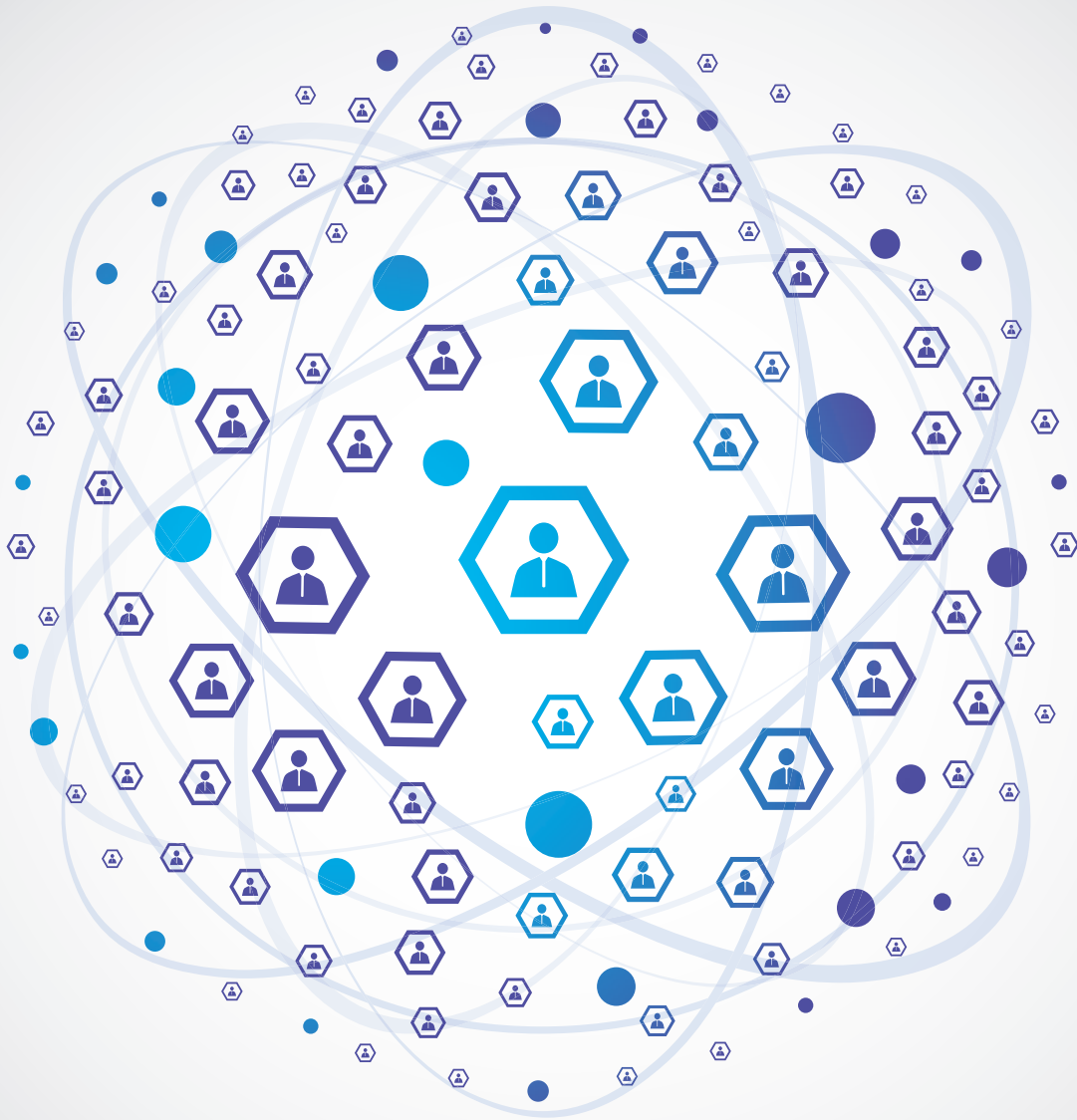


# Seven Critical Success Factors in the Shift to Services



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# Acknowledgements

## The Cambridge Service Alliance

The Cambridge Service Alliance is a unique global partnership between businesses and universities. It brings together the world's leading firms and academics, all of whom are devoted to delivering today the tools, education and insights needed for the complex service solutions of tomorrow.

### About the Cambridge Service Alliance

Founded in 2010 by BAE Systems, IBM and the University of Cambridge's Institute for Manufacturing and Judge Business School, the Cambridge Service Alliance brings together world-leading organisations with an interest in complex service systems to:

- Conduct insightful, yet practical research to improve the design and deployment of high-performance complex service systems.
- Create and develop industrially applicable tools and techniques that deliver competitive advantage.
- Provide an unparalleled network of academics and industrialists that share experience, knowledge and insight in how better to design and deploy high-performance complex service systems.
- Develop and deliver public and member-only education programmes to raise the skill levels of organisations.

## Joining the Cambridge Service Alliance

### Industrial members

The Cambridge Service Alliance is a business-led alliance with industrial members who have an active interest in the shift to services. It brings together companies prepared to make significant and long-term contributions to support the Alliance. The benefits of joining include:

- Challenging yet practical insights into the design and delivery of high-performance complex service solutions.
- Practical tools, techniques and methodologies.
- Education and training to enhance capabilities in service and support.
- A stimulating international network of the world's best talent engaged in solving problems associated with complex service solutions.

