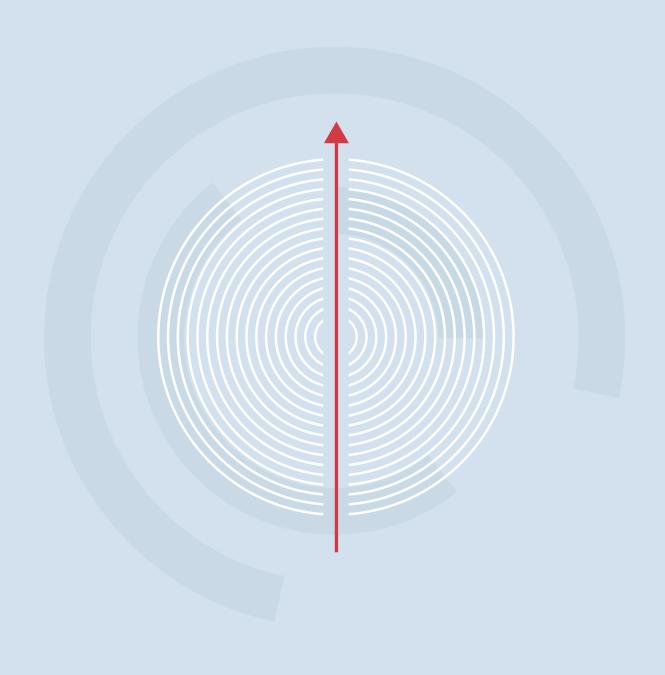


# cost-out

Gaining competitive advantage in downturns and beyond

Bringing Ingenuity to Life

paconsulting.com



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And with the global economy set for a significant reset while the world grapples with the impact of COVID-19, cost-out – the process of removing costs from your organisation (often referred to as cost optimisation) – has become essential to survive.

But all too often, cost optimisation is viewed solely as a short-term reaction to a threat, triggering headcount reductions and cost-cutting as part of 'business as usual'. While these quick-fire responses seem a logical response to ensure cash flow and liquidity, they bring a long-term cost – reducing your focus on innovation and growth and, in some instances, in the way you're viewed by the customers and communities you serve. And, with many leaders pursuing the same cost-out measures as their competitors, organisations are often pedalling harder to keep pace without gaining any advantage – and sometimes jeopardising their long-term footing. It's one thing to be good at cost-cutting, another entirely to be able to turn cost control into enhanced and enduring competitiveness.

We know, from our experience of hundreds of global cross-sector cost-out initiatives, that efficiency can only take you so far. While many leaders need to take quick action to stem the flow in tough times – immediately analysing all positions that consume money and cancelling non-essential activities – these quick fixes must be accompanied by a view of the future. We believe a long-term focus on cost, embedded in the mindset of your people, can create opportunities to find innovative, differentiated approaches to cost optimisation, ultimately driving competitive advantage.

We spoke with 180 global senior leaders across 10 sectors about their experiences of and attitudes to cost optimisation. Their feedback allowed us to identify common barriers and assess how organisations can achieve benefits that go beyond those achieved by traditional cost-out approaches to deliver a competitive advantage.

At PA, we believe in the power of ingenuity to create opportunity from complexity. And there's no doubt optimising costs across an organisation is a complicated business in these times. But done well, cost optimisation doesn't just protect you during uncertain times. It identifies ways to increase margins, gain new product insight and unleash innovation. It presents an opportunity to rejuvenate an organisation – increasing collaboration and empowering people to ingeniously cut costs in creative ways. It changes the way organisations think about costs – resulting in a new cost-out paradigm.

