive approach by taking action and telling team members what needs to be done.	Work through crises by asking the right questions and putting people in their power.

	Relations-oriented Behaviours	
Supporting	Support employees by being a protector and shielding the team from external pressures.	Prioritise employee well-being by providing tools and training.
Developing	Less focus on team members' personal growth but rather on the department as a whole.	Much focus is on helping team members develop by promoting and supporting their professional development.
Recognising	Use some material rewards to acknowledge outstanding performance but to a lesser extent.	Focus on celebrating small wins and providing positive feedback.
Empowering	Balance employee initiative with oversight, allowing creativity within set boundaries.	Delegate tasks and grand autonomy, having team-members seek them out for guidance only when necessary.
	Change-oriented Behaviours	
Advocating change	Play a more active and direct role, frequently communicating their vision and encouraging team members to align with organisational goals.	Lead by example, promoting change through quiet leadership.
Envisioning change	Use inspiring leadership to maintain morale.	Integrate change through a shift in philosophy.
Encouraging innovation	View innovation as a collective process, where innovations are a product of teamwork rather than individual innovativeness.	Encourage innovation by promoting autonomy and critical thinking in team members.
Facilitating collective learning	Do not seem to have a formal approach to collective learning and seem more integrated into daily operations.	View collective learning as an important part of the change process. It is done by organising training days, setting

		up lean departments, and visiting similar organisations.

Table 5 Difference in observed behaviours between Dutch and Japanese managers

4.3 Comparison of Self-reported and Observed Data

4.3.1 Dutch Managers

The data suggest a notable amount of differences between self-reported and observed data. Dutch managers' top value, continuous improvement, was reported as second in importance ranking. However, while many lean tools are mentioned, the actual process of ongoing improvement of products and services is not often described by managers and team members.

Similarly, Dutch managers and their team members reported that feedback and helpfulness were not big focuses for managers. However, interview data showed that these managers do actually seem to value feedback and support as part of their more consultative style, which involves engaging with their team in a more open and conversational way. Dutch managers also tended to downplay their emphasis on the potential of the "ordinary" employee value. Despite this, interviews provided multiple examples of managers actively supporting their teams' professional growth through skill-building, training, and new responsibilities.

Finally, there seemed to be a gap in how achievement was perceived. Dutch managers and subordinates said that achievement wasn't a primary focus, yet interview data showed that these departments frequently used key performance indicators (KPIs) to assess success. This focus on measurable targets reveals an implicit emphasis on achieving results, even though it might not be thought of that way.

4.3.2 Japanese Managers

For Japanese managers, there were also differences between how they described their management style and what was seen in practice. Japanese managers were observed as taking a more directive or guiding role. However, both the managers and their teams described having a strong sense of trust within their groups. This trust was reflected in how managers often gave employees significant responsibilities and decision-making power. Team members are allowed a fair amount of autonomy, even though the management style may seem more top-down. Additionally, Japanese managers and their teams reported that the potential of the "ordinary" employee, teamwork, and participation weren't major focuses. However, interviews showed many examples of employees actively proposing ideas and taking initiative. Managers seemingly listen to these ideas, which shows an underlying focus on using and developing employees' skills—a principle that fits with the potential of the ordinary employee, even if they do not describe it that way themselves.

Lastly, continuous improvement, or kaizen, which is a key part of lean management, was not

described as a main focus by Japanese managers. Nevertheless, the interview data showed that kaizen initiatives were common in Japanese departments. This difference suggests that while managers may not always talk about continuous improvement, it seems to be more embedded in how they work, becoming a natural part of daily tasks rather than a formal goal.

5. Discussion

5.1 Theoretical Implications

The purpose of this thesis was to understand and unpack how lean behaviours and values differ between Dutch and Japanese middle managers. The qualitative findings suggest various interesting similarities, differences, and even paradoxes in the results.