### Academic members

The Alliance draws on members from across the University of Cambridge, initially from the Institute for Manufacturing and the Judge Business School.

Internationally leading researchers and educators will be invited to join the Cambridge Service Alliance to meet specific research requirements and the needs of industrial members.



### Further information

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### Acknowledgements

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# Executive Summary

**M**aking the shift to services is a complex and challenging task<sup>1</sup>. Those firms that have succeeded have learned many difficult lessons along the way. Our research has distilled these lessons into seven critical success factors that anyone contemplating a service transformation needs to understand and address.

Critical success factors (CSFs) for any business are defined as the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organisation.<sup>2</sup> In other words, a critical success factor is a key factor or activity needed to ensure the success of a firm.

Together our seven CSFs create a roadmap for making the shift to services. There is a logical progression to them and a relationship between them. The first thing you need to do is assess the readiness of both your external and internal environments.

Only when you are confident that you, your delivery partners and your customers are all willing to embrace the changes that the shift to services demands can you create the strategic and cultural conditions in which successful services can be designed and delivered. Appropriate governance structures, resources, customer engagement activities and service processes are all critical to success and all need to be put in place so that they can run in parallel and coordination with one another.

Finally, you need to establish a mechanism that communicates and embeds the good practices you have learnt and so strengthens and sustains your service strategy – and creates a culture of innovation and continuous improvement. However, making a successful shift to services is about more than what goes on within your organisation. You also need your delivery partners and other stakeholders in the ecosystem to commit to working together to fulfil your service strategy.

The seven CSFs are:

1. **Assess your market and internal readiness:** making the shift to services means that all parties involved must be ready to change and understand the value of doing so.
2. **Create the right strategic and cultural context:** a service business is different to a product business and needs a completely new mindset to be instilled throughout the whole service ecosystem.
3. **Build the structures and governance for services:** firms need to make a clear commitment to services by creating properly empowered teams and the appropriate organisational structures.
4. **Get the resources ready for service innovation and delivery:** short- and long-term budgets need to acknowledge that services are very resource intensive and change over time.
5. **Proactively manage engagement and trust:** services are co-created with customers who are active participants in the service journey.
6. **Develop and embed service processes:** firms delivering services must experiment and adapt and they need processes that enable them to do that.
7. **Optimise services and communicate best practices:** services rely on continuous innovation and so require a 'best-practice' mindset.

If you can address these seven CSFs as you make the shift to services you will avoid many of the difficulties experienced by those who have trodden this path before you.





# Introduction

**T**oday's industrial firms face challenges at many levels. Market growth is limited. Pressure on resources means everyone is striving to do more with less. Cash flow is unsteady. Retaining a competitive sustainable position is a constant battle. Customers expect great products, services and experiences. The war for talent is endless, with intense inter-firm competition for skilled and capable people.

For manufacturing firms, making the shift to services represents a major opportunity, but also a challenge. Man Truck & Bus UK<sup>3</sup> took a good ten years to arrive at its winning service formula of selling 'miles per gallon'. ICI Explosives<sup>4</sup> took more than twenty years to develop a 'pay-by-result' service model. Today these organisations are both steadily capitalising on their shift to services. However, their transformations were slow, painful and resource-intensive because they had no roadmap to guide them.

*The aim of this report is to document the lessons the organisations have learnt in making the shift to services and, by doing so, provide a roadmap to help those embarking on this transformation journey.*

If you are involved with an organisation that is considering making the shift to services, this report can help you in four ways. First, it gives you a service strategy roadmap from start to finish. Second, it identifies the seven critical success factors (CSFs) that you need to concentrate on in order to deliver services successfully. Third, it gives you a set of actions that can help you realign priorities and focus your resources in order to accelerate the commercialisation of your services. Finally, it shows you how to instil a service culture in your company, ecosystem and market.

## Research approach

Three large industrial firms were studied for over a year. These case studies were supported by structured interviews and questionnaires and cross-referenced with secondary data. Vice-presidents, directors, managers, supervisors and front-line service employees participated in this research. In total 52 interviews were conducted, each interview lasting approximately 90 minutes and together producing 1,062 transcript pages. To increase the reliability of the findings, the results were presented to two focus groups comprising directors and senior managers from six large industrial firms. The feedback from these groups enhanced the framework and findings presented in this paper.

***'Assessing the internal readiness and creating the strategic and cultural context definitely need to come first before you dedicate resources or build a governance structure. Developing a clear value proposition for the service and a coherent business case is key to driving readiness internally and externally.'***  
**Monica Lund, VP of Market Innovation, Pearson North America**

# Critical Success Factor 1:

## Assess your market and internal readiness

### How can we tell when the time is ripe?

This is arguably the most important CSF of all: How ready is your market to accept a new value proposition and how ready is your organisation to deliver it?

### Why is it critical?

In order to make a successful shift to services there needs to be a fundamental change in the relationship between the service provider, its partners and their customers. Customers, for example, often have to relinquish control of particular processes to the service provider along with accountability for their performance and management of the associated risk. This requires a completely new mindset and high levels of trust between all parties. Everyone needs to be psychologically and emotionally ready to accept these changes in responsibility. If the appetite and commitment is not there, the risk of failure is high.