Based on our experience and research insight, there are three major actions you should take to kick-start a new approach to cost optimisation that will allow it to be a powerful force in striving for growth:

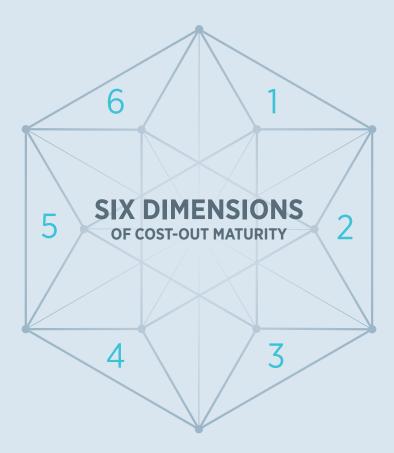
- · look beyond single cost-out levers
- · implement with impact
- · sharpen your competitive edge.

Over the coming pages you can read about our research findings, how to put our recommendations into practice and the priorities for your sector (see page 26).

## **RESEARCH FINDINGS**

From our decades of experience working with global, cross-sector clients, we know there are six vital dimensions to optimising costs.

Through our research, spanning more than five years, we confirmed our hypothesis on the importance of these dimensions and revealed how well sectors were performing across them.



## 1. STRATEGY

Develop a comprehensive vision for managing costs that integrates target setting and reward.

- Cost-out vision
- Scope of cost-out
- Product development roadmap and capability growth
- Platform strategy (standardisation/modularisation)
- Cost-out function

## 2. ORGANISATION & GOVERNANCE

Set up a cross-functional cost-out team and empower programme leaders.

- Cross-functional teams
- Roles and responsibilities
- Targets and objectives
- · Tracking and measuring
- Empowerment

## 3. PROCESSES

Implement total cost optimisation and end-to-end cost models for integrated processes.

- Customer requirements management (external view)
- Target price management (internal view)
- Product requirement and concept management
- 'Best of breed' concept development
- Savings delivery

## 4. TOOLS

Manage portfolios based on cost-benefit analysis and tracking.

- Project management
- Risk management
- Requirements management
- Change management
- · Cost management

## 5. COMPETENCIES & SKILLS

Define a training roadmap for growing operational excellence.

- Specification capability
- Cost-benefit analysis
- Development and technology capability
- Calculation capability
- Entrepreneurial competence

## 6. METHODOLOGIES

Define methods for benchmarking cost reduction within the relevant sector(s).

- Unit-price transparency
- Concept optimisation
- Benchmarking
- Bottom-up calculation
- Value stream optimisation

We use these to assess how successful an organisation's and sector's cost optimisation efforts are. And for this year's report, we went one step further, exploring the individual levers below each dimension and asking respondents to rank them by relevance. This allowed us to identify the cost optimisation actions seen to be most crucial in each sector.

Our research shows the better an organisation is at all six dimensions, the likelier it is to succeed in its cost optimisation. Equally, falling short in even one area can limit your overall success - and our research identifies which area is likely to have the biggest impact on your sector.

Like an engine, cost-out is a system that needs all component parts working at their best to deliver the optimal results. An organisation may have a strategy, but it won't translate into success without aligned key performance indicators (KPIs). And if you don't have cross-functional teams, any attempts to introduce process-based cost optimisation won't succeed.

Like an engine, cost-out is a system that needs all component parts working at their best to deliver the optimal results.

#### From our research, we found:

 the dimensions being used least effectively across all sectors were methodologies
 (2.57 out of 5) and strategy (2.68 out of 5).

While cost-out remains one of the top challenges for companies across all sectors, the top-down alignment provided by a clear strategy is lacking – putting progress at risk

 the dimensions with the largest gaps between 'best in class' and laggards are strategy (1.03 gap) and methodologies (0.95 gap).

The failure of leaders to understand and apply bestpractice cost-out presents a major opportunity to look beyond tactics or operations and ensure the strategic direction required to succeed is in place

 strategy (3.80 out of 5) and methodologies (3.81 out of 5) are also deemed to be two of the most relevant dimensions across all sectors.

Their relevance, combined with the awareness gap described above, shows that these areas are often the root cause of current cost-out shortcomings.

Our analysis shows that strategy and methodologies are two areas where leaders need to pay most attention, while maintaining attention on the other dimensions.