5.1.1 Differences in values

Firstly, concerning the differences between Dutch and Japanese values, our results underlined that while both nationalities fit Schwartz et al.'s (2012) self-transcendence, self-enhancement, openness-to-change and conservation values, the manifestation of these values was vastly different. More specifically, our research data showed that where Japanese conservation values manifested by limiting freedom of choice in the workplace, Dutch managers demonstrate this by having a reduced emphasis on creativity and courage. These results were in line with what was found by van Dun *et al*. (2017), who determined Dutch manager's values by means of using the critical incidents technique and by a forced distribution method, namely the Q-sort, where Dutch managers both showed and chose less creativity and innovation values. Similarly, self-transcendence values were portrayed by Japanese managers as having a great sense of responsibility, whereas Dutch managers underlined the need for honesty and integrity. These values, too, are similar to what van Dun *et al*. (2017) found in their paper, where Dutch managers both showed and chose these values themselves. Openness to change values were surprisingly embraced by both nationalities.

Since a previous study has shown that Dutch managers incorporate openness-to-change values, this was also expected of the Dutch managers in this study. However, the same was not predicted for the Japanese managers because Japanese society is famously known for being humble and modest, and so leaders were expected to behave this way, too (Kim et al., 2023). However, our data showed that Japanese managers actively called for their subordinates to deny humility, meaning these openness-to-change values superseded the Japanese manager's own national values. As for self-enhancement values, there seemed to be a gap between Dutch manager's own values and impressions and the actual situation in their departments. While Dutch managers actively emphasise teamwork and other self-transcendence values such as teamwork (since these oppose self-enhancement values), organisational goals seemed to annul these efforts because they unintentionally promote self-enhancement behaviours, such as achievement. Our results also showed that while Japanese managers do not seem to intentionally prioritise these self-transcendence values, the customer

focus, which is the common goal between Japanese team members, seemed to translate into teamwork. This leads us to the following proposition:

Proposition 1: A manager is likely to naturally neglect values that are more inherent to/ingrained in one's culture, whereas they do emphasise values that aren't inherent/ingrained in one's culture.

5.1.2 Differences in Behaviours

Secondly, moving to the task-, relation- and change-oriented behaviours, a paradoxical dynamic can be seen between the manager's values and behaviours. Some notable differences were discovered when comparing the Q-sort data to the interview data - so the self-reported data to the perceived data. For example, our results showed that Dutch managers and subordinates noted managers as not particularly emphasising feedback and helpfulness, but interview data showed that this was an integral part of their more consultatory management style, and this preference is supported by multiple studies. Furthermore, Dutch managers described themselves as not particularly emphasising the potential of the ordinary employee, but multiple examples show that they put much focus on the professional development of members of their team. Den Hartog *et al.* (1997) confirm this behaviour in Dutch managers, saying the following about Dutch team members: "The Dutch attach more importance to being consulted by their boss about decisions, freedom to adopt their own approach to the job, contributing to the success of the organisation, training opportunities, fully using their skills and abilities, and helping others." (p.398). This indicates that the data observed in this investigation concurs with the findings on the Dutch leadership style. Finally, while they were described as not prioritising achievement much, interviews showed that many of the departments in the Dutch organisations had a large focus on KPIs.

As for their Japanese counterparts, Japanese managers seemingly take on a more directive role, but both subordinates and managers themselves describe themselves as having a lot of trust in people. Our results showed that their perception was that middle managers did not prioritise the potential of the ordinary employee and teamwork and participation but did show plenty of employee initiative, with managers listening to these initiatives while also having a large focus on optimising human resources. The fact that Japanese managers participate in more relationship-oriented behaviours is confirmed by Mujtaba and Isomura (2012), who found that Japanese respondents in their study scored significantly higher on the relationship orientation dimension. Again, this indicates that the data observed in this investigation concurs with the findings on the Japanese leadership style. Continuous improvement, too, was described as not

being emphasised much by Japanese managers, but paradoxically, multiple kaizen initiatives could be seen in their departments.

