Lean Services:

How Service organisations meet future challenges

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Lean Services: How Service organisations meet future challenges

PREFACE

The 2008 ACE Report on Operational and Lean Management revealed that almost 80% of European manufacturing companies apply Lean Management to enhance their competitiveness, whilst only one-third of service organisations, public and private, have started to use this method to improve performance.

Based on dealings with hundreds of projects, in a large variety of service industries across Europe, we have witnessed how Lean principles – renowned for their success in the manufacturing industry – can just as successfully be applied within service organisations. The trick is not to copy them, but to adapt the basic principles of Lean thinking to the very different conditions in service organisations. In the words of John Shook, chairman and CEO of the Lean Enterprise Institute: "It has been a surprise to me that Lean tools are actually even more useful in an administrative, knowledge-based company than they are in production. By making work visible, we also make problems visible. It gives a huge psychological change effect because it will be accepted that problems exist. I recently visited the world famous Mayo Clinic in the U.S., and there was a surgeon who said: 'If I can see it, I can fix it.' It's the same for us in Lean: If the problem is visible, we can solve it."

We believe that Lean Management has a lot in common with sports like acrobatics or sky diving, because it stands for individual expertise embedded in a team – the capability to execute actions in perfect alignment, even under risky and ever-changing conditions.

In the latest 2011 ACE Report on Lean Services, European service organisations reveal some of the major challenges they will face in the coming years. More and faster innovation and better services at lower cost, with less qualified resources are just the tip of the iceberg. This report gives a clear overview of where the most pressing issues are, how prepared service organisations are to tackle them and by what means they plan to do so. More importantly, you will find solutions to these challenges – real case studies where different Lean approaches have already been successfully applied in service organisations, as well as a comprehensive overview of how to implement Lean in this sector.

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ACE – Allied Consultants Europe – is a strategic partnership of nine leading European management consulting firms. We are experts in the fields of strategy, organisation change and business performance, and have been working together – as one – since 1992. In 15 offices all over Europe, more than 600 consultants offer local know-how and international expertise to our clients, in both the public and private sectors.

ACE regularly conducts European surveys on a wide range of topical business issues. Like many of those studies, part of this report is also based on feedback from questionnaires that we received from our clients and business contacts. We would like to thank you all for your support and for sharing your views and opinions on the challenges of European service organisations with us. Finally, we hope this report inspires you to start your own 'Lean Journey', or intensify it, if you have already embarked on one.

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EXECUTIVE SUMMARY

In spring 2011, Allied Consultants Europe conducted a survey asking over 700 European Service organisations in a large variety of service industries, including financial, professional, ICT, industrial, transportation, retail, public, healthcare and many others – about their main challenges in an increasingly competitive market. Our aim was to provide a clear overview of what's on the agenda of European service organisations. The main highlights include:

Major challenges ahead

European service organisations indicate that they have already experienced complex and demanding business environments over the last two years. They also report that major issues will become even more prevalent over the next three years: Competition and market liberalisation call for more innovative service models. Customers require (further) improved service processes. And on top of this, an increasing shortage of talent will become an even more pressing issue in the future, than it is today.

Preparedness for undetermined change

One in three European service organisations feel unprepared for the upcoming challenges, especially how to tackle ageing society, the war for talent and the rising complexity within their businesses. For the two-thirds who claim to be more prepared for the challenges, the top management ranks are more confident in their organisation's ability to tackle future headaches, whereas middle managers and functional experts have a more negative – or realistic – view on the matter.

Capability to respond to future challenges

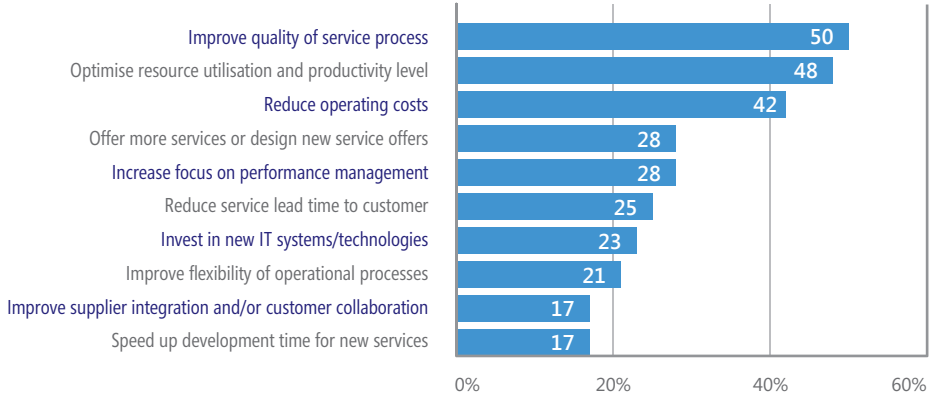
Although change management skills appear to be intact, European service organisations consider their 'execution' and 'the level of process improvement' skills rather weak. They mainly lack three crucial capabilities: comprehensive knowledge of how to create real value based on consumer needs, the alignment of the organisation towards value streams, and the application of industrial principles to optimise service processes.

Clear priorities on the management agenda

European service organisations have quite clear future priorities in order to tackle their troubles: quality, resource utilisation and productivity need to be pushed, while operating costs have to be reduced. In short, service organisations want to focus on creating more and better service quality at much lower costs.

Top priorities in the future

→ Focus on quality, productivity and cost



High or slightly high relevance for % of respondents (n=704); multiple answers possible

Listening to the voices of over 700 European service organisations, we are convinced that Lean Management provides a strong answer to these challenges, because:

- **Lean is a concept** that addresses very successfully the key issues mentioned opposite: quality, costs and delivery in parallel with an integrated set of principles, methods and tools.

- **Lean is a philosophy** of leadership, teamwork and problem solving, resulting in continuous improvement throughout the organisation by focusing on the needs of customers, empowering employees and improving processes.

- **Lean is about the process** that delivers and less about the actual product/delivery. Despite some obvious differences between the manufacturing and service sectors, all service organisations are based on processes, which are core to value creation for the customer.

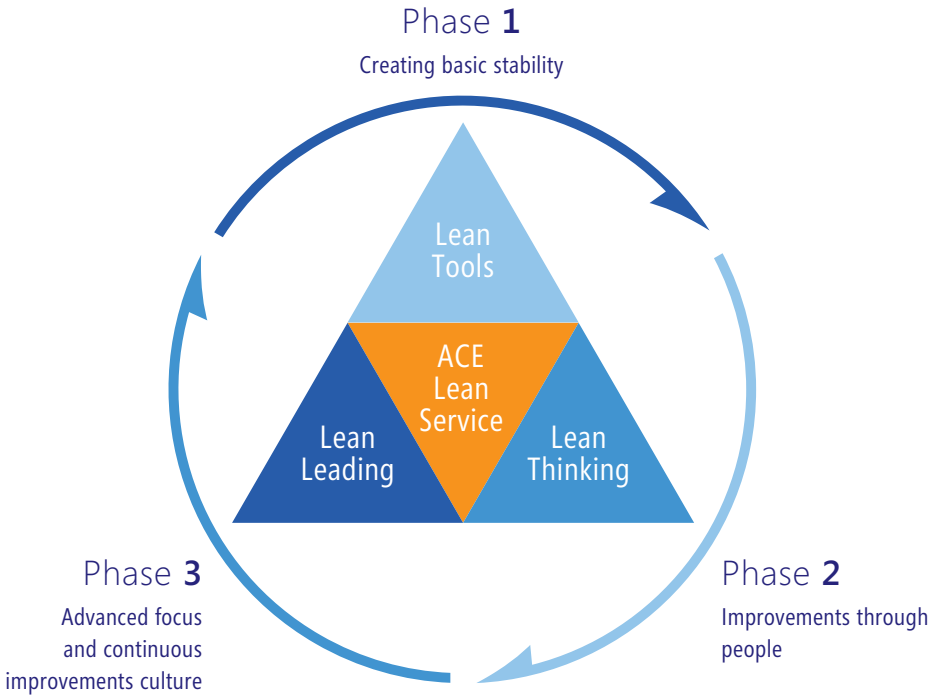
A tailored approach, translating Lean into a specific Lean Service programme for your organisation is crucial for success. As general advice based on our experience of conducting numerous Lean Service implementations throughout Europe, we propose three different phases for implementing Lean:

- **Phase 1: Creating basic stability**
- **Phase 2: Improvements through people**
- **Phase 3: Advanced focus and continuous improvement culture**

Each phase will require different methods and tools one should primarily focus on in order to reach a certain level of maturity, before embarking on the next stage. In the 2008 ACE Report on Operational and Lean Management, we learned that implementing Lean is not just about applying the Lean tools, such as Value Stream Mapping, Standardisation, 5S or Root Cause Analysis. We saw that a purely tools-based focus often resulted in short-term results and that continued progress, as well as maintaining achieved results, often failed. Lean also addresses issues related to human resources and organisational culture by integrating both 'hard' and 'soft' methods to enable operational excellence to be achieved. The ACE Lean Services approach therefore includes two additional pillars in the triangle: Lean Thinking and Lean Leading, which helps to not only achieve operational excellence, but sustain it in the long run.

