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# PERSONALITY CHARACTERISTICS OF EXCELLENT LEAN MANAGERS

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## ABSTRACT

*Today many Danish companies are implementing Lean and hereby trying to implement a continuous improvement (CI) program and culture. We have observed that companies can easily implement the artifacts of CI, such as Kaizen boards, Kaizen meetings, Performance management (KPI), A3 and PDCA reports, and analytical tools. However, many companies struggle with developing a CI culture and DNA. Reasons for this can be many but the authors of this paper believe that one of the main reasons is the mindset and personality of the Lean managers. This paper addresses the question: Which personality traits should excellent Lean managers have? Based on an assessment done by a panel of Lean experts composed from 26 different Danish companies, this paper presents a profile description of an excellent Lean manager, which encompasses 16 different personality traits. A comparison with the average Dane shows some important differences.*

**Keywords:** *Lean, leadership, excellence, management, personality traits*

## 1. INTRODUCTION

From an academic point of view, the curiosity of this research derives from a field of practice that is yet to be fully explored and requires further investigation. Practitioners frequently ask the hitherto unanswered question: What to look for when recruiting and developing Lean managers?

With ever more public and private, industrial and service organizations embarking on a Lean journey, a Lean mindset, behavior and culture are increasingly important. This involves a significant change for many organizations, and requires managers who can lead and sustain the transition successfully. Lean involves a deep cultural transition to a proactive and continuous improvement culture, which radically transforms the field of operation (Bhasin, 2012), but can cause tensions within the organization if the management lacks insight into what a successful implementation requires in terms of commitment to change (Emiliani, 2006, Spear, 2004). Management has a pivotal role in setting an example, and the responsibilities that Lean managers need to take are well documented. However, as Mann (2009) points out, there is a gap in the literature on Lean management and the personality traits that are necessary for Lean managers to excel in their role.

This issue is at the core of this paper, and the objective is *to generate knowledge needed to develop a new tool that is specifically aimed at determining the best-qualified Lean manager candidate*. More specifically, the paper aims to identify which personality traits excellent Lean managers possess in their role of leader of employees. The assumption, albeit not entirely undisputed, is that the personality traits and mindset of Lean managers are the same regardless of industrial differences. We will focus on the leaders of employees, not the leaders of leaders level (Charan et al., 2001). The personality traits identified will be used to develop a guideline targeted at the recruitment and development of Lean managers.

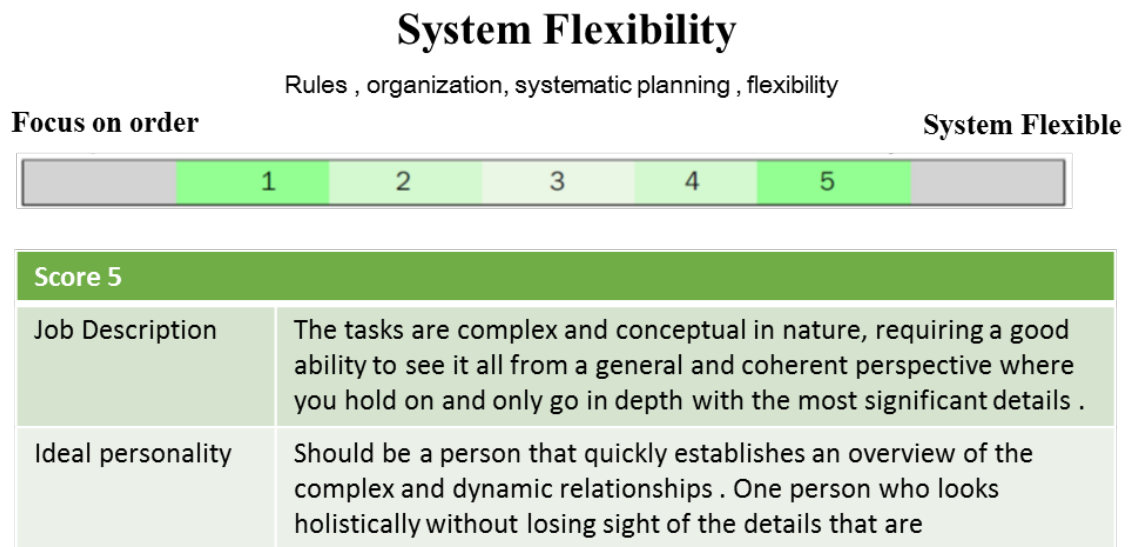
## 2. RESEARCH DESIGN

The paper is based on a research program called The Excellent Lean Leader Profile. The research group behind the program involves two universities (Aalborg University and Aarhus University), a management consulting firm, and Garuda, Scandinavia's largest supplier of assessment tools for individuals, groups and organizations. The analyses reported in the paper are based on the output of an expert panel workshop, which took place in October 2015. The participants in the workshop were Lean managers from 28 medium-sized and large Danish companies, who were selected to represent the public, manufacturing and administrative & service sectors. All companies have several years of experience with and expertise gathered from working with Lean.