5.1.3 Explanation of inconsistencies

When considering why these paradoxes may appear, we turn to Van Dun *et al.*'s (2024) research, which found a similar result. In their study, Brazilian managers identified with the lean philosophy and values greatly, and so they adopted behaviours that were atypical of their perceived cultural norm. The researchers suggest that in line with identity theory (Ashforth & Schinoff, 2016; Stryker & Burke, 2000; Skovgaard-Smith et al., 2020) and its notion of identity salience and centrality, managers often display the identity that is more important to them in a certain context. Consequently, they might intentionally emphasise behaviours that align with these objectives in developing towards being an effective leader.

Researchers van Dun, Hicks and Wilderom (2017) found that there is a specific value constellation that is particularly conducive to being a successful lean leader. They found that the six highest-ranked values related to effective lean managers were customer focus, the potential of the ordinary employee, participation and teamwork and trust in people, which are all aligned with Schwartz et al.'s (2012) self-transcendence cluster. Openness to change, continuous improvement and open-mindedness were mentioned (Van Dun et al., 2017). When it came to conservation-type values, respect for people, persistence and humility were listed, while only one self-enhancement value was associated with effective lean managers, namely achievement orientation (Van Dun et al., 2017).

In this study, our results showed that Dutch managers strongly identified themselves with the lean philosophy, seemingly also adopting the lean values as being their values, even if the Dutch culture may pose a different importance on values that are, on the contrary, fundamental to lean philosophy. For instance, in the results, managers and subordinates alike talked about the various lean tools being used, and the lean value of continuous improvement is highly emphasised by Dutch managers, ranking second out of 24. Furthermore, in comparison to other European countries, the Dutch had a below-average score when it comes to self-transcendence (Schwartz, 2007), but our results showed that Dutch middle managers in this study described themselves as having more self-transcendence values while also showing more self-transcendence behaviours. Both self-transcendence and openness-to-change type work values have been shown to benefit improvement behaviours in the context of lean leadership (Van Dun & Wilderom, 2016; Van Dun et al., 2017; Van Dun & Wilderom, 2021).

Proposition 2: As managers progress in lean leadership, their lean identity often takes precedence, leading them to prioritise lean-aligned values and behaviours over their (national) cultural identity.

5.1.4 Differences in Lean Adoption

While considering the lean adoption within organisations between Dutch and Japanese organisations, at first glance, one might think the Dutch managers may have more fully developed this philosophy. Some of the Dutch organisations in this study have departments dedicated to lean, and many team members have had lean belt training. Moreover, while Japanese managers did not discuss or emphasise continuous improvement or other lean tools in the same way, that does not necessarily mean that lean can not be seen in these organisations. Besides the Japanese manager's familiarity with kaizen, another reason for this suggestion is that it appeared that Japanese managers, too, seemed to somewhat stray from their cultural norms and embrace some lean values such as participation and speaking one's mind, thereby denying humility. Adopting values to fit a specific social context creates a strange but rather interesting dynamic in Japanese managers. Given that the philosophy of 'lean' originally stems from Japan but was then rebranded and adopted by Western organisations (Holweg, 2007; Womack et al., 1990), this has created a situation where a more Western type of leadership is combined with a more innate proficiency for certain lean values.

In their 1994 paper, researchers Taka and Foglia (1994) describe what the inherent Japanese leadership style entails by describing the three ideal characteristics Japanese people look for in their leader, namely: (1) emphasis on self-realisation, (2) appreciation of diverse abilities and (3) trust in others (Taka & Foglia, 1994). In this Japanese management context, leadership is fundamentally shaped by a self-transcendent normative environment that emphasises a sense of purpose tied to the greater good. Japanese managers naturally embody values that align closely with lean principles—such as customer focus, participation and teamwork, trust in others and the potential of the ordinary employee (which are all self-transcendence values). This inherent cultural alignment means that Japanese managers often don't need to adopt lean values to be effective lean leaders; they already practice them because they intentionally emphasise behaviours that align with these objectives in developing towards being an effective Japanese leader.