ACE Lean Service model

→ Helping to achieve operational excellence



Service: Already a challenging business

VOICES OF 700 EUROPEAN SERVICE ORGANISATIONS: MAJOR CHALLENGES AHEAD

During April/May 2011, ACE conducted a survey asking over 700 European organisations in various service industries about their main challenges in an increasingly competitive market. The aim of this survey was to provide an overview of what's on the agenda of the average European service organisation. What troubles service providers most, which demands will challenge the organisation significantly in the near future, and just how prepared are they to convert these challenges into opportunities? In order to investigate these areas, we divided our survey into the following questions:

1 **What were the main challenges you faced, looking two years back?**

2 **What are the main challenges for the future, looking three years ahead?**

3 **How prepared is your organisation to tackle the most pressing issues?**

4 **How capable are the process improvement skills in your organisation?**

5 **How capable are the change management skills in your organisation?**

6 **What are the main priorities for developing your organisation?**

In the following paragraphs, we summarise the main observations from the feedback.

Running a business today is, without a doubt, more challenging than ever. Of course, this is also valid for the service industry. The market continues to become increasingly customer driven, meaning that customer expectations are constantly growing and changing. Customers want more and better services at minimal costs. And if a service provider fails to deliver, others will happily take over. At the same time, general market conditions have increased in complexity. What traditionally was a public task, suddenly becomes privatised, creating new and changed types of competition. Key performance indicators (KPIs) and methods generally used in manufacturing companies, suddenly become a new standard in the service sector as well. And general European demographic issues, such as ageing and reduced population growth make it difficult to find and retain the right talent. It's not challenges that service organisations lack – not today, nor in the future.

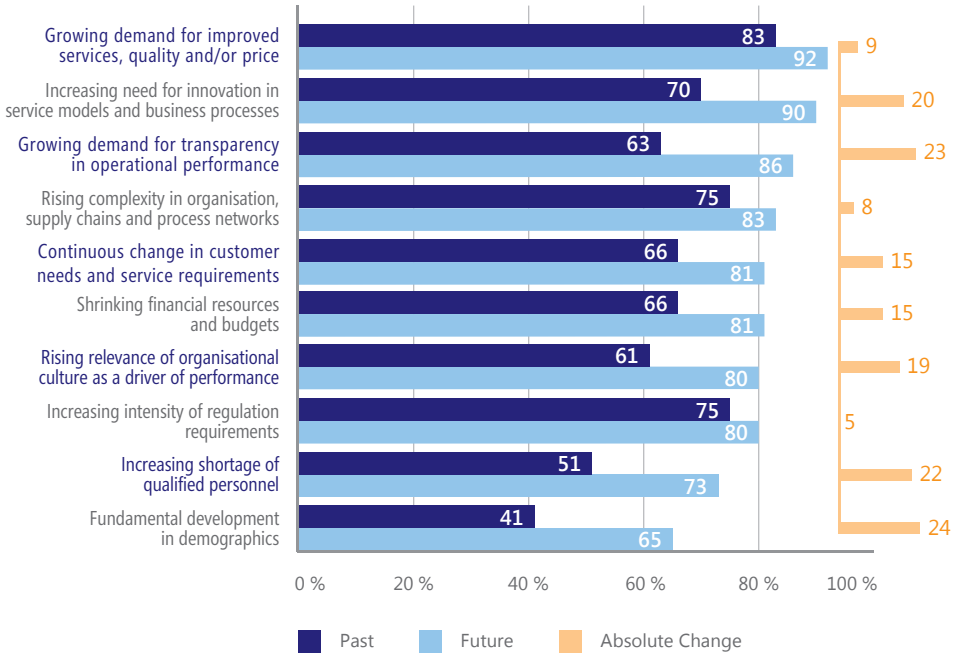
The growing demand for improved service, quality and/or price continues to be challenge number one. But two new runners up make their entry into the top three, as the second and third largest challenges for the future:

- **Need for innovation in service models and business processes**
- **Transparency in operational performance**

Two external threats – demographics and shortage of qualified personnel – have also become much more evident (see Chart 1 opposite) than a few years ago, and so takes a huge leap in priority. Service organisations acknowledge how people development and retaining the best resources will become important factors in future development.

1 Past vs. future challenges

→ More innovation in services and transparency in performance needed



High or slightly high relevance for % of respondents (n=704)

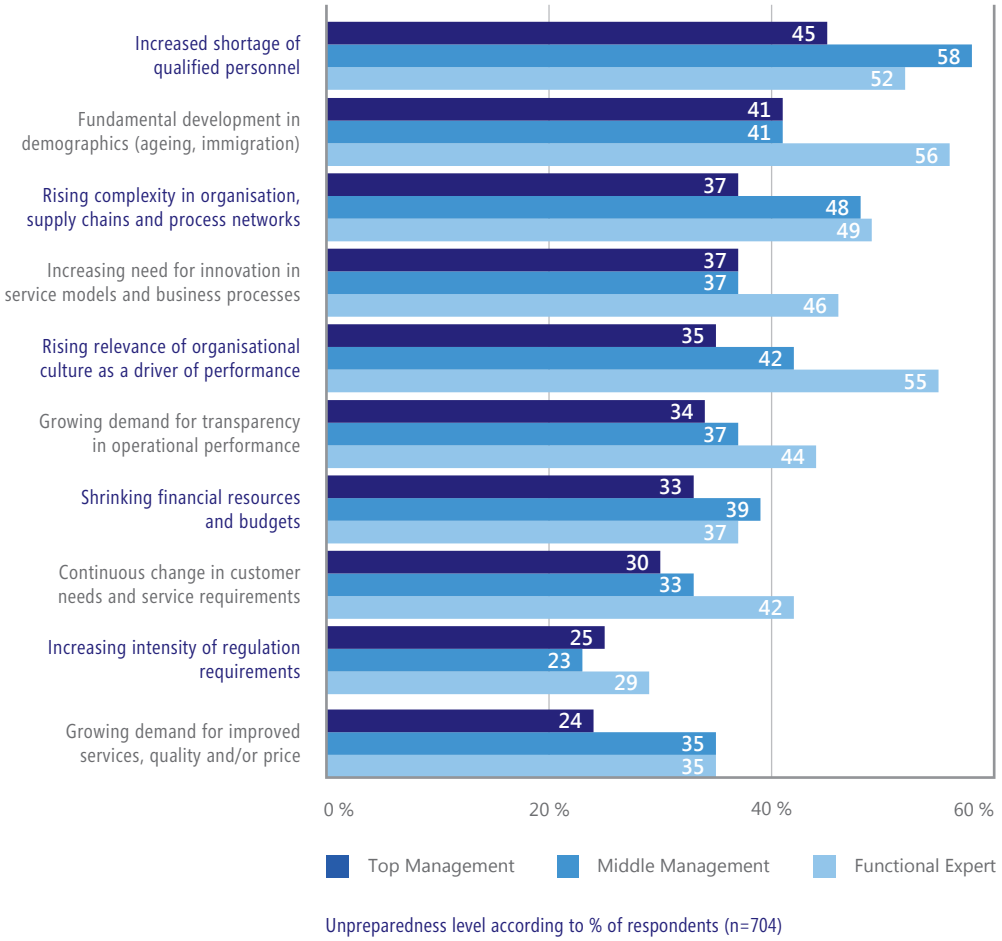
Fragile readiness to face the challenges

A challenge is only a problem when you are unprepared to overcome it. By being prepared any challenge can be turned into an opportunity. So let's explore the readiness of European service organisations to tackle the challenges ahead of them. Chart 2 indicates the percentage of respondents who consider their readiness being low/slightly low.