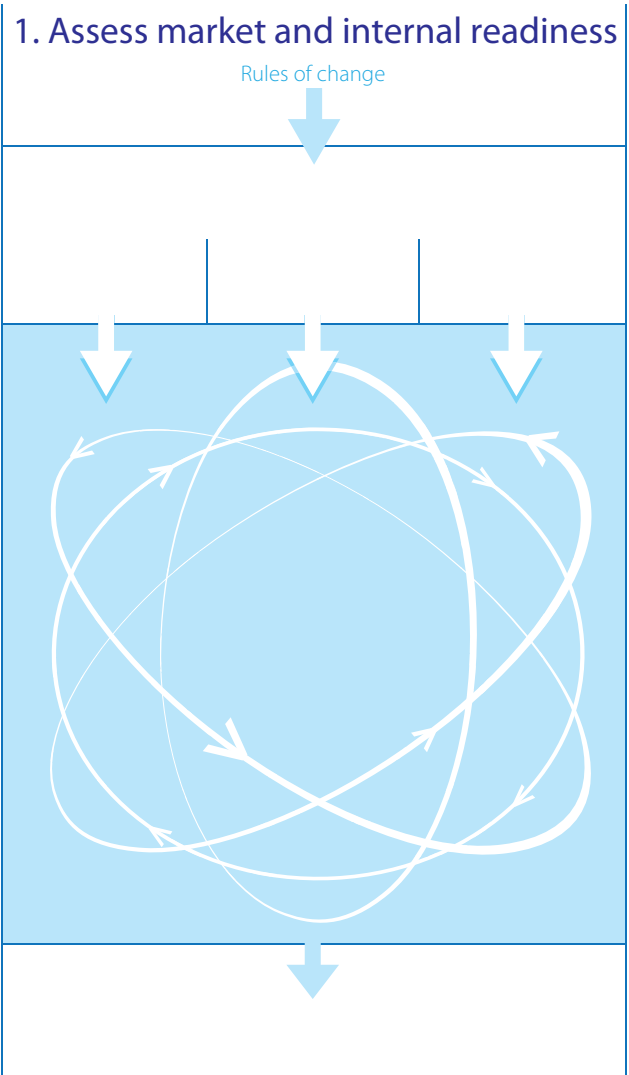
### What does it entail?

The first key element is to ensure you understand whether your organisation, your partners and your customers are all ready to make the shift to services. To do this you need to get a clear picture of where accountabilities lie across the service ecosystem and how these might have to change. You then need to assess how willing the key stakeholders are to accept those changes.

### Steps to success

There are four things you need to do in order to assess the readiness of your firm and the market:

1. Clearly define the service value proposition and confirm that it is appealing to all parties involved in its delivery.
2. Set, define and communicate a compelling business case for your customers – how will your proposed service help them achieve their goals?
3. Identify and run a prototype or pilot to evaluate: (i) the appeal of the value proposition; (ii) the effectiveness of the business case; (iii) the readiness of your customers to consume the service; (iv) the readiness of your organisation and your ecosystem partners to deliver the service.
4. Evaluate the results of the pilot to confirm whether the new service creates more value for your customers than previous solutions.





***'Mind-set change is a really key thing. It is a big change in culture and how you operate and what you do and what you need to become good at. Those things are about teams and people.'***  
**Dav Bisessar, Business Architect, IBM**

# Critical Success Factor 2: Create the right strategic and cultural context

## How can we create the right mindset?

This CSF focuses on developing the right strategic and cultural context for making the shift to services. In other words, it is about creating a service mindset. This mindset applies not only to the service provider, but also to the wider ecosystem of organisations working together to ensure the successful delivery of the service. If this is not in place any attempt to implement service strategies will fail. For product-oriented businesses the creation of the service culture, context and mindset is useful but not critical, but when organisations are competing through services, it is a key survival skill.

## Why is it critical?

People – both within the service provider and across its broader ecosystem partners – need to adopt a much more service-focused view of the world. In this highly competitive environment, companies need to recognise that the value to the customer lies in the solution being offered rather than the traditional physical product. This can only be achieved by instilling a service vision and value proposition in people's minds.

Our research shows that, in general, industrial organisations are good at planning and budgeting physical resources for the delivery of products and, sometimes, services. Yet they often forget to plan and budget the time and resources needed to engender the radically different mindset that services require.