Recalling Van Dun et al.'s (Van Dun et al., 2017) results, which show that customer focus, the potential of the ordinary employee, participation and teamwork and trust in people are the values that were the highest-ranked in relation to effective lean managers, one could

hypothesise Japanese managers are already inherently effective at lean, despite them being relatively new to the concept of lean, leading to the following proposition:

Proposition 3: If what a national culture perceives as an effective leader already aligns with the optimal lean values and behaviours, a more natural lean implementation will occur. If the two do not have a natural alignment, this could lead to friction between the two identities.

These results contrast with those of Erthal and Marques's literature review on lean in relation to culture (2018). Through the lens of Hofstede's cultural framework, their findings were that Japanese culture was thought to hinder lean implementations. Because of the nature of Schwartz's framework, which has a more nuanced approach to understanding personal values, it is understandable that using this approach would give a different view. It also underlines that reality can become distorted by taking only an etic perspective and omitting context-specific practices. Etic classifications, in general, all 'naturally entail a certain amount of reductionism' (Spencer-Oatey, 2009, as cited in Carminati, 2024). Carminati (2024) proposes a dialectical approach, which is needed to fully understand the full dynamics of cultures by integrating culture-general dimensions and frameworks with culture-specific aspects and practices, which is what this investigation has done.

Hence, it is evident from our results that the actual situation is more nuanced and cannot be easily generalised or put into boxes (Carminati, 2024). Our data, too, shows that Japanese managers and subordinates act in a way different than expected because they have already partly identified themselves and embraced the lean identity and values while already having an identity that is similar to their nationality's idea of an effective leader. In contrast, the Dutch, whose culture was initially hypothesised to be more suited to lean, seem to have their own challenges when it comes to implementing the lean philosophy precisely because they are adopting values that are further away from what they know. Thus, rather than saying that some cultures might be suitable or unsuitable for lean philosophy and its implementation, it is important to acknowledge that every culture can, in principle, embrace lean since all cultures have their own values. Hence, it is a manager's role to try to actively adopt values and behaviours that will aid their goal of becoming effective lean leaders, which ultimately, team members will also recognise and embrace.

5.2 Practical Implications

This study highlights several practical insights for organisations pursuing lean implementation across cultural contexts, particularly in multinational settings. First, although Dutch and Japanese managers may exhibit differences in values and behaviours, these distinctions do not necessarily hinder lean adoption. Instead, lean implementation can be enhanced when managers foster values that are close to lean, which complement their national culture.

Given the paradoxes identified, organisations should encourage managers to recognise and address any cultural tensions that may emerge between lean values and inherent national values. This approach can reduce friction, allowing managers to authentically adopt lean behaviours even if they may initially seem incongruent with their cultural background. Leadership programs should prioritise values like customer focus, teamwork, and trust in others - elements shown to resonate across both Dutch and Japanese managers but manifest in culturally unique ways. For instance, since Japanese managers may already embody certain lean-compatible values such as customer focus, teamwork, and trust in people due to their national culture, so instead, they could be encouraged to embrace more relations-oriented behaviours as part of their leadership development. This would allow them to enhance their lean effectiveness without forcing them to step away from deeply ingrained values like humility and collectivism. For Dutch managers, leadership programs may put less emphasis on achievement-based values but rather emphasise customer-focused values as well as teamwork and participation values, aligning their efforts towards self-transcendence values in a conscious way.

Hence, organisations are advised to build identity-oriented lean leadership programs that provide managers with practical opportunities to incorporate lean values authentically rather than adopting a one-size-fits-all approach. Developing lean-oriented social norms and incentives can reinforce a lean identity across cultural boundaries, potentially leading to a sustainable lean culture within the organisation. Future research could explore workshops and lean leadership training to accelerate lean behaviour adoption.