More than one-third of all respondents are unprepared for the challenges they expect to face over the next three years (37%). That said, one out of every two organisations claim they are unprepared to deal with the top three challenges. These challenges are also the ones, which had the highest increase in importance (see Chart 1). The people development challenges are indirectly connected to demographics and shortage of qualified personnel. However, the top management ranks are more confident in their organisation's ability to tackle future headaches, whereas middle managers/functional experts have a more negative/realistic view on the matter.

2 Unpreparedness for future challenges

→ Most are unprepared for shortage in personnel and demographic changes



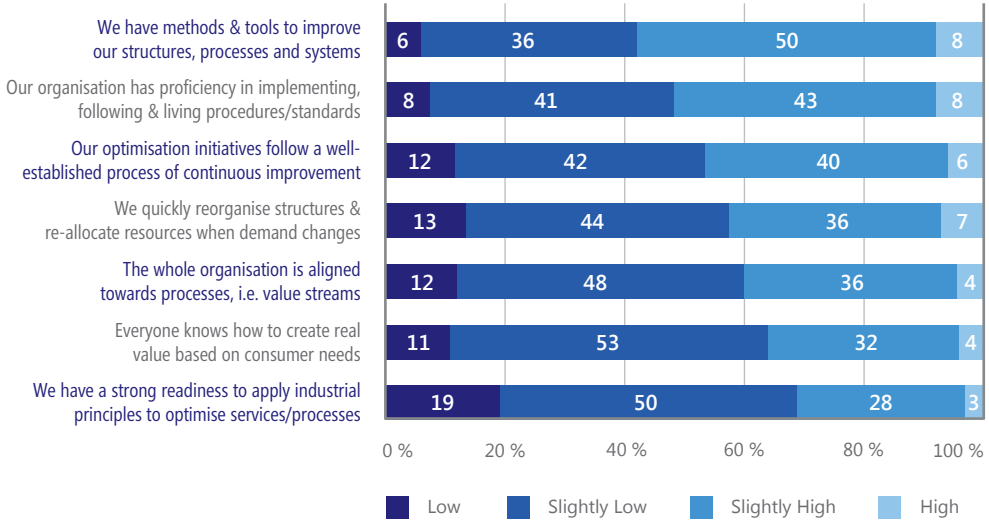
Unpreparedness level according to % of respondents (n=704)

The struggle to develop the right competencies

Let's dig deeper into the competence situation and explore two crucial competence areas for beating future challenges: 'process improvement' and 'general change management' competencies. Chart 3 illustrates the degree of competence level within seven different organisational process improvement indicators.

3 Process improvement competencies

→ The current process improvement level is quite weak



Competence level according to % of respondents (n=704)

The top three statements, in the chart above, indicate that the majority of service organisations have methods and tools in place to improve their businesses. But the last three statements indicate that the right competencies to align the organisation towards customer needs are somewhat less developed. Least competence is found in the readiness to embrace industrial principles for optimising services and processes. This relates directly to the capability to adapt the basic principles of Lean thinking, such as customer centricity, pull, flow and waste-free value creation, to the different conditions in Service organisations.

In short, five out of seven statements rate competencies as being low/slightly low. This indicates that a considerable amount of service organisations are still in the process of developing the right competencies to meet their challenges.

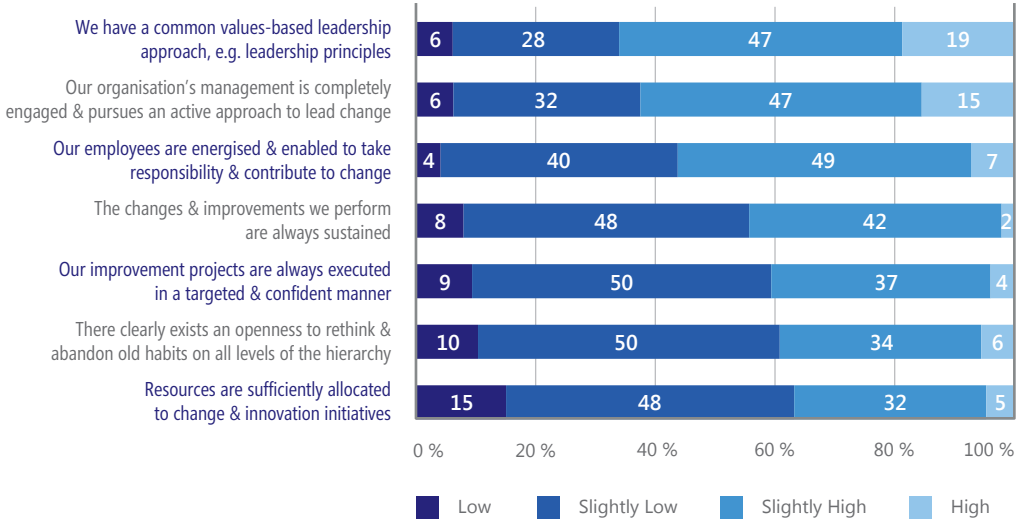
Turning to Chart 4 (see next page), we observe a similar picture, but this time focusing on the change management competencies. Here four out of seven statements rate competencies as low/slightly low. The weak areas of change management skills seem to be centred on the actual execution, where they experience difficulty in finding the time (resource allocation), changing old habits, driving projects forward and sustaining obtained results.

That said, three statements reveal that the majority actually do have slightly high/high competence skills in the people and managerial orientated areas. Leadership is values-based and aligned, management is engaged and active, and employees are responsible and contributing. This indicates that, in general, service organisations seem to have the right people and the right attitude, but lack the tools and methods to deal with the challenges they face.

An insightful twist to Chart 4 is revealed when the survey results between the organisations' different management positions are compared. How aligned are we, and do we have the same view on our strengths and weaknesses?

4 Change management competencies

→ Two sides to every story: difference in change management competencies



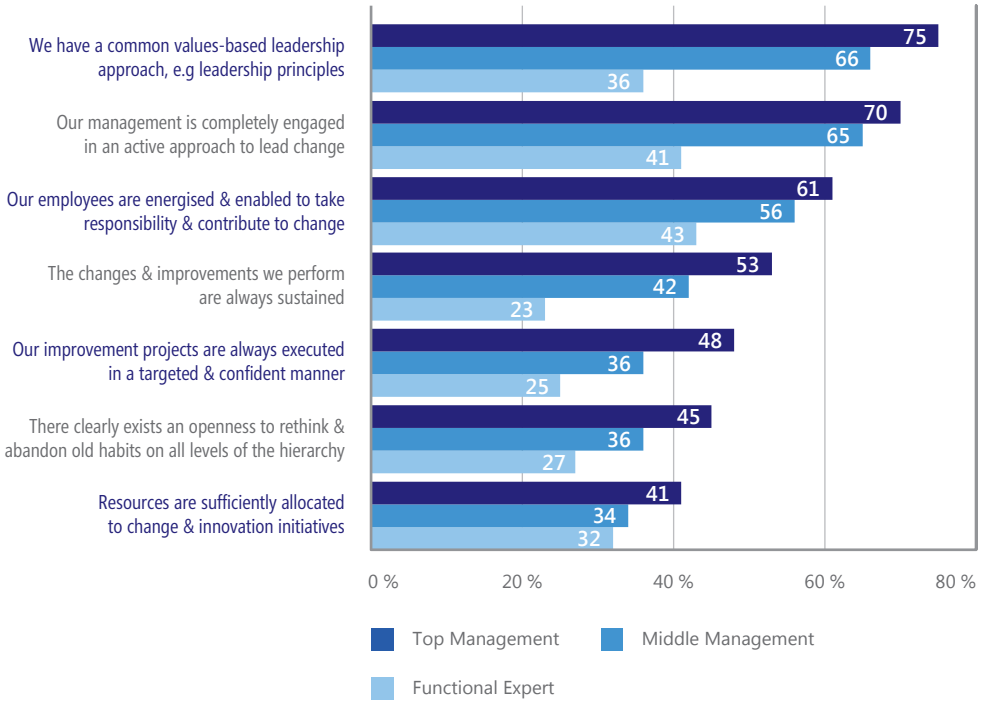
Competence level according to % of respondents (n=704)

Chart 5 tells a similar story to Chart 4, but with responses from different management positions and functional levels. In general top management has a much more positive view on their current competence levels, especially concerning their own strengths, with 75% indicating a high degree of common values-based leadership. But, interestingly, only 35% of functional experts share their viewpoint. Another large difference exists in sustainability, where 53% of top management perceive that they are successful, whereas only 23% of the functional experts, who are closer to daily processes, believe that they can sustain results.