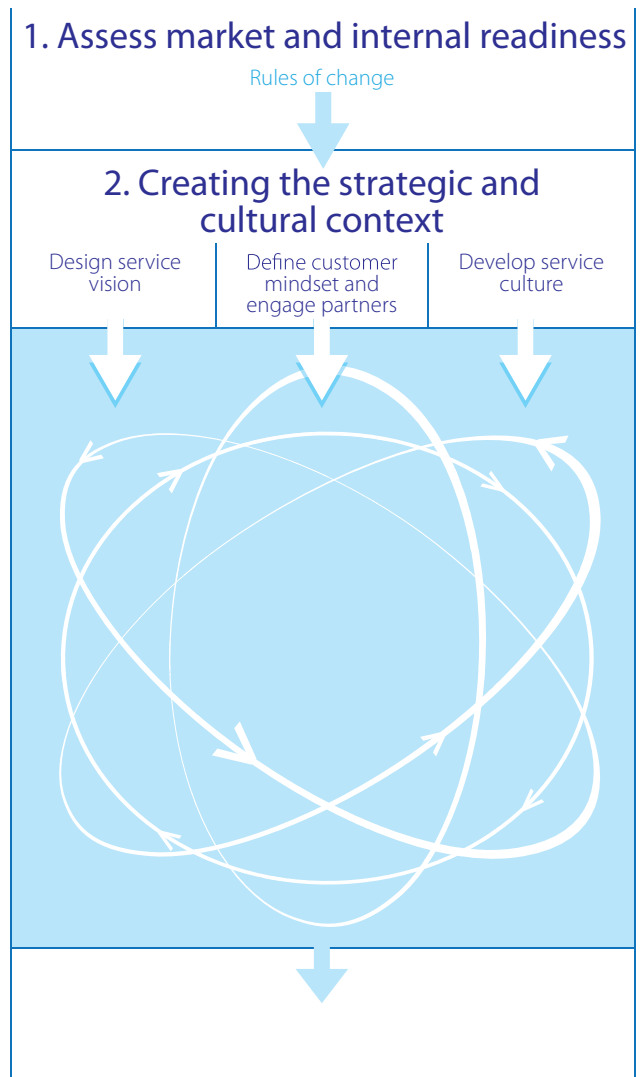
## What does it entail?

Creating the right strategic and cultural context involves crafting a clear and compelling story that persuades people of the value of services. Winning hearts and minds involves building a service mindset that ensures that people understand: first, that value in the service context is 'co-created' in partnership with customers and, potentially, customers' customers; second, that the role of leadership should be supportive and enabling rather than directive; and, third, that services depend on customer intimacy achieved through a combination of data, knowledge and deep relationships.

## Steps to success

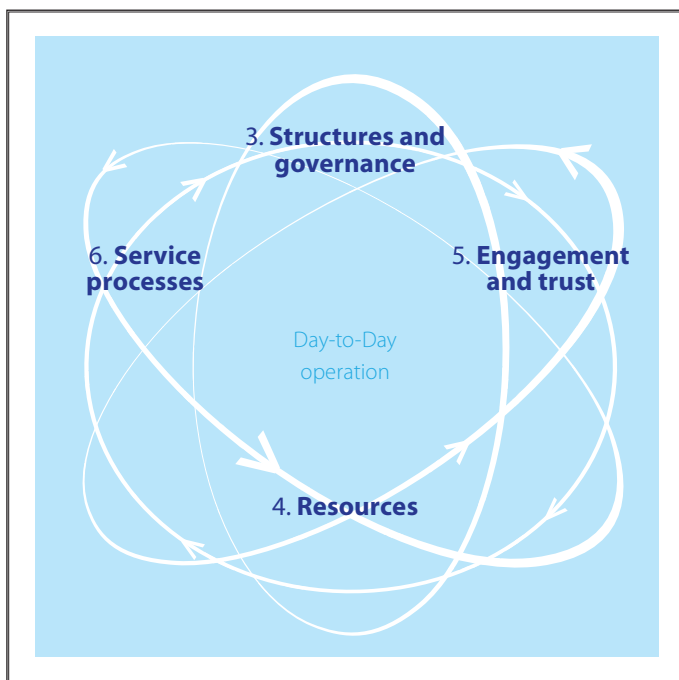
There are four things you need to do in order to create the right strategic and cultural context:

1. Define and communicate a clear and compelling service vision, underpinned by a coherent rationale for why services matter.
2. Ensure that people across the ecosystem understand and believe in the services vision and rationale so they are 'living' the service culture.
3. Ensure that your staff and your ecosystem partners' staff are fully engaged and have adopted an end-customer focus.
4. Ensure that your customers are psychologically prepared to consume your services.



# Tactical Critical Success Factors in day-to-day operation

**D**eveloping and managing services is a complex task. In a day-to-day operation, there are four critical success factors that need to be synchronised. These are: CSF 3 'Build the structures and governance for services', CSF 4 'Dedicate the resources for creating and delivering new services', CSF 5 'Proactively manage engagement and trust' and CSF 6 'Develop and embed service processes' (see diagram below). They interrelate to one another and constitute the internal working practices that organisations need in order to make and sustain the shift to services.



In services, the more complex the services (result-oriented or user-oriented services) your organisation offers, the more continuous engagement with the customers (end-users) is needed. Why? Because when you develop continuous communication with your customers, you will get more updated input and clarity about their expectations. And because you get more updated input and clarity from customers, you will use these as feedback to improve your internal processes. Because you feed back your processes to deliver better services, you will find that sometimes you need to modify your resource allocation, ecosystem participating partners, service design and delivery. In turn, because you modify resource allocation, ecosystem participating partners and service design and delivery, you will improve your customers' experience, service business model and even sometimes the governance of your interrelated systems. Then, the cycle continues again when you get further input from your customers and/or service ecosystem.

In conclusion, these four critical success factors need to continuously and simultaneously inform, feed and build upon one another to build and sustain the shift to services. We will now look at each of these factors in turn.

**Tactical Critical Success Factors in Day-to-Day Operation**



***'When we look at high performing service industries, the role of leadership is to support and enable the true value creation at the service front line where the service is delivered.'***

**Stewart Leinster-Evans, Head of support, BAE Systems**

# Critical Success Factor 3: Build the structures and governance for services

## What kind of governance do we need?

Many industrial firms have a traditional product-based business model. If they do provide services they tend to manage them as separate entities, external to the firm. However, if they intend to make the shift to services, they need to adapt these structures and bring them within a service environment and culture.