The workshop design was methodically inspired by the Delphi method, the socialization, externalization, combination, internalization (SECI) model and focus group interviews aimed at extracting the expert panel's tacit knowledge through a socialization process (Nonaka & Takeuchi 1995).

To help the participants reach consensus, the workshop was based on the framework of the 16 personality traits from Garuda's assessment tool, Competence Profile. Multiple rounds of group discussions and plenary sessions took place in order to reach consensus about the traits that apply to excellent Lean managers.

Each group was given a description of the 16 traits and each trait had five to six subdivisions, see example in Figure 1 where a description of score five is presented. It is important to mention that the expert group could not choose the extreme scores (the gray area in the illustration) because it was found that the extremes are not relevant for any Lean leader. The groups had to choose between the different descriptions and select the text that gave the best description of the ideal Lean leader. They had to give two scores, one primary and one secondary.



**Figure 1. Score 5 description**

Afterwards, the groups had to present their results and reason their answers. Given the differences in the group assessments, a basic statistical analysis was made. The results of the workshop led to profile descriptions, which all participants were given for review and feedback.

## 3. THE 16 TRAITS

The 16 personality traits that were used as the framework can be subdivided into three categories.

First, in situations where the Lean leaders feel content with themselves and can do as they wish to, how do they tackle and process the problems and tasks they are confronted with in their daily work? This is the Lean leaders' head working. The traits that this category is covering are: *System Flexibility, Comprehensiveness, Abstract Thinking, Risk and Impulsive.*

Second, in situations where the Lean leaders feel content with themselves and in harmony with the people they associate with in their daily work, what is the character of the relationships that they establish with these people? This is the Lean leaders' heart working. This category is dealing with the areas of: *Empathy, Social Contact, Social Flexibility, Support and Confidence.*

Third, in situations where the Lean leaders are working on the solution to a problem, how do they go about it and how great an influence do they have or would like to have on the process of solving the problem? This is the Lean leaders' leg working. The final category is handling the traits: *Competitiveness, Influence, Self Confidence, Independence, Psychological Strength and Physical Energy.*

#### 4. EMPIRICAL RESULTS

In this section, we will present the results of the empirical work. The section is structured around the 16 traits. Each trait will be introduced by a short description of the interpretation of the outer score. Hereafter, an illustration is presented related to the Lean leaders' scores. See Figure 2 for a guideline as to how to read the illustrations. Finally, a job and a personal profile description will be put forth.

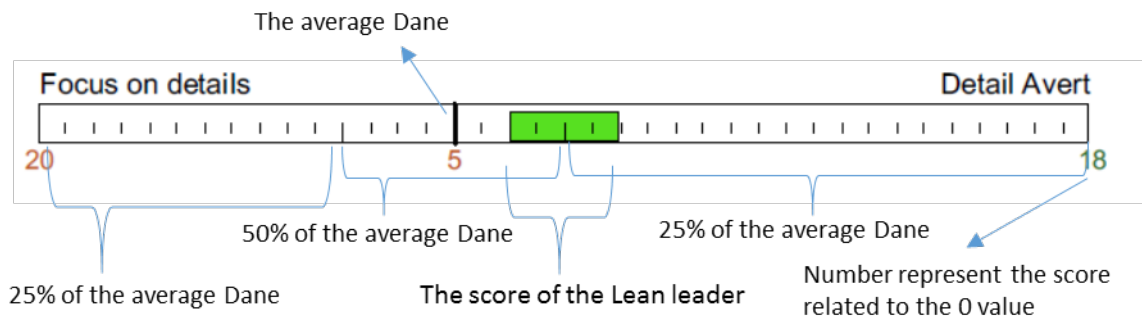


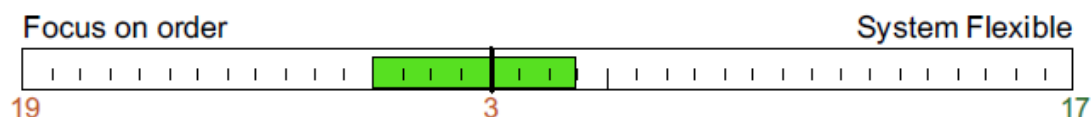
Figure 2. Illustration guideline

#### System flexibility

*Focus on order:* Prefers fixed rules, a framework and guidelines indicating which tasks must be performed and how. Emphasizes order and planning. Point of departure in given established methods.

*System flexible:* Prefers tasks that allow a free hand to solve problems. Prefers establishing personal solutions rather than following given, familiar paths. Planning takes place in the person's own head rather than in a concrete, physical form. May therefore appear unstructured to others. Can work on several tasks at a time.