We believe that excellence in operations is of equal importance to all hierarchical levels of an organisation. The considerable difference in viewpoints indicates that although the strategic management approach is often there, implementation on all levels most probably lags far behind.

5 Change management competencies

→ A need for alignment between the different management and functional levels



Slightly high or high competence level according to % of respondents (n=704)

Top priorities for the future

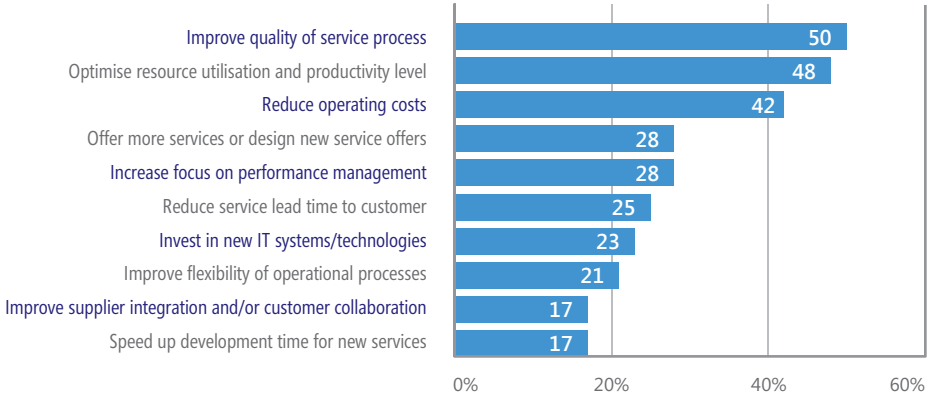
Finally, we look at the future priorities of service companies. We have seen clear statements where European service organisations claim that they are well aware of the upcoming major challenges and (despite the discrepancy between the management/functional positions) that a general weakness in developing the needed competencies in process and change management exists. Chart 6 indicates the main focus areas for the future.

Three areas specifically stand out, with more than 40% of all respondents indicating these to be at the top of their agenda: improve quality of services, increase productivity and reduce costs, and provide more/better service with less effort.

So there's a clear message about the major challenges and needs that service organisations will face in the coming years. An approach that has a proven track record to tackle the challenges that service organisations face is Lean Management. In the following chapter, we discuss this approach as a suggested way forward.

6 Top priorities in the future

➔ Focus on quality, productivity and cost



High or slightly high relevance for % of respondents (n=704), multiple answers possible

Lean as the answer

THE WAY FORWARD: LEAN AS THE ANSWER TO FUTURE CHALLENGES

In the previous chapter, the main observations from over 700 different service organisations were highlighted. The survey results indicate that service companies now face many more challenges, especially in the following areas:

- **Increased demand for improved service offers (quality)**
- **Increased productivity and reduced cost levels (costs)**
- **Increased demand for more and new services (innovation)**

The main problem for organisations is that they can't simply choose one of the above parameters to work on, because to be successful all three have to be improved at the same time. Another challenge is resources. Not only has it become more difficult to find the financial resources, but the right human resources too. And many fear that this issue will worsen over the next 10-20 years across Europe because of changing demographics.

To face these future challenges, we need to focus on a structured methodology that actually handles these various aspects. A dual-strategy concept that focuses on both growth and efficiency improvement, in parallel with Lean Management, is a methodology that aims for exactly that. Other methods could also apply, but the reputation and proven history of Lean is long, and although somewhat shorter than in manufacturing, its popularity in the service sector is increasing every year. We therefore advise companies to address their future challenges with the principles of Lean.

Lean Service: Introduction and history

It was the work of professors James P. Womack and Daniel T. Jones who, for the first time, put a label on the revolutionary mindset of optimising processes using Lean principles, with their book *Lean Thinking*, when it was published in 1997. It could not be called a new methodology since its origins went back to methods developed by Toyota, back in the 1940s, and then continuously refined up to the actual publication of *Lean Thinking*. The '70s and '80s had also provided us with some knowledge of parts of the system; TQM, TPM, Just in Time (JIT) and Kanban, for example, were familiar topics before the book was even published. But the *Lean Thinking* publication provided a clearer and bigger picture, because all the known individual tools and topics were connected under one umbrella, labelled Lean.

After a relatively slow start, mainly due to arguments, such as "We already tried JIT 10 years ago" or "We do not manufacture cars", the implementation of Lean principles in the manufacturing sector started to soar between 2000 and 2005. Different US and European studies/surveys now estimate that 70-80% of all manufacturing companies in the USA and Europe have some kind of Lean or Lean Sigma (inspired) programme running in their business (see ACE Operational & Lean Management Survey, 2008).

When Lean experienced a boom in the manufacturing sector, another factor became increasingly predominant – globalisation and the outsourcing of manufacturing to low-cost countries, especially in Asia. Europe therefore experienced quite a dramatic change over the past 20-30 years, as the service industry became the primary sector (70% of GDP), and manufacturing slipped back, becoming the secondary sector (25% of European GDP). And as a result, an office environment was fast replacing the traditional workplace setting of the factory shop floor. Thousands of jobs were converted from manufacturing into service-related functions, and with that Lean, as a method to deliver better service at lower costs, started to take shape in a new sector. The reasons for improving the service business in today's increasingly competitive markets (also outlined in the first chapter of this report), include:

- **All parameters show an increase in the perceived challenges looking into the future compared to looking back – for service organisations it has become more difficult to perform than ever**
- **The most challenging parameter is the growing demand for improved services, quality and/or price**
- **When looking at the respondents top three priorities for the future, it is quite clear what's on the agenda of most European service organisations:**
  - Improve service quality
  - Optimise resource allocation and productivity
  - Reduce cost level

In other words, deliver more (service) with less (effort) – a classic Lean task, but this time in the service sector, under the new banner of 'Lean Services'.

Elimination of waste in service processes

The target of Lean Services, as in manufacturing, is the elimination of waste. Lean specifies eight different types of waste that can be found in all types of processes:

	WASTE	EXAMPLES
1	Overproduction	Duplication of work, non-relevant procedures and activities/services not needed by the customer, producing at an unlevel speed through the process flow
2	Waiting Time	Delays by waiting on information, decisions, data, appointments, etc.
3	Unnecessary Movements	Unnecessary communication, information or authorised processes, inefficient office layouts
4	Unnecessary Processes	Unnecessary activities, duplicate data gathering, inefficient communication or information, inadequate or wrong system usage
5	Inventories	Backlogs in mails and documents of open orders, inquiries, proposals, etc.
6	Transportation	Lacking information or documentation, inquiries, inefficient organisational structure with extensive use of hand-overs (of responsibility)
7	Defects/Errors	Wrong documentation, errors in drawings, incomplete data/forms, call-backs
8	Under-utilised People Skills	Inadequate usage of employees skills and motivation, lack of tapping into employees knowledge on ways to improve processes

As stated earlier, as much as 99% of the total process lead-time for any given process can often be identified as one of the above waste types. By identifying the waste, the target then is to eliminate it and convert more and more of the work time into true, value-added activities. This method ensures increased efficiency and quality without the need to work harder or faster.