5.3 Limitations and Future Research

As in all other research, this work is not without limitations, which can serve as guidelines for future research. The first limitation of this investigation is that most of the interviewed candidates were men. Since our sample consisted mostly of manufacturing companies, this majority accurately reflects the distribution between men and women (World Manufacturing Foundation, 2024). But even so, by including more female participants in future research, those studies could limit bias and provide a more balanced understanding of how culture and gender intersect in management contexts. Secondly, while qualitative research fits the exploratory goal of the study, its nature may limit generalisability and objectivity. Future studies may consider a mixed methods approach, which offers the advantage of triangulation of data. Furthermore, while coding was discussed with supervisors, the interviews were coded by one researcher, meaning future research could improve on interrater reliability by adding a second coder. Fourthly, regional cultural differences must be taken into account. Japanese respondents in this study all came from the Kantō region, while all Dutch respondents came from the Overijssel region. Future research may benefit from a wider geographical scope to capture possible regional cultural differences. Finally, since Japanese interviews were held in Japanese and then

translated into English, information may have gotten lost in translation. While the two translators were highly skilled in both languages, future studies could consider having a Japanese national who could perform the interviews in their native language in their research team.

6. Conclusion

This thesis revealed how lean values and behaviours differ between Dutch and Japanese middle managers, focusing on the influence of national culture on lean leadership. The findings show notable differences, similarities, and even contradictions that shape lean management in these two contexts.

Both Dutch and Japanese managers value self-transcendence, openness-to-change, self-enhancement, and conservation, yet express these values in unique ways. Japanese managers, for instance, show conservation by limiting individual choice, while Dutch managers downplay creativity as part of their conservation approach. Japanese managers also demonstrate a strong sense of responsibility for the group, whereas Dutch managers highlight honesty and integrity in their roles. Unexpectedly, both groups value openness-to-change, with Japanese managers even encouraging subordinates to deny humility - contrasting their national cultural values.

The study also highlights several contradictions between managers' self-reported values and observed values and behaviours. For example, Dutch managers describe themselves as teamwork-focused but often emphasise achievement through key performance indicators. While being more directive, Japanese managers foster employee initiative and customer focus, displaying an inherent closeness to lean values. These paradoxes may stem from managers choosing to display behaviours that align with lean values, even when they do not fully align with their national culture.

This study adds to the literature on lean management by demonstrating that managers' lean identity can lead them to prioritise values and behaviours congruent with lean philosophy, even when these diverge from cultural expectations. Japanese managers may already reflect lean-compatible values like customer focus and teamwork, while Dutch managers may face some cultural gaps and need to adopt lean practices more consciously. Ultimately, this research offers valuable insights into how lean can be effectively implemented, not through one-size-fits-all solutions but by fostering an identity-oriented approach that respects and builds upon the cultural values of individual managers.

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Appendix I: Interview Protocol

Introduction

o Tell about the purpose of the research.

o Data will be treated confidentially.

o Everything said here will be completely anonymised.

o There are no wrong answers.

1. Can I record this conversation?
2. Can you briefly tell us about your position within your organisation?
   (Number of subordinates, responsibilities, since when?)

Lean organicity

3. What is, in your opinion, a lean organisation?
4. How do you see the role of a manager in a lean organisation?
5. Do you see your own organisation as a lean organisation? Why?
6. When did your organisation start implementing the lean principles?
7. What do you do differently now since your organisation made the transition to lean, compared to the situation before?

Leadership

The research focuses on effective middle management in lean organisations.

8. Why are you an effective manager?
   a. What specifically are you doing that makes you think this?
   b. Is this different from other middle managers (in other, non-lean organisations)?

Definition: values are 'beliefs that someone carries with them in all situations as a guideline for his/her actions.' An example of values are the ten commandments, or a value such as 'honesty'.

9. What personal values do you find important?
   a. Is this different from other middle managers (in other, non-lean organisations)?

Critical Incident Technique

10. Please try and recall a specific moment in time, when you/your manager interacted with your/their immediate subordinates, and they showed very successful leadership. Can you describe this situation and tell me what exactly happened?

A successful moment can be, for example: when the 'click' is made and employees actually think lean.

a. When did this incident take place?
b. What caused this situation?
c. What were you/ they doing at that particular moment?

Definition: Behaviours can be described as 'what leaders and managers do in their work'. Different levels of abstraction are possible here.

- ➢ Distinctive for lean middle managers?
- ➢ Continue to ask questions and have them name specific behaviours.