Establishing the structures and governance for services will create a solid platform that will enable your employees to sell and deliver services. Importantly, it will also send a signal that you are serious about making the shift to services. Organisations that have a clear desire and aspiration to grow their business in services create, invest in and support the service business unit. This requires two things: first, you need to appoint, empower – both financially and non-financially – and define the remit of a service leader and his or her team. Second, you need to establish an appropriate organisational structure for the service unit.

## Why is it critical?

Giving responsibility without empowerment and the support of senior management is a recipe for disaster. Firms that only partially commit to services face serious problems, such as customer confusion, employee frustration, strategic misalignment, financial losses and, eventually, the disintegration of the service offering.

Creating the right structures and governance for services is, therefore, crucial. Doing so is both a sign of organisational commitment and a deliberate focusing of effort. You have to consider whether you want to create separate business units for services and, if you do, whether these will be profit centres in their own right, on an equal footing with existing product business units. Critically, you also have to consider reciprocal governance structures – how can service business units support the product business, and vice versa?

## What does it entail?

Three key elements support this CSF. First, there needs to be clear accountability and governance structures for services. Second, appropriate incentives and metrics need to be put in place. Finally, you need to ensure that product and service business units are mutually supportive rather than competitive.

## Steps to success

There are three things you need to do in order to build effective structures and governance for services:

1. Create a governance structure with service leaders who have the necessary hierarchical position, power and authority to expand the firm's revenues through services.
2. Establish and agree strategic objectives for services – translate these into service targets and metrics and align them with the individual and team incentives.
3. Align incentives and metrics across business units so the product and service businesses recognise that services are different and need different contracting and governance structures.

## 1. Assess market and internal readiness

Rules of change

## 2. Creating the strategic and cultural context

Design service vision

Define customer mindset and engage partners

Develop service culture

## 3. Structures and governance

Define leadership  
Set organisation structure

Day-to-Day operation

*'The shift to service needs a reasonable amount of internal investment, but moreover it needs time. ...time to implement and digest the changes.'*

**Graham Pennington, Support Solution Architect, BAE Systems**

# Critical Success Factor 4: Dedicate the resources for creating and delivering new services

## How can we prepare for innovation and delivery?

Having the right resources in place for service innovation and delivery is vital. By resources we mean things you might expect, such as technology, information, processes, systems, investment and people but also time, soft skills, behaviours, expertise, key performance indicators, customer requirements and customers' metrics.

A lack of appropriate resources for service development results in confusion, low productivity and a lack of progress that will eventually lead to frustration and the loss of internal and external support for service delivery strategies.

### Why is it critical?

Too often services are seen as a poor relation of the product business. However, they are extremely resource intensive. To innovate your services and ensure they are delivered successfully, you have to devote the necessary resources to establishing, interconnecting and sustaining them. In this context, 'time' is a particularly important resource. You need to budget and make time for people to design, implement, digest, adapt and evaluate the results and incremental achievements in the shift to services. This is about balancing the resources to support service strategies, objectives and expectations over both the short and long terms.

### What does it entail?

Before you can create new services you need to understand what resources and capabilities you already have, both within your organisation and across the ecosystem, what will be needed to deliver those services and where the gaps are.

### Steps to success

There are four things you need to do in order to ensure the resources are in place for service innovation and delivery:

1. Create short- and long-term budgets to support the shift to services – balancing investments required for today and tomorrow.
2. Map and identify the resources and capabilities required to deliver your services.
3. Map the resources and capabilities available within your firm and the wider ecosystem.
4. Use these maps to identify resource and capability gaps and decide how they should be filled, for example, internal growth, acquisitions, partnerships.

## 1. Assess market and internal readiness

Rules of change

## 2. Creating the strategic and cultural context

Design service vision

Define customer mindset and engage partners

Develop service culture

## 3. Structures and governance

Define leadership  
Set organisation structure

Day-to-Day operation

## 4. Resources

Define company resources  
Define individual resources

*'Managing engagement and trust sounds easy, but it is not that simple. The CSFs are useful to identify the actions that drive success. One key action that we found was to have defined customer engagement plans, with objectives, targets and measures at each point along the way.'*

**Neil Alison, Director of Business Model Innovation, Pearson North America**

# Critical Success Factor 5: Proactively manage engagement and trust

## How can we create trust?

Meeting your customers' needs is no longer sufficient. To achieve competitive advantage you must delight your customers and give them something special and also unforgettable experiences. This only happens when you walk the 'service journey' with your customers. The best service is delivered when there is genuine trust and engagement between both parties.

Because service relationships are co-created with customers and change over time, this engagement needs to happen at all stages of the service life cycle, from the definition of the service concept, prototype, launch, market introduction and ongoing service execution until the service is upgraded or a new service replaces the existing one. And the engagement needs to happen simultaneously with customers and service ecosystem partners.

## Why is it critical?

Services are about relationships and experiences. Customers evaluate services in terms of not only their functional performance but also their emotional impact. Creating deep and meaningful relationships that are based on trust and mutual understanding is essential if you are to understand your customers' world and help them achieve their goals.