Conditions for Lean Service

As in the initial phase of Lean in manufacturing, service organisations also have and do experience resistance when embracing the principles of Lean. "We are not manufacturing products" is a commonly heard statement. But more and more people now acknowledge that Lean is not about the actual product/delivery, but instead more about the processes that deliver the product/service. All service organisations have processes; all processes can be optimised. And Lean is now an increasingly used methodology in the service sector. That said, the transfer of Lean from a manufacturing environment into a service context should not be copied in exactly the same way. There are important differences between the two sectors, and conditions need to be handled differently in order to succeed, for example:

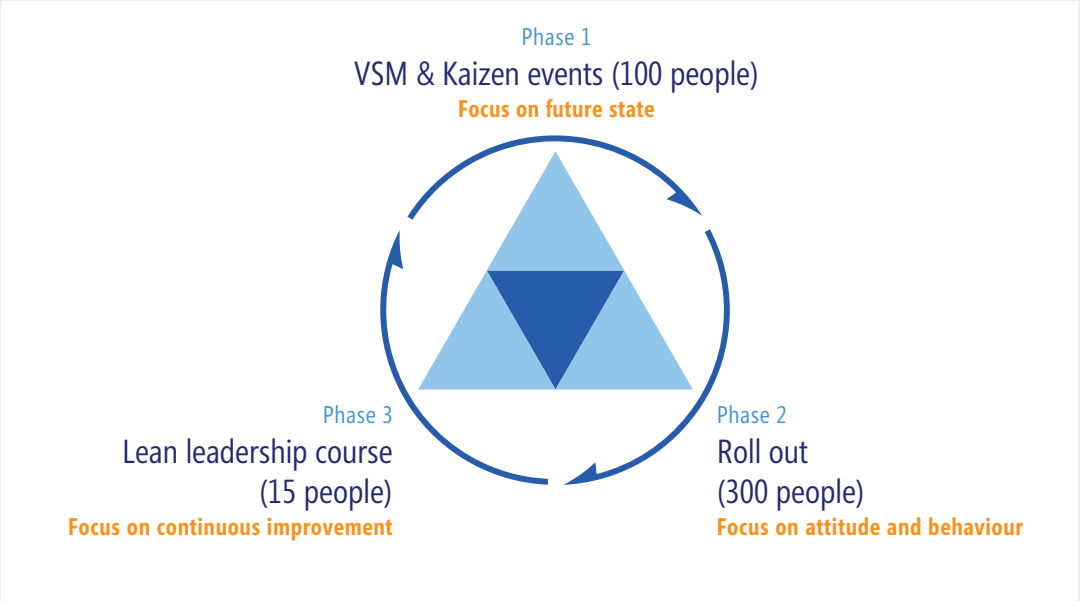
- **There are generally fewer repeatable process steps in service organisations than in manufacturing, and the customer is often part of the process**
- **Service organisations deliver according to a here and now demand, whereas manufacturing industries often produce to inventory**
- **The process flow is often invisible or hidden in IT at service providers, whilst it's mostly visible in manufacturing**
- **The output quality in the service sector is often intangible and based on feelings/expectations of the customer, whereas in manufacturing the output is generally more measurable, because the value/price generally depends on product specifications**
- **Most service organisations have either a short, or no, history of measuring performance and following standards, whilst manufacturing firms are used to both**

These days, hardly anyone questions the power of Lean in manufacturing. But for it to work, it has to be applied the right way, with top management attention and involvement. It also requires a long-term focus and people development, using the right Lean tools in the right sequence, specifically tailored for an individual company. The same, of course, applies to service organisations. Lean programmes can be successful in service businesses, but the correct translation from manufacturing is vital. If you keep too much of the original Lean manufacturing content, the risk of neglecting the differences mentioned earlier is high. But if you remove too much of the original manufacturing package ("We are not manufacturing"), you run the risk of not achieving the full potential and results that Lean is capable of unleashing. So it's a fine balancing act.

To learn more on how to design a successful Lean Service programme, turn to the following three chapters, where case studies of various service organisations demonstrate how they have achieved success using Lean principles.

Case A: Lean in Industrial Maintenance

LEAN SERVICE CASE STUDIES



"In cooperation with our people, ACE consultants not only improved our efficiency, quality and safety, they also created a structural change in our culture and behaviour."

Challenges and background

Like many firms in the oil and gas industry, a world-wide operating multinational in the Netherlands, responsible for the exploration and production of oil and gas, is facing many critical challenges, including:

- **A growing demand for an improved balance of costs and quality**
- **Rising complexity in organisation and processes**
- **Structural pressure on resources and budgets**
- **A shortage of qualified personnel**
- **Increasing relevance of culture as a driver of change**

"Asset Life Cycle Management" is vital for firms in this sector because the more cost efficient oil and gas exploration is, the more productive the assets will be. From that perspective, engineering and maintenance costs are a decisive factor because they determine the costs of operation to a considerable degree. Alongside environment and safety, efficiency is therefore a high priority for multinationals in this sector.

The engineering and maintenance of equipment at this multinational was carried out by a department of 250 full-time employees, as well as approximately 300 technicians from an Integrated Service Contractor. This cooperation was formalised in a Service Level Agreement. However, by the end of 2008, this multinational was no longer satisfied with the performance of the contract firm. There were many problems, including: issues of compliance, too much bureaucracy, a structural lack of efficiency, as well as too many health and safety-related incidents. As a result, performance and efficiency levels were being compromised.

To resolve the situation, the contract partners hired the services of ACE to apply the principles of Lean. ACE was contracted to not only help apply the Lean tools in maintenance, but also provide customised Lean training for top and middle management to improve efficiency and performance.

ACE approach

To introduce the main elements of Lean, ACE organised Kick Off Meetings for the top and middle management of both parties in the contract. The 'Lean Management Game'[1] was used to make participants aware of the differences between traditional processes and top-down management, versus the Lean philosophy and a bottom-up approach. Significant progress in performance (output, quality and safety) convinced key personnel of the benefits of Lean.

Between January 2009 and the summer of 2010, ACE helped to optimise the maintenance process, together with 150 representatives of both contract parties in about 10 working groups. Numerous Kaizen sessions were organised, where several Lean tools were used to create a better flow in maintenance processes to eliminate disturbances, reduce waste and improve the Hands on Tool Time (HOTT). Other Lean tools used, included:

- **Value Stream Mapping**
- **Standardisation**
- **KANBAN and 5S**
- **TQM**
- **Jidoka and JIT**

Together with the shop floor employees, over 250 improvement measures were created, all SMART-formulated (Specific, Measurable, Achievable, Realistic and Time-framed). This bottom-up approach contributed to a smooth implementation of the changes in structure and processes. In addition, a 'hearts and soul' training was rolled out to embed the lean philosophy in the DNA of all employees. As a result, a connection between the changes in structure and processes was created, which resulted in a change in behaviour and attitude – proactive ownership, and improved sense of commitment and responsibility.

Results

The involvement and enthusiasm of employees to date has been overwhelming, and the success has been phenomenal and measurable. It's no wonder that the responsible Engineering and Maintenance manager recently stated: "The approach and experience of the ACE team has given our people energy and inspiration: our employees are more proactive, they show more ownership and operate much better in teams."

ACE's Lean principles helped to achieve about 15% efficiency improvement in the maintenance of oil and gas equipment, making a considerable contribution to Asset Life Cycle Management. This approach also gave a serious push to Lean Thinking and Lean Leading, which resulted in much better performance in Health, Security and Environment and Total Productive Maintenance (less defaults and rework).