These two areas are recurring themes throughout our sector and overarching recommendations and present an opportunity for leaders to ensure more cost-out initiatives succeed, and that the outcomes deliver greater impact.



#### **STRATEGY**



#### **PROCESSES**



### **COMPETENCIES & SKILLS**



### **ORGANISATION & GOVERNANCE**

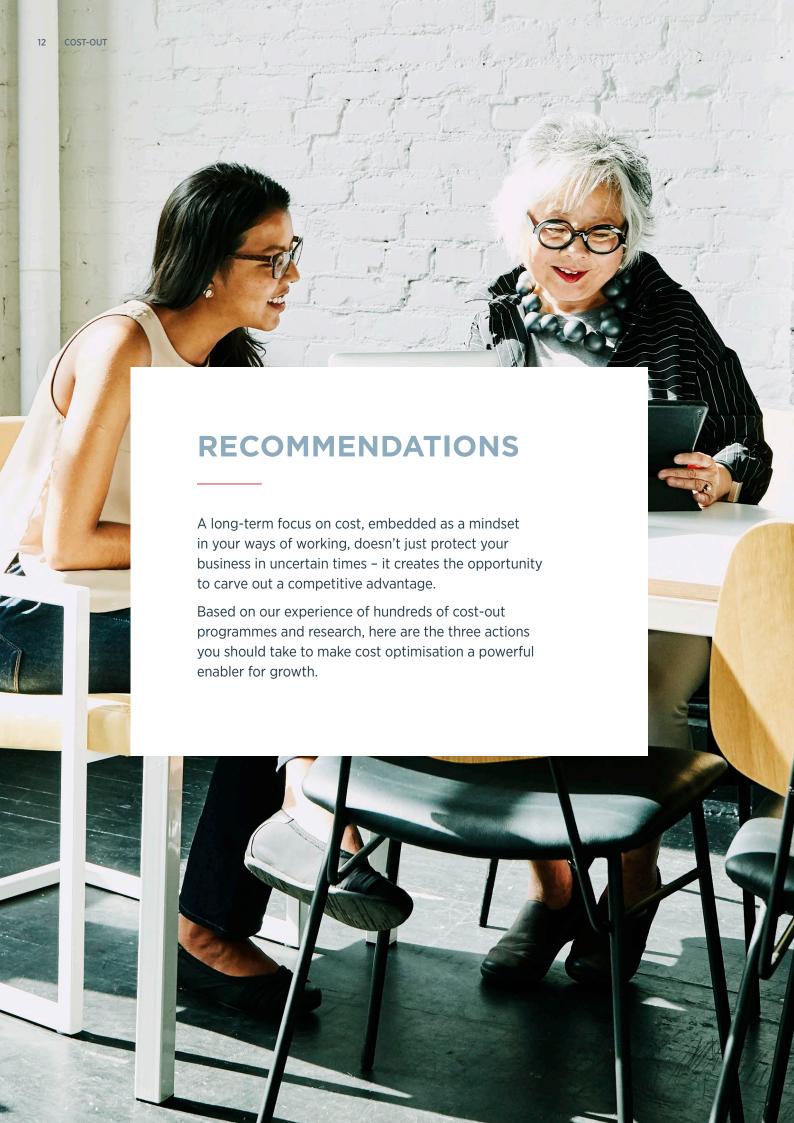




## **METHODOLOGIES**

COST-OUT MATURITY GAP





## Look beyond single cost-out levers

In our view, cost-out needs to be thought of as an integrated system that needs all parts working effectively to deliver long-term, sustainable success. But in our experience, all too often leaders view cost optimisation as a loose set of levers to pull at various times and in certain circumstances for short-term impact.

In contrast, we believe the full opportunity of cost optimisation comes when you view it holistically as a core within your business. This means starting with an unbiased temperature check – an objective assessment on how well things are currently working and how they score against what others are doing. This helps create transparency and shows where the gaps are. You can start by using our sector scores (on page 26), and our experts can help you explore these findings and the steps you need to take in much greater detail.