#### The Lean leader related to system flexibility



*Job profile:* The tasks are solved, with few exceptions, in accordance with established rules, within well-defined and organized frameworks. Most of the tasks are known and the working conditions are clear and well defined.

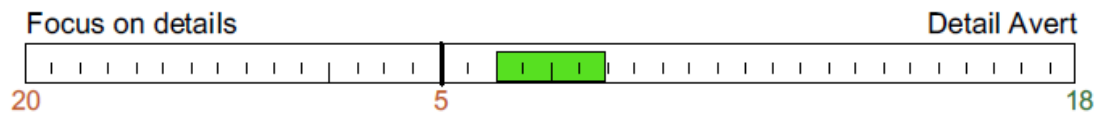
*Ideal personality:* Should be systematic and organizing when solving tasks. A person, who is very structured when solving problems and makes a point of having well organized working habits without being too limited by fixed rules and structures.

### Comprehensiveness

*Focus on details:* Prefers more routine tasks. Works painstakingly and thoroughly with tasks until the last detail has been considered and is in place. Does not consider a task Completed until everything is perfectly in order.

*Detail averse:* Prefers approaching tasks from an overall, general point of view. Looks for the most significant elements in a problem. Sees the wood and imagines the trees. Prefers leaving details and routines to others.

#### The Lean leader related to comprehensiveness



*Job profile:* There is some qualitative, as well as quantitative variety in the tasks. Thus, it is important to distinguish between important and less important details. Important details need attention and thorough processing.

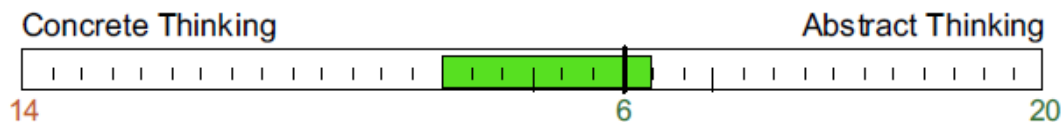
*Ideal personality:* Should be a person, who likes to go into few important details but who does not lose her/himself in more routine oriented tasks. A person, who can skip things and leave them to others without losing comprehensive view and control.

### Abstract thinking

*Concrete thinking:* Prefers tasks where everything can be seen, measured and weighed in a concrete, physical form. Is practical and down-to-earth. Uninterested in theory, the imaginary and the complex.

*Abstract thinking:* Prefers to approach problems on the basis of ideas, theories and models. The complex is a challenge. Sees him or herself as creative. Enjoys discussing philosophical and abstract matters.

#### The Lean Leader related to abstract thinking



*Job profile:* The key tasks represent practical, known in advance and sometimes also more complex problems that can best be solved with the use of specific models and simple known theories.

*Ideal personality:* Should be a person, who finds it challenging to solve concrete practical matters as well as more abstract conceptual ones. Is a person, who is good at working with and taking a starting point in models and theories.

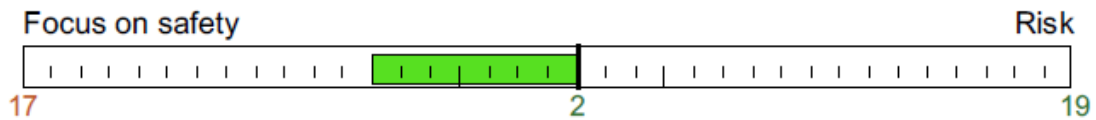
### Risk

*Focus on safety:* Prefers tasks that are definite and highly predictable. Seeks support in all accessible information. Controls and checks things. Thinks things through

thoroughly and attempts to safeguard him or herself as much as possible against the unexpected and unpredictable.

*Risk:* Prefers a job where it is necessary to make many, rapid decisions. Learns by doing. Inquiring and sometimes takes chances. Is impulsive and often acts spontaneously. Is not afraid of relying on his or her feelings.

### ***The Lean Leader related to risk***



*Job profile:* The nature of tasks and their content is varied, but mostly known. For tasks where this is not the case, it requires a calculative and certainty-oriented approach to the solution possibilities.

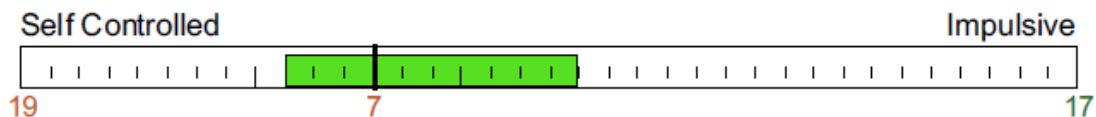
*Ideal personality:* Should be a consistent decision-maker liking to make decisions based on feelings, intuition, and experience. A person, who can make many and quick decisions in areas where information is vague or not a hundred percent certain and where time is limited.