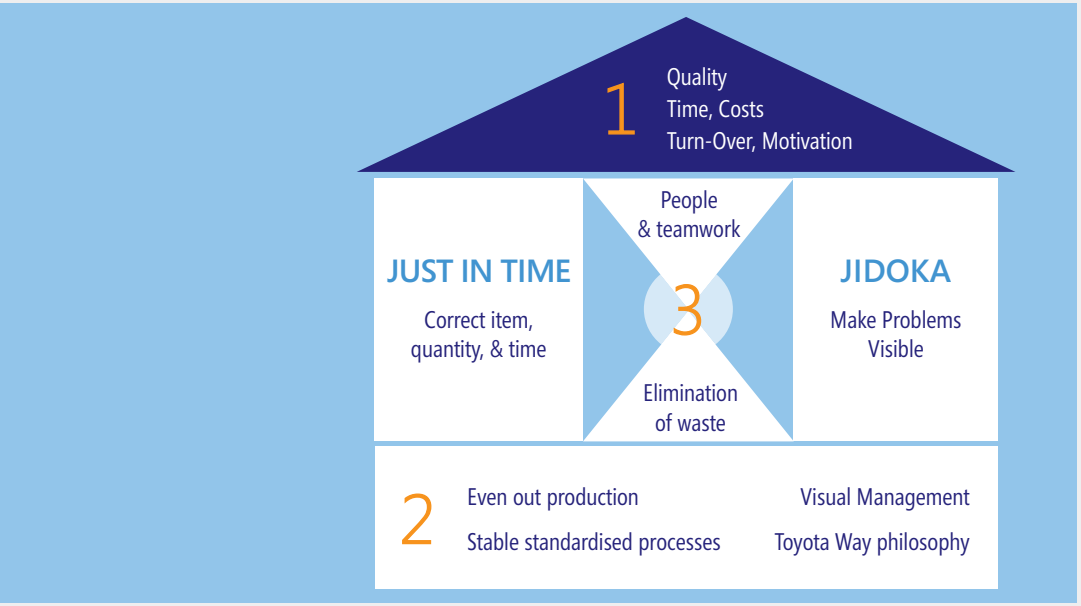
Highlights

- **Structural efficiency improvement of 15%**
- **Health and safety and quality of performance have improved**
- **Improvement in leadership and commitment**
- **Awareness of First Time Right (Jidoka)**
- **Reduction of waste and disturbances through and flow**

[1] Lean Management Game: a lean tool developed by ACE

Case B: Lean in the Insurance Sector

LEAN SERVICE CASE STUDIES



"The ACE Operational Excellence project, focusing on a Lean and operations management approach was a great success. It has created an echo in every corner of the organisation and created significant results by moving mountains", stated the Chief of Development and Operational Excellence Centre.

Challenges and background

For several years an insurance firm in the financial sector had a tendency to focus on risk management, instead of optimising on the actual operation and production processes to improve productivity and customer service. Because employee competencies generally vary hugely in the insurance sector, the quality and quantity of the tasks carried out over time were inconsistent, which compromised productivity and customer service levels delivered by this firm.

The three key challenges for this organisation included:

- **Reversing the trend in operating costs, so that the overall cost rate is reduced**
- **Increasing customer retention through better service and faster processing of claims**
- **To get its competent leaders to focus more on operations management**

ACE approach

The main characteristics of the ACE approach included:

- **Management as the focal point to better focus on the entire value stream, and not solely on isolated processes**
- **Operations and Lean management training for all leaders involved, to ensure synergy on projects and operations, to produce better results**
- **Build internal Lean consultancy skills in parallel with the project to ensure consolidation and continued development of the organisation**
- **Three highly focused optimisation projects over a period of 18 months (mid-2008 to 2010) in all areas, led by two vice presidents and 10 managers**

Different project phases

With a duration of only six months per project, the process needed to be closely monitored with focused project management. Any deviations from the plan or expected results were quickly identified and appropriate action was taken to get back on track. The project was split into four phases, based on the Lean Temple model (see diagram opposite) focusing on:

- **Identifying potential – Phase 0**
- **The roof/targets – Phase 1**
- **The fundamentals – Phase 2**
- **The walls and the people – Phase 3**

Phase **0** ➔ **Potential assessment**
Management was unsure about the potential and what targets should be set for the project. The potential assessment provided hope that even one of Europe's already most effective insurance companies could still benefit from implementing Lean. The targets set for this insurance group were based on the following five parameters: customer value, employee, economy, processes and management performance.

Phase **1** ➔ **Designing performance management**
Breaking down strategic goals into specific operational objectives, which are action-orientated for both management and individual employees.

Phase **2** ➔ **Stabilisation**
Design and implementation of new operational management principles.

- **Capacity planning by year, week and day**
- **High frequency, visible performance management in all departments (using the month, week and daily flight deck solution)**
- **Using tools from operations management training**

Phase **3** ➔ **Optimisation of processes and quality**

- **Implementation of visual improvement boards with weekly meetings**
- **Value stream mapping of internal and extended processes**
- **Implementation of standardisation driven by employees and owned by managers**
- **Short analysis and intense implementation process (Kaizen Blitz), and follow up in four-week cycles with high employee involvement to ensure ownership of change**
- **Implementation of quality organisation and structured problem solving to focus on the costumer, both internal and external**

Results

The following achievements have created great value for the company:

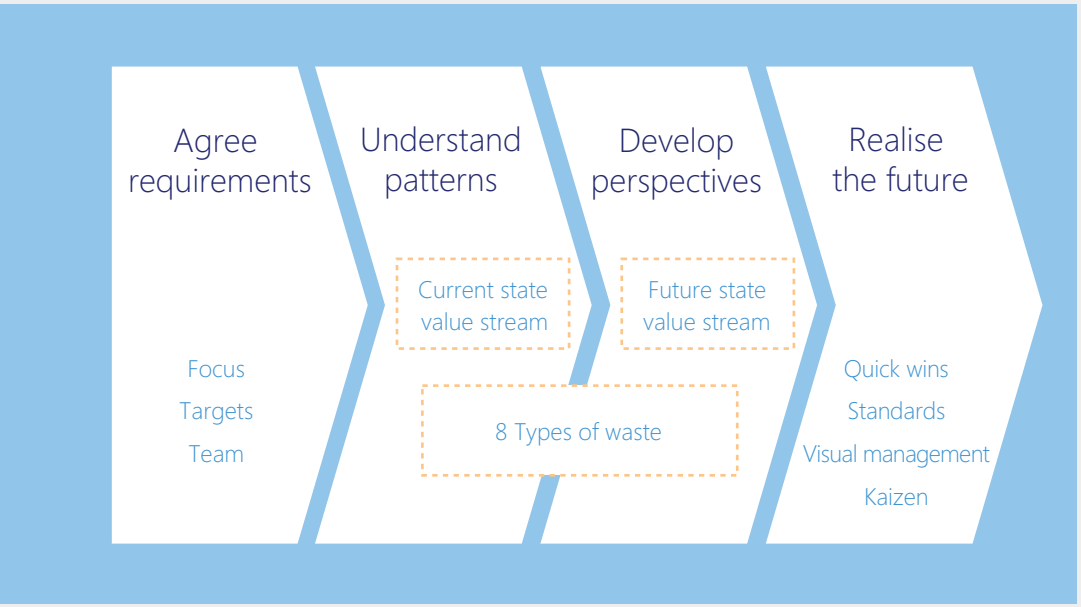
- **Productivity has increased by 51%**
- **The number of quality assessments has increased six-fold and quality has improved from 37% to 77%**
- **Process lead time has improved by 79% (reduced from 6.9 to 1.4 days)**
- **Service levels over the phone have improved by 31%, with a reduction in variation by 85%**
- **The number of lost calls has reduced by 81%**
- **Employee satisfaction has improved by 26%**

Highlights

The company has subsequently managed to create even more significant results through further continuous improvements in the organisation. The internal Lean consultant and the trained change agents now help to maintain the already implemented solutions and they are being developed further with the PDCA (Plan, Do, Check, Act) Mindset.

Case C: Lean in Industrial Retail

LEAN SERVICE CASE STUDIES



"ACE's Lean approach towards our retail processes was a great success: lead and process times dropped and productivity increased. We will keep this continuous improvement ongoing."

Challenges and background

For years, an industrial retail company was achieving double-digit growth, which was always managed by hiring new people. However, despite the growth, productivity decreased every year. The challenge was to break the rule 'more business needs more people'. The retailer suffered especially from:

- **Decreasing productivity over the last few years**
- **Long lead times for proposals and orders**
- **Poor collaboration between the sales and purchasing departments**

This firm wanted to overcome these challenges by breaking the firm's old rule of employing more people, and instead improve their processes to sustain growth.