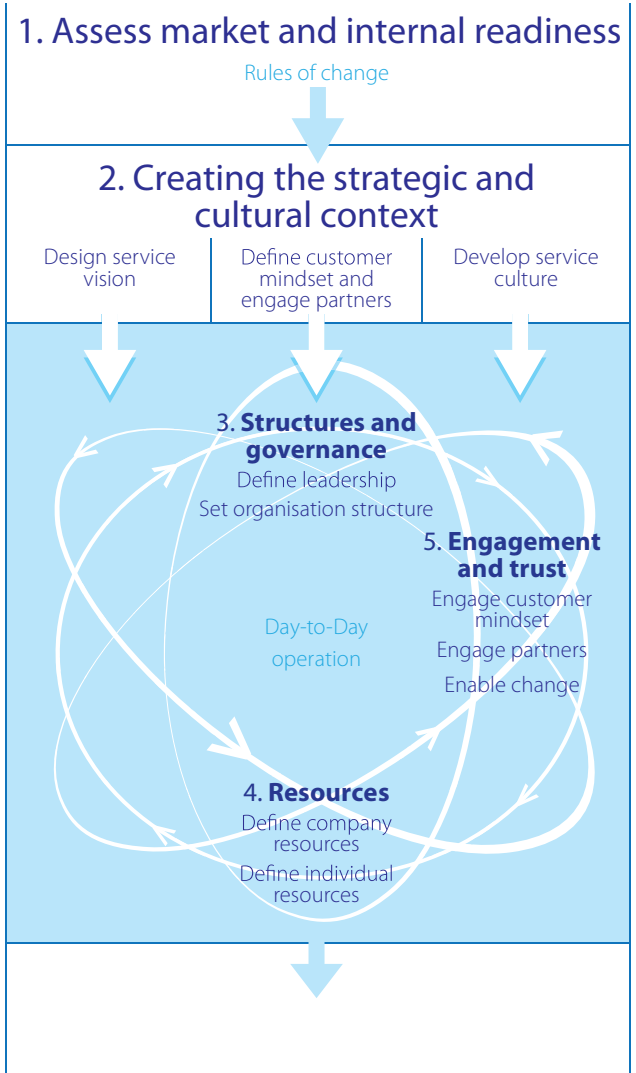
## What does it entail?

Creating trust relies on building relationships between customers and people at all levels of your organisation and doing so over time, not just at the contracting phases.

## Steps to success

There are four things you need to do in order to proactively manage engagement and trust:

1. Design 'customer engagement plans' for specific services, with clear objectives, targets and measures – and monitor the outputs.
2. Develop channels to open, share and harmonise information and feedback for relevant people, both inside and outside of the service firm.
3. Track actions generated by customers' feedback and inform customers and staff about the changes made in order to involve them in the co-creation process.
4. Continuously gauge the gap between customers' needs and demands and what the services you are providing are actually delivering. This feeds back into the design of future service opportunities.





*'The biggest learning that the organisations of tomorrow need to think about is having a clear understanding of their commercial model and having a clear understanding of how they are going to measure success.'*

**Daniel Smith, Senior Director, Zoetis International**

# Critical Success Factor 6: Develop and embed service processes

## How could we design, develop and deploy services?

It is not uncommon for industrial firms to manage their service business in the same way that they manage their manufacturing business. However, while manufacturing business models rely on control over production processes, services business models need adaptive platforms, processes and guidelines. In services, this 'ability to adapt' requires a commitment to experimentation with one or more variants of the business model, in areas such as prototyping, pricing and service execution.

This CSF focuses on the development of processes relating to the design, test, launch, market introduction and execution of a service. These service processes have an important part to play throughout the service life cycle from the early stages of identifying service opportunities to upgrading, replacing and terminating services.

### Why is this critical?

There are a number of processes that are essential for the design, development and deployment of services. They range from the identification of service opportunities through to upgrading, replacing and terminating services. And they must be in place if an organisation is to develop service offerings that will deliver maximum value to its customers.

### What does it entail?

Developing service processes involves: i) developing the service operating model; ii) managing the service portfolio; iii) piloting, simulating and testing the service offering; iv) scaling and documenting the service processes; and v) continuously innovating services.

### Steps to success

There are four things you need to do in order to develop and embed service processes:

1. Design and develop the service operating model.
2. Establish the rules for service portfolios, including when and how to terminate a prototype or a service.
3. Define criteria to gauge the success of services, from early prototyping stages to commercial execution by, for example, creating express customer feedback on a prototype through mechanisms such as customer panels, electronic panels, customer focus groups.
4. Establish processes for scaling, commercialising and upgrading/enhancing services.

## 1. Assess market and internal readiness

Rules of change

## 2. Creating the strategic and cultural context

Design service vision

Define customer mindset and engage partners

Develop service culture

## 3. Structures and governance

Define leadership  
Set organisation structure

## 6. Service processes

Design and plan service model  
Pilot and model  
Portfolio management  
Commercial execution  
Transition generation 1 to 2

Day-to-Day operation

## 5. Engagement and trust

Engage customer mindset  
Engage partners  
Enable change

## 4. Resources

Define company resources  
Define individual resources

*‘These factors tell you what things you are doing well and what you are missing out on, or those that may overlap in some way. It is very much a mapping tool. We have had access to senior people who make strategy at top levels in their organisations in compiling our report; they have already been living and solving these problems, which gives our CSFs report an edge.’*

**Dr Veronica Martinez, Cambridge Service Alliance**

# Critical Success Factor 7: Optimise services and communicate best practices

## How can we systematically learn from our experience?

Our ultimate goal is to embed service knowledge and best practices across the ecosystem and to deliver the best possible service at all times. This CSF is about sustaining the service mindset and continually looking for opportunities to do things better.