### **Impulsiveness**

*Self-controlled:* Finds it important to control his or her feelings and keep calm in all situations. Does not allow his feelings a free rein. Remains calm under pressure and is not easily excited. Admires people who can keep their temperament under control.

*Impulsive:* Responds rapidly and shows his or her feelings. Is temperamental and becomes easily excited in stressful situations. Quick-tempered, but usually soon calms down again. Reacts impulsively with regard to his or her feelings and experience of the situation.

### ***The Lean leader related to impulsiveness***



*Job profile:* Tasks are solved under conditions where the person responsible, especially for key tasks, is under some time pressure or under pressure because of conflicting interests, changing circumstances and/or because there are unexpected situations.

*Ideal personality:* Should be able to stay calm and keep cool in hectic situations. A person, who is in harmony with him/herself and therefore does not overreact if something does not work out as planned or if exposed to negative criticism.

### **Empathy**

*Indifferent:* Is indifferent towards other people's thoughts, actions and feelings. Finds it difficult to understand the aims of other people and why they act as they do. Basically believes that this must be their own concern.

*Empathy:* Makes efforts to understand other people's thoughts, actions and feelings. Listens to others and has an open mind regarding others' views. Has great respect for other people's actions and motives.

**The Lean leader related to empathy**



*Job profile:* Tasks are solved in cooperation with others, which is dependent on a common understanding and acceptance of the division of tasks and responsibilities, and thus aware of the interdependence.

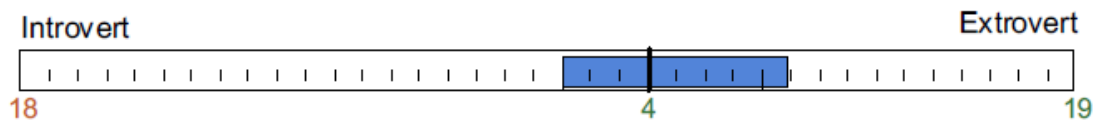
*Ideal personality:* Should be a person, who is conscious in his/her efforts of wanting to understand other people’s personality, social and professional background for acting as they do. A person, who focuses on other’s attitudes, motives and feelings, and who, from this, is good at integrating him/herself in the interaction with others.

**Social contact**

*Introvert:* In most situations prefers to work alone. Establishes contact with others when this is appropriate and serves a definite purpose. Is reserved towards strangers. Is a loner and does not feel comfortable in larger social gatherings.

*Extrovert:* Prefers a job involving a great deal of contact with others. Open, outgoing and seeks contact. Enjoys being at the center of larger social gatherings.

**The Lean leader related to social contact**



*Job profile:* Task solution requires the creation of a good and stable contact to a limited and fixed group of collaborators.

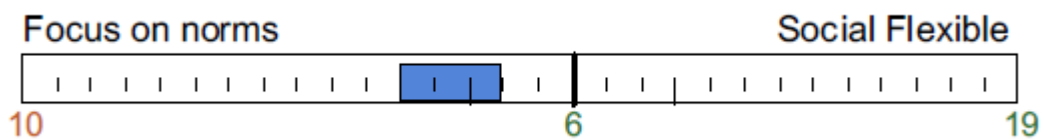
*Ideal personality:* Should be a person, who finds it easy to maintain and widen established contacts. Does not need by nature to be especially active and out-going, but should be able to when the social contacts and the social small talk have a purpose.

**Social flexibility**

*Focus on norms:* Prefers fixed norms, rules and guidelines regarding what is permissible and what is not. Not patient with others who go outside the given framework. Emphasizes self-discipline and the ability to administer and keep to current norms on own initiative. Has little patience with unconventional behavior

*Socially flexible:* Is tolerant, patient, understanding and sometimes compliant towards unconventional social behavior. Does not evaluate and judge people on the basis of their appearance and spontaneous behavior alone. Supports others if they are insecure and fail to live up to established demands and norms.

**The Lean leader related to social flexibility**



*Job profile:* Tasks are solved in an environment where the tolerances of the work-related and social behavior are not narrow, but well defined. Within these areas, it is important that you always have order in your work and contribute with a high degree of

self-discipline.

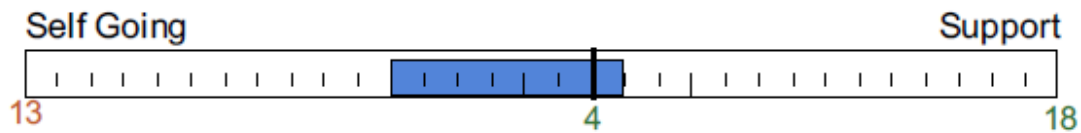
*Ideal personality:* Should be a person who can function in a work environment where the tolerances of work-related and social behavior are, if not limited, then well defined. That is to say a person who attaches great importance to having their things in order, being on time, having things finished on time, and finds it easy to accept and conform to being given more disciplined standards of dress and social interaction.