Retail businesses generally have two core processes: selling and buying. However these processes are highly repetitive, with little variation. Low margins cause high cost pressure and the necessity for continuous productivity improvement. The main external challenges for most industrial retailers are:

- **Growing demand for improved service quality, i.e. flexibility and fast reaction time**
- **Need for transparent operational performance management**
- **Increasing shortage of qualified personnel at affordable cost**
- **Rising process complexity**

ACE approach

The ACE approach, to identify customer value and eliminate waste, focused on redefining the core processes based on market requirements. A value stream analysis was carried out for all the main processes, tracking down waste in each area. Based on the outcome, future core processes were defined. Waste was identified and eliminated in the following seven categories:

- **Overproduction: elimination of repeated tasks by creating a culture of 'getting it right the first time round'**
- **Waiting time: improve the flow principle for proposal and orders, so there's no waiting around for blocks of orders to arrive**
- **Movement: better integration of sales and purchasing teams, depending on processes**
- **Processes: these were redesigned, so they are not only better integrated, but based on customer value**
- **Inventories: define the maximum workload per person/workplace, and route orders accordingly**
- **Transportation: eliminate paper-based work, by switching completely to IT**
- **Defects/errors: clearer rules and standards for better collaboration between departments**

All the processes have been redesigned and are based on two basic principles:

1. **Standardisation: the same systems and tools are used throughout all processes to facilitate workforce flexibility and training of new employees**
2. **Visual management: Computer screens and the work environment have been redesigned for transparency and a clearer overview of orders**

After the implementation of the new processes, all employees have been trained in the new system. They not only understand the new processes, but also the principles behind them. Finally, a Kaizen system – based on a weekly improvement structure – was integrated company-wide to ensure ongoing improvements.

Results

"**Today nobody can imagine going back to the old structures and processes.**"

Employee satisfaction of day-to-day work in every department of the company has improved. Employees not only appreciate the new system, but are now also more open to suggesting their own improvement ideas and initiatives. Overall, the results have improved and performance indicators have exceeded original targets. For example:

- **Process times have decreased by up to 60%, i.e. from 20 to 12 minutes for a sales order**
- **Lead times have reduced by up to 55% – from eight to five days**
- **Productivity has increased by 20%**
- **There is now high transparency and reliability in all processes**
- **Productivity is now not only manageable, but comparable in all departments**

Highlights

The company continues to grow against its market as a result of quicker response times, increased flexibility and reduced costs.

Principles and tools for a general Lean Service programme

GUIDELINES FOR SERVICE ORGANISATIONS: MOVING IN THE LEAN DIRECTION

As mentioned earlier, the individual tailored approach of Lean to your own Lean Service programme is crucial for success. The following information is general advice, based on our experience of conducting numerous Lean Service implementations throughout Europe, in all types of service organisations, including: financial, professional, ICT, industrial, transportation, retail, public, healthcare and many others. We differentiate three phases of implementation:

Phase **1** **Creating basic stability**

Phase **2** **Improvements through people**

Phase **3** **Advanced focus and continuous improvement culture**

Each phase will require different methods and tools one should primarily focus on in order to reach a certain level of maturity, before embarking on the next stage. Phase one generally has a duration of 1-2 years, phase two tends to last 2-3 years, and phase three is an ongoing, infinite phase. For each phase, we recommend five tools/methods for that maturity level: four tangible 'hard' tools and one management 'soft' tool. Without the soft tool, the sustainability of results achieved by the hard tools, will decrease within a short period of time.

Phase 1 - Creating basic stability

Before hurrying to initiate various improvement changes, it is strongly advised to start with a fundamental understanding of your current situation, and then dedicate first efforts on gaining basic control of the processes in your business. We recommend the following five areas to focus on during the first phase:

1 **Visual Performance Management (VPM)**

2 **Standard Work**

3 **Order and Tidiness - 5S**

4 **Value Stream Mapping (VSM)**

5 **Lean Leadership Development - Operational Management**

Visual Performance Management (VPM). What is being measured gets done. With this concept, we establish the ability to measure our day-to-day performance. If we want to deliver 'better', 'more', 'faster', 'efficient' services, then we need to define what that is. The visual part of the concept is added because we want it to be a tool for the employees behind the process – not a control tool in a manager's computer. VPM is a daily monitor that indicates when we are behind/below (so we can react to the problem), and when we are ahead/above (so we can celebrate our efforts) at any given time/point.

Standard Work. Where there is no standard, there can be no improvements. Not all parts of a process can be standardised, but often there are only a few areas that need special handling, and even those can be handled in a standardised way, even though the output may be one of a kind. Spotting the various areas where standards can be applied and implemented, will improve results in a big way. Further improvements, based on the current best known standards which all employees follow, then become easy to establish and will have an immediate impact on everything.

Order and Tidiness – 5S. The method to achieve and sustain an effective work environment. 5S is about having a fixed place for all materials (binders, forms, consumption articles, etc.). Do not make the mistake of directing your 5S focus towards individual workplaces. Yes, people should follow a clean-desk policy after work, but how many pencils they have in the drawer and where the coffee cup is placed during work has nothing to do with Lean/5S. The main focus should be on shared areas, ensuring that everybody knows where to find and place the things that others need.

Value Stream Mapping (VSM). For the first phase, VSM should focus on mapping the current process. Then, in phase two, we use this to map the foundation for making process improvements. The overall purpose of VSM is to see the process with a new set of eyes, with a focus on flow and lead-time. The VSM of your current flow will probably indicate that the actual processing time of a given service often has a 97-99% waiting time. This opens up potential for dramatic improvements in the delivery time of your service. Reducing your lead-time will also see improvements in other areas, such as improved productivity, quality and customer satisfaction.

Lean Leadership Development - Operational Management. To successfully apply the above tools and methods, it is crucial to have aligned management. The soft managerial 'tool' recommended for this phase addresses the manager's ability to drive the business. It's not just about improving the business, but about gaining control. The managerial aspects are, of course, closely related to the tools introduced. So the aim of this phase is for the manager to take charge of the new performance board, support and ensure that the new installed standards are being followed (including the 5S standards), and be the driver of the current state mapping process.

Phase 2 - Improvement through people

With the basic foundation in place, the next phase will have an increased focus on improving our current (stable) level into a new, improved (and stable) level. The chosen method of how to improve and make the change is crucial for long-term development. People development is the main focus here; we want to develop employees so that they have the fundamental ability to follow both the current standard, yet, at the same time, question the standard for ways to improve. We recommend the following five focus areas for this phase:

1 **Flow and Service Families**

2 **Heijunka Workload Levelling**

3 **Exchange and Learning – Dojo Training**

4 **Quality Circles**

5 **Lean Leadership Development – Lean Management**

Flow and Service Families. With the current state value stream map in place from phase one, we now focus our attention to the future state. The purpose is to increase the flow of our services (since it drives shorter lead times and improves efficiency, quality and customer satisfaction). The first step is to arrange all your services into Service Families. A Service Family is a group of service propositions that have similar process steps and complexity. Taking a simple example from a customer-handling department in an insurance company: Divide all tasks into 'difficult', 'medium' and 'easy' cases. Organise your team around these families based on competencies/experiences and give them end-to-end responsibility. We want the team to handle the incoming cases from start to finish, thus increasing the flow.

Heijunka Workload Levelling. Service organisations are often hit by daily changes in demand. This becomes even more visible in the dedicated Service Family teams if no Workload Levelling has been installed. Imagine that 'team medium' one day receives no customer inquiries whilst 'team difficult' is drowning in work. The concept of Service Families that gave us the fast flow would not survive for long. So we need to establish a levelling system. Lean uses a method called 'Heijunka', which secures a steady delivery of small work tasks during the day in order to achieve a balanced workload between teams. Heijunka has its limits though; when the daily variation exceeds a certain percentage, you need to absorb the additional variety with multi-skilled employees, through the concept of Dojo training.

Exchange and Learning – Dojo Training. People development is our finest asset. In a Lean environment, we are deeply dependant on skilled, flexible employees – skilled not just in one expertise area, but preferably in two or three; skilled not just in one professional role, but also have a holistic understanding of the entire process; and skilled not just in following standards, but also in finding and implementing improvements to current methods. The Dojo is a place and method for structured knowledge sharing by employees through other employees, with the mindset of 'what our best resources know, can benefit the rest'. This concept increases the overall learning curve of the organisation dramatically and helps to create more multi-skilled employees, capable and ready to perform a variety of tasks throughout the day.