## Why is it critical?

Firms involved in services have to innovate continuously. As they deliver services they should be learning new and better ways of doing things in the future. These lessons can then be used to develop new services and share best practice. It is particularly helpful to look for opportunities to innovate infrastructure and capabilities that are shared across services, as this will make service delivery more efficient and enhance its value to customers.

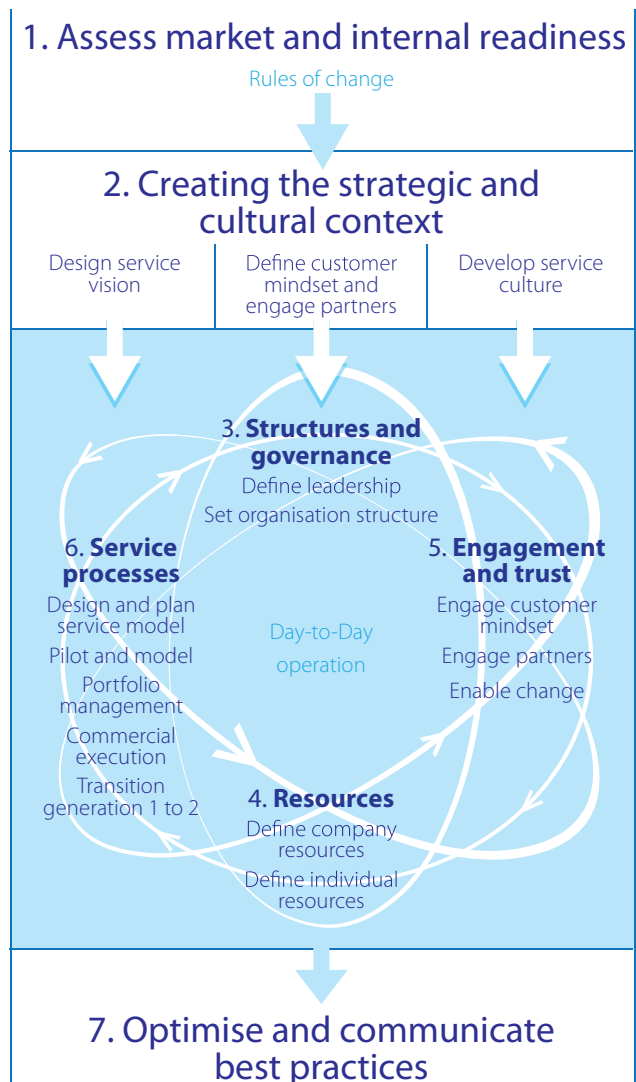
## What does it entail?

Knowing what best practice looks like is important, as is being able to capture and share examples of it while always seeking opportunities to improve and innovate. An important part of this activity is to periodically model and analyse the current service offerings on the market.

## Steps to success

There are four things you need to do in order to optimise and communicate service best practices:

1. Establish routine and easy-to-use processes to collect examples of good practice.
2. Create open and clear routes for disseminating good practice.
3. Create a services repository that can easily be accessed.
4. Deliberately search for service innovations that can be shared across service lines to drive efficiency and customer value

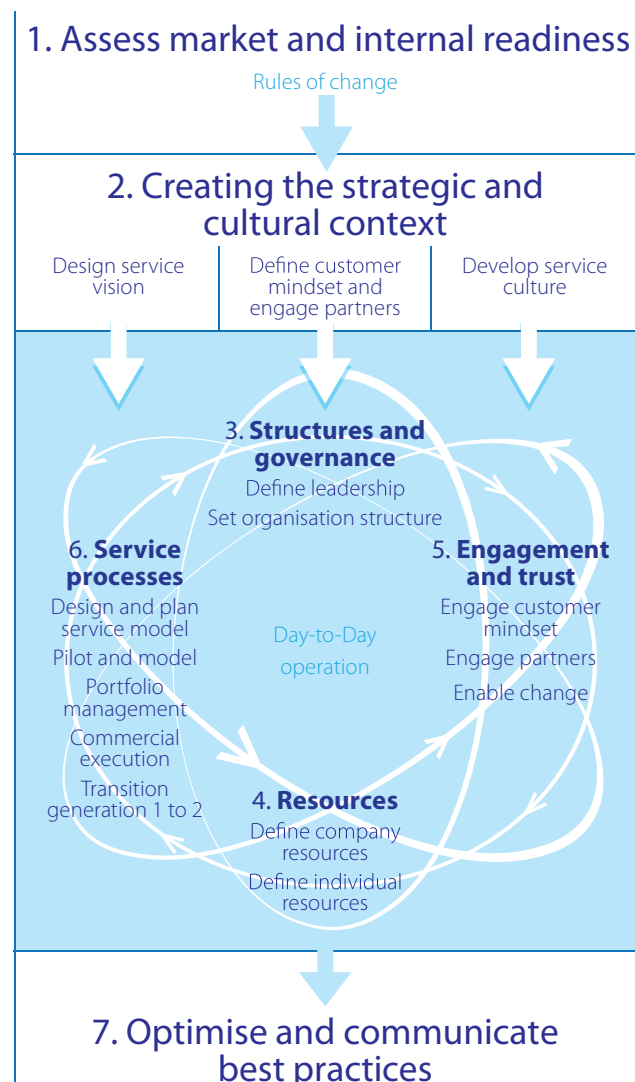


# Conclusion

**This report describes 'the service strategy model' that drives a sustainable shift to services. It is based on research with companies that have 'been there, done that and learnt important lessons along the way'. By highlighting the critical factors and activities that drive success, it should become an invaluable roadmap for everyone setting out on the service journey.**