### Support

*Self-going:* The independent type, uninfluenced by what others may believe, think and imagine about his or her person and what he does. Does not seek acceptance from others, but goes his or her own way. Takes initiatives and starts things without asking others.

*Support-seeking:* Prefers to seek acceptance and recognition from others before starting anything. Feels most comfortable in surroundings where mutual praise, support and backing are predominant.

### *The Lean Leader related to support*



*Job profile:* Tasks are solved under conditions where the task-solver, only in exceptional situations, is dependent on or has to ask for others' acceptance, support and encouragement.

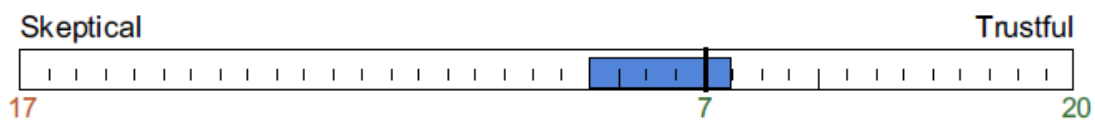
*Ideal personality:* Should be a person who can provide independent efforts and initiate things in time without the need for support, praise and recognition.

### Trust

*Skeptical:* Is skeptical and critical of others. Does not always trust others and is therefore reserved and cautious during the initial phase of contact. Does not make his or her aims known to others before they have made themselves worthy of his or her trust. Keeps most people at a distance.

*Trustful:* Spontaneously open and trusting of other people. Talks openly about him or herself and expects this trust to be reciprocated. Possesses a positive view of people and believes that most are decent and honest.

### *The Lean leader related to trust*



*Job Profile:* Tasks are solved in an environment where the direct contact to others, in general, is characterized by openness and trust. The need to remain skeptical of others' behavior, ideas and motives is situation-dependent.

*Ideal personality:* Should be a person, who meets other people with a high degree of trust and kindness in his/her daily work, based on the philosophy that confidence and openness meet with confidence and openness. However, he/she must be a person, who can look objectively to others. Must be able to deal with situations where the personal



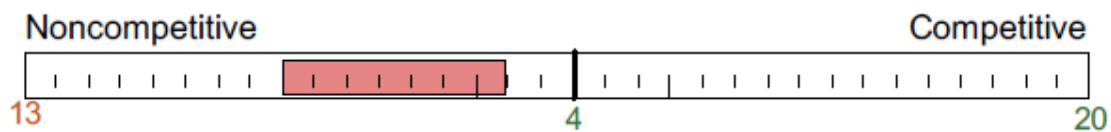
trust not always is shown.

### Competitiveness

*Noncompetitive:* Emphasizes co-operation and group effort more than his or her own performance. Believes that relying solely on his or her own performance always happens at the expense of others. Can tolerate “losing” and makes no effort to be better than others.

*Competitive:* Emphasizes his or her own performance and usually compares it with that of others. Wants to be the best. Believes that mutual competition promotes results. Makes great demands for performance on him or herself and on others. Constantly sets new goals for him or herself.

#### *The Lean Leader related to competitiveness*



*Job profile:* Task solution and the requirements for result creation lies mostly in the daily routines and procedures, but the goal can vary and thus, in limited areas, require individual performance-oriented activities.

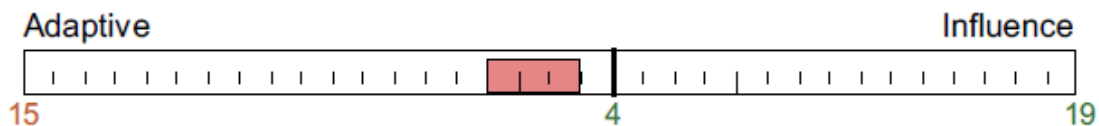
*Ideal personality:* Should be a person, who always sets him/herself new and higher goals. The aim, the ambition to be among the best, should be an important source of energy.

### Influence

*Adaptive:* Does not interfere in others’ ways of doing things. Keeps to his or her own area. Is reticent when decisions must be made. It is unimportant to him or her whether it is his or her ideas and suggestions that are accepted. Defers to people of greater formal and personal authority.

*Influence:* Has a great need to make his or her influence felt. Interferes as far as possible in all decisions. Regards him or herself as a leader type and enjoys giving orders. Is ambitious and strives to obtain a high, leading position. Sticks to his or her ideas and points of view and prefers to see them carried out.

#### *The Lean leader related to influence*



*Job profile:* The task’s optimal solution requires that the person responsible for the solution is a proactive participant in some parts of the decision-making process and in this finds argumentation of their ideas, opinions and attitudes natural.

*Ideal personality:* Should be a person who does not keep a low profile in the decision making process. A person, who works independently, to carry through his /her ideas and points of view, and finds it easy to be the central figure controlling and conducting the process if no one else takes responsibility,.