Quality Circles. Where the Dojo training focuses on the operational skills of doing the job, Quality Circles focus on developing skills to improve the job. Quality Circle teams are often misinterpreted, due to its name, as only a quality focused improvement team. But the improvements can be of any kind as long as it targets KPIs, such as delivery performance, quality, cost, customer and employee satisfaction. The setup of the team can differ from company to company, but the norm is to assign a team of four or five employees on a quarterly basis. They are given a couple of hours every week to work on an improvement of their choice. The main purpose is purely competence development, but will also result in impressive improvements.

Lean Leadership Development – Lean Management. For the soft managerial 'tool' in this phase, the manager should focus on building an 'improvement' mindset into the team. This second phase requires a more supportive/coaching approach, whereas in the first phase – establishing the foundation – is not open for discussion. This demands more time and involvement in the team to help create improvements, as well as supporting Dojo training and the Quality team if and when required.

Phase 3 - Advanced focus and continuous improvement culture

By now the organisation is quite mature and advanced. The fundamentals are in place, the culture is changing and initial improvement results should be visible in most parameters, like delivery performance, quality, productivity, customer satisfaction and employee satisfaction. For this phase (which basically has no end) the key focus is to build the system/DNA that ensures ongoing development and improvement of the organisation's processes and results. We recommend the following five focus areas for this final phase:

1 **Expanded Competence Matrix**
2 **Jidoka (first time right quality)**
3 **Six Sigma**
4 **Kaizen (continuous improvements)**
5 **Lean Leadership – Hoshin Kanri Management**

Expanded Competence Matrix. The first level of a competence matrix should already be established as a part of the Dojo training. This first step, however, requires development of the 'professional' skills in order to increase multi-skilled flexibility of operational skills. The expanded competence matrix adds competencies related to improvement skills. Each employee can increase their competence level by participating in, for example, Quality Circle teams and Kaizen activities.

Jidoka. Lean basically consists of two main areas to improve. Creating flow and creating strong processes that deliver the right quality, first time round. Where phase two focused on the flow parts, this phase should focus on the more complex area of consistent quality. Jidoka is a structured methodology that aims to build good quality in the process, ensuring that mistakes are minimised or eliminated. It also

includes methods to investigate mistakes, using different quality tools like Fishbone, Pareto, 5xWhy, etc.

Six Sigma. Once a concept in its own right, Six Sigma now often forms part of a (mature) Lean programme and is often applied to the more complex, quality problems, where the root cause isn't that clear. It aims to reduce the process variation to a minimum, making organisations able to deliver a consistent result every time. It has a clear project management methodology attached (DMAIC – Define, Measure, Analyse, Improve, Control) and is very strong in data-driven search solutions.

Kaizen. Kaizen is about involving all employees in the constant improvement of our processes. Always question, how do we think and do it every day? It includes structured methods to look for improvements, describe suggestions, handle incoming feedback and execute chosen improvements. With Kaizen in place, the Lean programme/project has officially ended and a new ongoing improvement culture has taken over. This ensures that the improvement level achieved during the previous 3-5 years doesn't just become the new status quo.

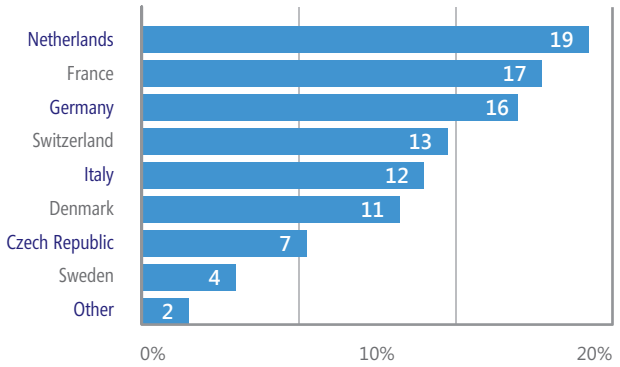
Lean Leadership - Hoshin Kanri Management. The final managerial soft 'tool' for supporting the overall process is related to the principle of striving for perfection. Hoshin Kanri is a structured methodology that bridges strategy to operations, and secures alignment between all functions and hierarchical levels. It consists of a yearly, strategic, top management workshop where the direction and targets for the coming year are decided. After this, a policy deployment process starts, which include the use of Lean tools like A3 reporting for a breakdown of the overall targets for each department and team. And weekly/monthly follow-ups on the status/execution of targets, are carried out with highly useful managerial tools such as 'A3 catch-ball' and 'Plan, Do, Check & Act'.

Finally, as a general conclusion, we would like to emphasize that deploying Lean in service organisations as outlined in the above steps, together with the recommended tools, makes it possible for service providers to turn the challenges into future opportunities and unique selling points. Lean, without a doubt, makes European service organisations better, smarter and faster!

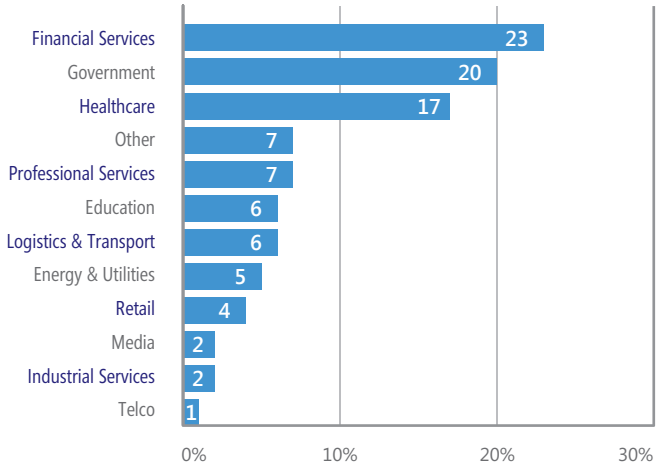
Participants of the ACE 2011 survey

STATISTICS (n=704)

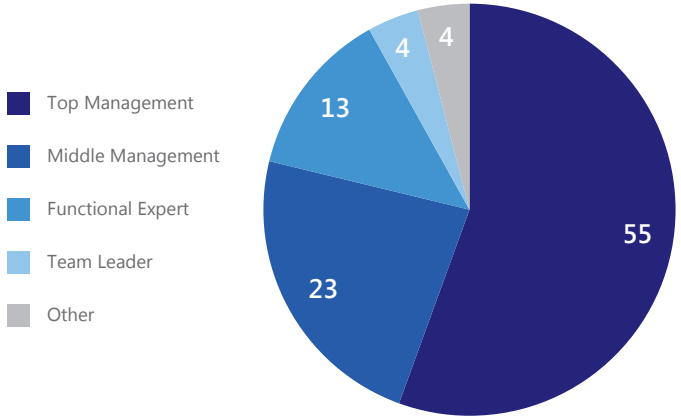
7 Participants per country (in %)



8 Participants per service sector (in %)



9 Participants by organisational position (in %)



Glossary of common Lean Tools

Value Stream Mapping
Learning to see waste (current and future state). Process description and analysis

Kaizen
Continuous improvement (including implementation)

5 Why
Problem solving aimed at finding the root cause

7 wastes
Identifying waste (activities with no added value)

Standard work
Documenting and implementing best practices (standard operating procedures)

5S
Organised and visual working space

Flow layout and cell design
Intelligent routing of process steps

Kanban
Signal to produce/deliver a product. Planning system based on withdrawal (pull system)

Jidoka
First time right, built in quality

Just in Time
The right part, at the right moment, in the right quantity

Performance Management
Safety, reliability, quality, efficiency and costs. Including daily, weekly and monthly reviews

Visual Management
Presenting (performance) information in a visual way

Heijunka Workload Leveling
Leveling workload to soften effects of fluctuating demands and to prevent overstressing

Dojo training
Sharing knowledge and best practices within the company – employee to employee – in order to improve overall operational skills

Quality Circles
Regular team gatherings to improve key performance abilities

Expanded Competence Matrix
Structured overview of professional skills and improve multi-skill flexibility – first step to Dojo training and Quality Circles

Six Sigma
Management strategy, which uses a wide variety of methods and tools in order to meet quality standards

Hoshin Kanri Management
Structured methodology to support and communicate the strategic goals between all hierarchies

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