Managers and directors of participating firms all recognise the value of the steps of this model and their correspondent's critical success factors. Retrospectively, they all agree that if they had had a tool like the 'service strategy model' and its CSF when they began to make the shift to services, the experience in shifting to services would have been more rational and positive and maybe even faster. A Zoetis' technology developer commented: '... now, I can see why it did not work out the first time around... it took us too much time.' A Pearson's vice president added: '... I can clearly see the steps and where to go... it is simple... but before we did not have this clarity..'

In reality, organisations have a variety of services – different complexity of services, at different lifecycle stages. The 'service strategy model' and the 'critical success factors' provide a roadmap and architecture to guide rational decision-making processes in making and sustaining the shift to services. It is important to understand that the CSF and the service strategy model need to adapt to the context-specific environments, needs and circumstances. For instance, performance-based services in fast-moving sectors (such as telecommunications) experience faster feedback and consequently faster changes in the way they operate their service processes.



# References

## References

1. Neely A. 2008. 'Exploring the financial consequences of servitization'. *Operations Management Research*, 1 (2): 103-118. Also read: Martinez V., Bastl M., Kingston J. and Evans E. 2010. 'Challenges in transforming manufacturing organisations into product-service providers'. *Journal of Manufacturing Technology Management*, 21 (3/4): 449-469.
2. Leidecker J. K. and Bruno A. V. 1984. 'Identifying and using critical success factors'. *Long Range Planning*, 17(1): 23-32.
3. Martinez V., Kingston J., Evans S., Gaiardelli P., Raffoni A., Vladimirova D. and Claes B. 2011. 'Organisational transformation for effective delivery of integrated products and services: thoughts on practice'. Report; ISBN 978-0-9571374-1-7. Also read: Froehle C. M., Roth A. V., Chase R. and Voss C. A. 2000. 'Antecedents of new service development effectiveness: an exploratory examination of strategic operations choices'. *Journal of Service Research*, 3(1): 3-17. In addition, read: Baines T. and Lightfoot H. 2013. 'Made to serve: how manufacturers can compete through servitization and product-service systems'. John & Wiley Son. Pp. 89-90, 204-205.
4. Cohen M. A., Agrawal N and Agrawal V. 2006. 'Winning in the aftermarket'. *Harvard Business Review*, 84(5): 129-138. Also read: Martinez V. and Turner T. 2011. 'Design competitive service models' in the book *Service Design and Delivery*, edited by Macintyre M., Parry G. and Angelis. J.; published by Springer: London. In addition, read: Sheth J. N. and Sharma A. 2008. 'The impact of the product to service shift in industrial markets and the evolution of the sales organization'. *Industrial Marketing Management*, 37(3): 260-269.

## Related webinars

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- 11 January 2016: '**Innovating Your Business Model: The Capability Assessment Tool**', Professor Andy Neely
- 12 January 2015: '**Services Typology: A Classification Model for Product-Service Offerings**', Dr Veronica Martinez

## Further reading

- Baines T., Lightfoot H., Peppard J., Johnson M., Tiwari A., Shehab E. and Swink M. 2009. 'Towards an operations strategy for product-centric servitization'. *International Journal of Operations & Production Management*, 29 (5): 494-519.
- Gebauer H. 2008. 'Identifying service strategies in product manufacturing companies by exploring environment-strategy configurations'. *Industrial Marketing Management*, 37(3): 278-291.
- Neely A. 2008. 'Exploring the financial consequences of servitization'. *Operations Management Research*, 1 (2): 103-118.
- Oliva R., Gebauer H. and Brann J. M. 2012. 'Separate or Integrate? Assessing the Impact of Separation Between Product and Service Business on Service Performance in Product Manufacturing Firms'. *Journal of Business-to-Business Marketing*, 19(4): 309-334.
- Reinartz W. and Ulaga W. 2008. 'How to sell services more profitably'. *Harvard Business Review*, 86(5): 90-98.
- Sheth J. N. and Sharma A. 2008. 'The impact of the product to service shift in industrial markets and the evolution of the sales organization'. *Industrial Marketing Management*, 37(3): 260-269.
- Spring M. and Araujo L. 2009. 'Service, services and products: rethinking operations strategy'. *International Journal of Operations & Production Management*, 29(5): 444-467.
- Visnjic Kastalli I., Van Looy B. and Neely A. 2013. 'Steering manufacturing firms towards service business model innovation'. *California Management Review*, 56(1): 100-123.
- Wise R. and Baumgartner P. 1999. 'Go downstream the new profit imperative in manufacturing'. *Harvard Business Review*, 77(5): 133-141.



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