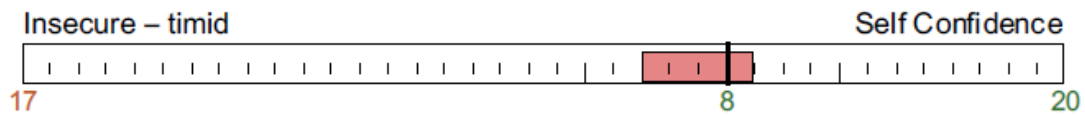
### Self-confidence

*Insecure – timid:* Has doubts about his or her own value and abilities. Often pauses to

consider whether they are adequate to perform a given task. Is hesitant with regard to the new and unfamiliar. Is modest and reserved. Does not take the lead. Is nervous in important and critical situations.

*Self-confident:* Believes in him or herself, his or her own value and ability. Does not hesitate to take on the unfamiliar and unusual. Enjoys accepting challenges with an unwavering belief that things will turn out well. Does not lose self-confidence due to the criticism of others.

**The Lean leader related to self-confidence**



*Job profile:* The tasks are generally of such a nature that in many contexts they place demands on the task-solver’s ability to independently deal with unforeseen and unknown problems and situations in a constructive and proactive manner.

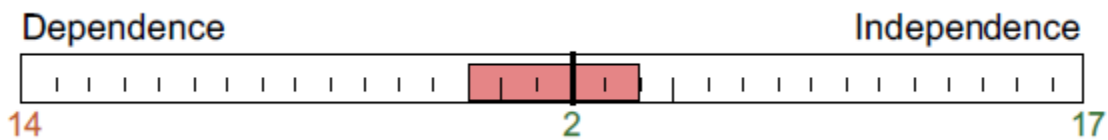
*Ideal personality:* Should be a person with a good and natural confidence to him/herself and his/her abilities. A person, who can handle the direct confrontation with other people’s views and attitudes without being stressed or personal unbalanced.

**Independence**

*Dependence:* Finds it easy to adapt and does not resent other people interfering in the way s/he does his work. Accepts established frameworks and resources for managing tasks. Stays in his or her place and avoids doing things that create problems and opposition.

*Independence:* Has an inherent need to do things in the way that suits him or her best. Finds it difficult to take direct orders from others and fights for his or her freedom and independence. Wishes to be his or her own master and work without others interfering.

**The Lean leader related to independence**



*Job profile:* The task’s solution is, for the most part, subject to some established procedures, as well as authoritatively given orders that rarely require the jobholder’s independent or constructive critical position.

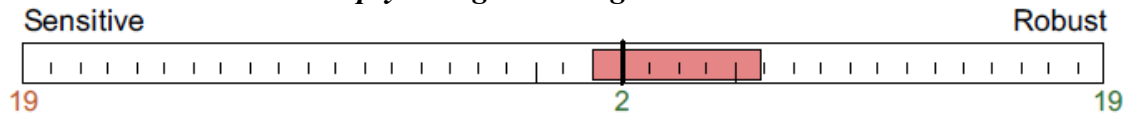
*Ideal personality:* Should be a person who can and will work independently within the frames and rules, which the organization has settled. In addition, a person, who is able to look constructive critically to these and give a certain opponent, if he/she finds them inexpedient in connection with the daily task solving.

**Psychological strength**

*Sensitive:* Thinks a great deal about the criticism s/he has been the object of. Consciously attempts to avoid people and situations where s/he has felt humiliated. Takes criticism very personally. Becomes insecure if s/he cannot perform a task and fears negative sanctions.

*Robust:* Quickly gets over humiliations, criticism and personal insults. Often takes these as a challenge and answers back. Has a good ability to defend her/himself when pressed by others. Is not afraid of making mistakes.

### ***The Lean leader related to psychological strength***



*Job profile:* The task's nature and solution represents some unforeseen difficulties and challenges. The jobholder will, in certain situations, experience pressure and resistance from others.

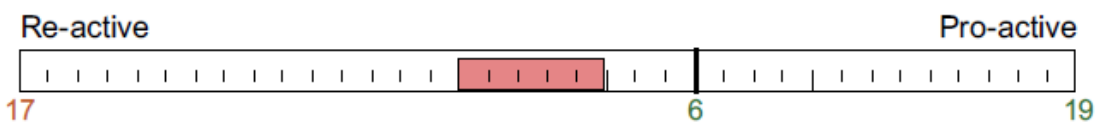
*Ideal personality:* Should be a psychological strong person, who can handle directly and personal criticism in a constructive way. A person, who is not afraid of running into difficulties or direct personal resistance and criticism.

### **Physical energy**

*Re-active:* Patiently performs one task at a time. Works steadily and calmly towards the goal. Works long hours and takes things easy now and again. Relaxes when s/he gets home. Does not hurry from place to place and does not like things moving too rapidly.