Best-in-class cost-out entails an end-to-end view from ambition to delivery. You'll need to set appropriate targets based on baseline costs, aggregate costs before seeking to optimise them, generate and qualify savings ideas from across the business, and deliver with a constant drumbeat and continuous progress tracking.

But first, you need a clear overarching strategy – and you need to embed it into your organisation. It shouldn't be a 'nice-to-have' or something you reach for in an emergency. It needs to become part of your everyday business: how you boost competitiveness and power innovation.

For leaders to create a successful strategy, they'll need to consider and implement the following:

- cost-out vision set a clear and comprehensive vision
  of how cost optimisation creates, not just protects,
  value, and how it will develop in the future, with
  consideration given to all six dimensions of cost-out as
  well as to the organisation's long-term ambitions and
  short-term objectives
- scope of cost-out utilise a Design-to-Cost approach alongside the entire product life cycle (product development, serial production, after-sales) as well as for production investments. This is where cost is factored in to early-stage design and initiation decisions, ensuring any unnecessary costs can be avoided further down the line
- product development roadmap and capability growth

   a detailed plan of product or customer offerings over
   the next five years will enable you to prioritise spending
   on projects and technology capabilities for your cost
- platform strategy (standardisation/modularisation)

   standardise platforms where possible, with a modularisation/platform strategy helping to reduce cost baselines and supply chain risk for all your key products or customer offerings. This decreases development costs, investment for tooling and complexity in manufacturing plants due to higher volumes
- cost-out function cost optimisation needs a dedicated function to calculate product costs and facilitate costout initiatives, and to influence and gain buy-in from those across the organisation.



While the above were all deemed by our survey respondents to be crucial elements of a successful cost-out strategy, the final bullet is of critical importance. This is how you can establish governance and align your people to the same direction of travel.

Example 1 shows the importance of internal co-operation and understanding. Each member of the cross-functional cost-out team needs a clearly defined role and they need to be committed to that role. Every development project should have clearly defined cost targets and progress should be tracked. That might sound like common sense, but it works more effectively when your dedicated cost-out function includes experts from different areas of the business.

For cost optimisation to succeed, executives across key functions need to be aligned. Identifying existing frictions and overcoming them is key

Jost Kamenik
PA cost-out expert

## Renewable energy business: boosting internal co-operation adds 28 per cent in savings

Market conditions in the renewable energy sector have changed drastically in recent years. At the same time, businesses in the sector need to invest in new technologies. With margins under substantial pressure, a business undergoing a wide-ranging cost optimisation programme asked us to help make sure it would succeed.

We interviewed 17 executives from different functions worldwide. We found that while everyone was clear on the need to achieve substantial costout savings, there was no common understanding of the focus needed and the capabilities available to make the programme work. The research and development team, for example, believed there was a clear roadmap for the new products planned for development. But it didn't exist.

As a result, we helped the client close those gaps, align the internal approach across all six dimensions of cost-out and develop a concise strategy for their cost optimisation programme. This boosted firmwide co-operation and enabled faster delivery of results. As a consequence, they identified an extra 28 per cent of savings that were delivered in just three months.



## Implement with impact

Businesses often go wrong because they only look at costout in terms of products or services. What you need is a highly integrated end-to-end view of all planned and live cost reductions, starting with a clear understanding of the customer journeys you want to create. That will allow you to identify how costs flow through the various functions in your organisation. Typically, that would include sales, marketing, product, operations, administrative, IT and supply costs. For each, you need clarity around process, system, structural and business model costs.

In some areas there'll be potential for 'quick wins', with others more of a medium- to long-term pay-off. Crucially, you need to implement using the robust governance outlined before, aligning KPIs to clear and consistent cost targets. Example 2 demonstrates that potential savings can be missed when there's no overall oversight.