11. What personal values did you insist on at the time?

Definition: values are 'beliefs that someone carries with them in all situations as a guideline for his/her actions.' An example of values are the ten commandments, or a value such as 'honesty'.

- ➢ Distinctive for lean middle managers?
- ➢ Continue to ask questions and have them name specific personal values.

Q-sort (Values)

12. Which personal values are most important to you/the middle manager?

Please distribute the (24) cards in the following normal distribution (which has 24 boxes)

4	3	2	1	0	-1	-2	-3	-4
Most important				Neutral				Least important

After the Q-sort:

a. Would you like to supplement your choices in the division?

b. Why did you make these choices?

c. Did you experience any difficulties while making the distribution?

Personal questions (1/2)

14. a. What is your gender?

Male	
Female	
Other, namely...	

b. What is your position in the organisation?

c. How long have you worked in this organisation?

"...years and ... months"

d. How long have you worked in this position?

"...years and ... months"

e. what kind of employment relationship do you have? (choose one)

Parttime	
Fulltime	

Personal questions (2/2)

(FOR MIDDLE MANAGERS ONLY)

15 a. How many FTE does your team have?

(*FTE (Full-Time Equivalent) refers to the number of hours worked by a single employee in a week. It is a unit of account for the size of a job or for the total workforce. For example, you may have one staff member working 30 hours a week, another working 50 hours a week, and a third who worked 40 hours a week. This adds up to 110 hours a week in total. Considering the average FTE or full-time working week is 40 hours, this means you have three full-time staff. In other words, your FTE is three.*

b. How many team members does your team have?

c. How often does your team meet face-to-face during an average work week?

Final

1. Is there anything you would like to add?

Thank you for your cooperation and sharing your knowledge!

Appendix II: Q-sort Values

1 Participation/teamwork	2 Potential of the Ordinary Employee
3 Customer Focus	4 Achievement
5 Trust in People	6 Integrity
7 Continuous Improvement	8 Persistence
9 Equality	10 Responsibility

11 Open-mindedness	12 Honesty
13 Information Sharing and Analysis	14 Courage
15 Constructive Feedback	16 Helpfulness
17 Creativity	18 Humility
19 Respect for People	20 Self-reflection
21	22 High Quality

Innovation	
23 Justice	24 Freedom of Choice

Appendix III: Q-sort Analysis Mean Scores

Values (cluster) NL	***Values (cluster) JP***
1. Respect for People (CON)	*1. Responsibility (ST)*
2. Continuous Improvement (OtC)	*2. Customer focus (ST)*
3. Honesty (ST)	*3. Respect for people (CON)*
4. Integrity (ST)	*4. Trust in people (ST)*
5. Trust in People (ST)	*5. Integrity (ST)*
6. Responsibility (ST)	*6. Honesty (ST)*
7. Customer Focus (ST)	*7. High-quality (SE)*
8. Participation/Teamwork (ST)	*8. Achievement-orientation (SE)*
9. Constructive Feedback (OtC)	*9. Persistence (CON)*
10. Justice (ST)	*10. Creativity (OtC)*
11. Achievement-orientation (SE)	*11. Continuous Improvement (OtC)*
12. High-quality/Performance (SE)	*12. Information Sharing (ST)*
13. Self-reflection (SE)	*13. Open-mindedness (OtC)*
14. Information sharing (ST)	*14. Constructive feedback (OtC*
15. Innovation (OtC)	*15. Innovation (OtC)*
16. Equality	*16. Helpfulness (ST)*
17. Potential of the Ordinary Employee (ST)	*17. Self-reflection (SE)*
18. Helpfulness (ST)	*18. Freedom of Choice (OtC)*
19. Open-mindedness (OtC)	*19. Humility (CON)*
20. Courage (OtC)	*20. Participation/Teamwork (ST)*
21. Freedom of Choice (OtC)	*21. Courage (OtC)*
22. Persistence (CON)	*22. Justice (ST)*
23. Creativity (OtC)	*23. Equality (ST)*
24. Humility (CON)	*24. Potential of the Ordinary Employee (ST)*