*Pro-active:* Enjoys working at great speed and being active all the time. Often finds it difficult to wait until things happen and therefore likes to have several projects running at the same time. Keeps him or herself busy and finds it difficult to wait for others. Prefers varied tasks and many changes of tempo.

### ***The Lean leader related to physical energy***



*Job profile:* The tasks are of such a nature that they require a certain degree of physical and/or intellectual activity, if the level of which varies from situation to situation, but generally lies in the more routine end of the scale.

*Ideal personality:* Should be a person who copes with everyday life, where many more or less routine here and now operations are to be performed, which require both physical and mental energy and a desire to keep busy most of the time.

## **5. DISCUSSION**

The assessment of the expert panel shows that 3 of the 16 traits are in the 50% zone of the Danish population, namely system flexibility, empathy and self-confidence. Only in one case, physical energy, the score is entirely in the 25% quartile. The other twelve are both in the 50% zone and in one of the 25% quartiles. Furthermore, in twelve cases the score touches the average Dane, which means that these traits are fairly common among the Danish population. The question is if all the 16 traits are equally importance. The expert group was asked to select the most important ones. They pointed out 5 of the personality traits:

### **1. System flexibility**

Reasons: One of the key foundations in Lean is standardization. Without standards, there is no Lean environment. Therefore, an important trait is structure, but on the other hand the leader should be able to think beyond the fixed rules and standards for new ideas. If the Leader cannot challenge the known standards, Kaizen or Continuous Improvement (CI), a cornerstone of Lean, will not happen.

**Table 1. Summary of the 16 personality traits**

<b>Personality trait</b>	<b>Quartile(s) <sup>1</sup></b>	<b>"Averageness" <sup>2</sup></b>
<b>System flexibility <sup>3</sup></b>	50%	Yes
<b>Comprehensiveness <sup>3</sup></b>	50-25%	No
Abstract thinking	25-50%	Yes
Risk	25-50%	No
Impulsive	50-25%	Yes
<b>Empathy <sup>3</sup></b>	50%	Yes
Social contact	50-25%	Yes
Social flexibility	25-50%	No
Support	25-50%	Yes
<b>Trust <sup>3</sup></b>	25-50%	Yes
Competitiveness	25-50%	No
Influence	25-50%	No
Self-confidence	50%	Yes
Independence	25-50%	Yes
<b>Psychological strength <sup>3</sup></b>	50-25%	Yes
Physical energy	25%	No

<sup>1</sup> 25-50%: in lower 25% and 50% zone

50%: in 50% zone

50-25%: in 50% zone and higher 50% zone

<sup>2</sup> Yes: scoring zone includes the average Dane; no: scoring zone does not include the average Dane

<sup>3</sup> Traits in bold: assessed as particular important for excellent Lean managers

## **2. Comprehensiveness**

Reasons: Lean leaders have an important role in knowing the details of the operations, but at the same time they should not lose a comprehensive view and control.

## **3. Empathy**

Reasons: People who work closely together in high performance teams create results in a Lean environment. The leader has a critical role for creating such teams and one of the traits that promote this behavior is empathy.

## **4. Trust**

Reasons: One of the key elements in Lean is respect towards people, so it is critical that the leader has faith in and trusts his or her employees.

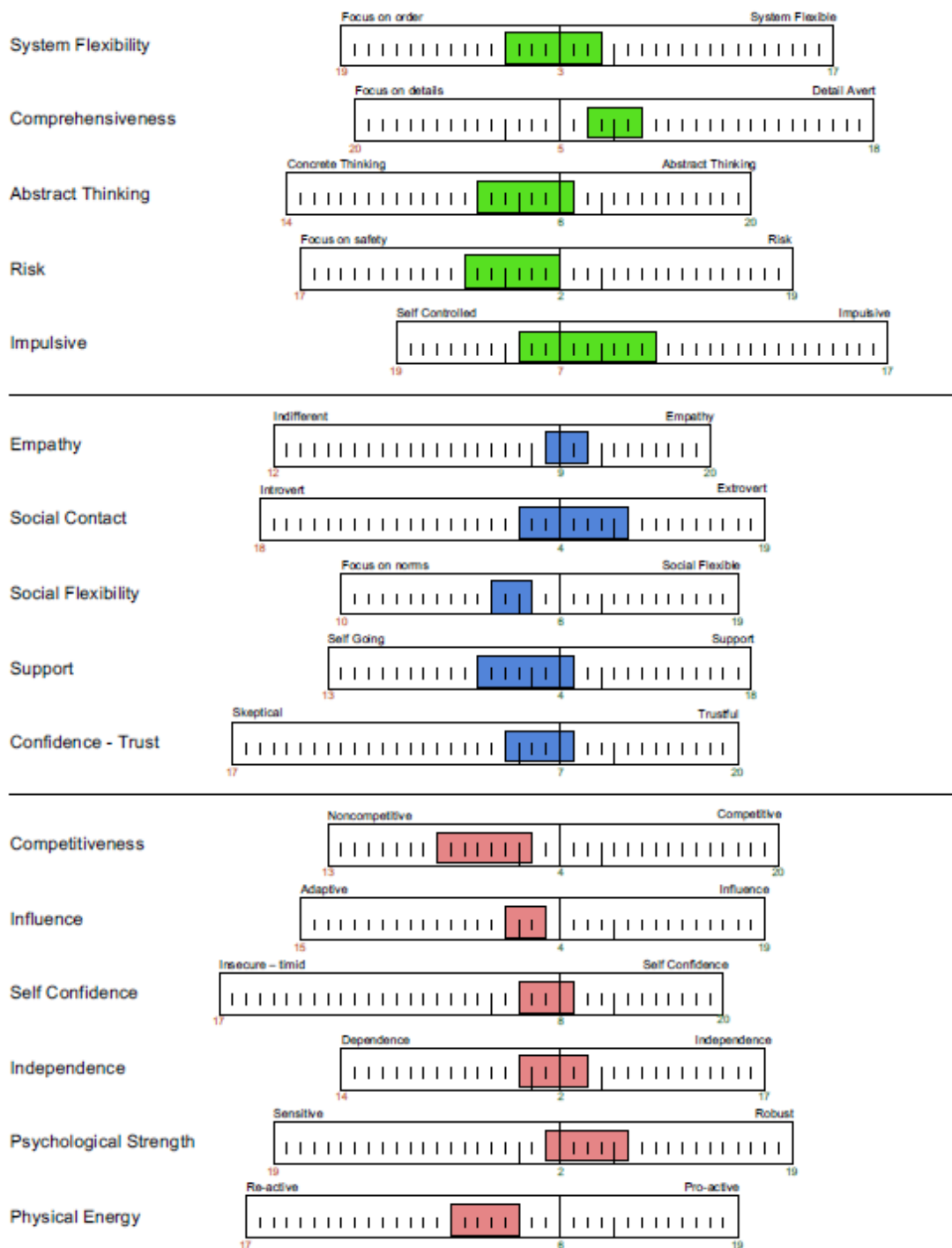
## **5. Psychological strength**

Reasons: Lean is built on a CI mindset and a Learning organization paradigm. Learning from mistakes and errors is the root of improvement, therefore, it is essential that a leader can handle directly and personal criticism in a constructive way. Hereby also, develop a constructive feedback culture in the company.

These findings provide a preliminary answer to the question which personality traits make an excellent Lean manager. However, they also raise important questions for further research.

First, the expert panel took its starting point in the framework of the 16 personality traits from Garuda's assessment tool, Competence Profile. Further, initially literature, research is needed to establish the theoretical validity of the tool, especially in terms of

its completeness. Next, field research, in the form of interviews with Lean managers, is needed to validate the set of personality traits and their relative importance.



**Figure 3. The Lean leader profile**

Second, the Lean manager profile was developed by Danish experts based on their experience from Danish companies. Further research is needed to generalize the profile (or its adapted version, based on the previous step) abroad.

Third, the ideal Lean manager differs significantly from the average employee. The Danish Lean manager is less focused on detail, takes less risk, is more focused on norms,

is less competitive and is more adaptive and reactive than the average Danish employee. While these traits concur with the Lean concept, the differences with the average employee raise the question: what are the implications for the success of Lean implementation processes if the differences between the manager and the employees involved in the transformation are so significant?

## 6. CONCLUSION

### 6.1 CONTRIBUTION

The research presented and discussed in this paper departed from the hypothesis that an excellent Lean leader has a special profile. An expert panel consisting of Lean managers from 28 medium-sized and large Danish public, manufacturing and administrative & service organizations, all of which had several years of experience with and expertise gathered from working with Lean, was asked to identify the personality traits of excellent Lean managers.

The 16 personality traits from Garuda's assessment tool, Competence Profile, provided the basis for the experts' assessment, which was organized using the Delphi method in multiple rounds of group discussions and plenary sessions. The expert panel arrived at the profile summarized in Table 1 and Figure 3. Furthermore, the expert group selected 5 traits that they found most important: system flexibility, comprehensiveness, empathy, confidence, and psychological strength.

### 6.2 FURTHER RESEARCH

To make the Lean leader profile stronger, further theoretical and empirical study is needed to validate the profile *per se* and outside the Danish context. Once validated, the results can be used in the recruitment processes as "an excellent Lean manager template" to compare candidates. Furthermore, it can be used as an internal organizational development tool of Lean managers using gap analysis to enable strategic competence development. Finally, it can be crucial as a self-awareness tool for Lean managers.

Finally, there are some significant differences in the personality traits of Lean managers and the employees involved, respectively. What are the implications of these differences for the success of Lean implementation processes?

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