## Telecommunications business: aligning KPIs boosts savings

To counteract market pressures, a telecommunications company had set up a large-scale cost optimisation programme. While identifying savings worked well, the company hadn't sufficiently followed through with implementation, losing the full impact of potential savings.

Often cost optimisation projects produce diminishing savings pipelines and delivery slows. Making sure everyone has a stake in achieving the same KPIs can solve that problem.

We analysed the organisation's cost-out maturity across all six dimensions. This revealed their KPIs weren't integrated across functions or the various layers within the organisation. Some departments' targets bore no relation or connection to those set by the board. We helped refocus KPIs and applied them consistently across the organisation – making sure teams and individuals were clearer about their responsibility for optimising cost.

This allowed better understanding and buy-in from all individuals and teams. As a result, they shifted focus towards real value drivers and massively improved savings delivery.

To successfully deliver against these KPIs, every organisation needs an integrated, web-based toolset for planning, delivering and tracking cost data that allows all stakeholders immediate and comprehensive access to one consistent and reliable set of data.

Our research also found that many organisations are yet to use the full range of cost-out tools and methods at their disposal. The tools dimension was in the top three areas where many sectors were falling short, with risk management shown to be an area where many fell short. In our experience – in the automotive industry, for example – there's been too strong a focus on benefits. Unexpected risks in the past have meant savings ideas having to be abandoned.

Imagine the difference, instead, if leaders were able to focus on risk management as well as they have on other subdimensions. Rather than being abandoned, successful cost reduction initiatives would create momentum and encourage further initiatives and innovation, creating a cycle of success. We often find that cost-out success breeds cost-out success – with organisations able to identify and seize further savings much more easily once they are into the groove of successful implementation.

Methodologies was another dimension with the biggest gap between the best and the worst. According to our research, several sectors – such as life sciences, financial services and defence and aerospace – are struggling to optimise unit-price transparency or the use of bottom-up calculations. These methods are extremely valuable. Unit price tracked against budgets or historic data can throw up anomalies and highlight opportunities for savings. With a detailed bottom-up cost calculation for all processes, products and investments, you get a factual baseline.



**EXAMPLE** 

#### Empower your people to deliver cost-out change

Successful organisations are designed for simplicity, building teams around products and services, rather than skills, while empowering people to make decisions and creating a flat organisational structure. Such a business design removes barriers to doing great work – including identifying potential cost savings.

You'll need to embed the right culture for cost-out success to be sustainable. Successful organisations break down silos and implement agile principles – and this helps ensure that the organisation as a whole is working to the same strategy with consideration of all six cost-out dimensions, rather than different functions pulling different levers at different times.

We've seen agile working unlock so much value in organisations. Our research into the top businesses by financial performance found they're almost 30 per cent more likely to display agile characteristics, suggesting that commitment to organisational agility can make a crucial difference as a driver of success.¹ Example 3 shows the impact switching to agile working can have on a cost optimisation programme.

Making agile transformation real, continuous, embedded and owned by all is the real challenge, and a huge opportunity. There are five key factors to making agile work:

- put 80 per cent of your effort into culture
- be persistent and consistent
- see measurement as an instrument of change
- devolve ownership
- recognise agility as the new normal.

In delivering the above, you'll be able to make cost optimisation a priority for everyone, and encourage and facilitate cost-out innovation across the enterprise.

Automotive equipment manufacturer: finding an extra 20 per cent in savings by switching to agile working

The company faced significant price increases from suppliers for parts that were no longer mass-produced. They asked us to come up with ideas to prevent these increases for one of the biggest commodities.

We used our cost optimisation framework and identified more than 50 cost-saving ideas together with the business team. We developed a life cycle strategy to stabilise material cost. By implementing agile principles, we encouraged new ways of thinking. And this increased motivation and energy. We identified cost-saving benefits of more than 20 per cent of the company's yearly purchase volume, and put in place a strategy so the company will continue to apply new ideas.

Seeing the company realise how much is possible by getting people working together was fantastic

David Schlitt
PA operational excellence expert

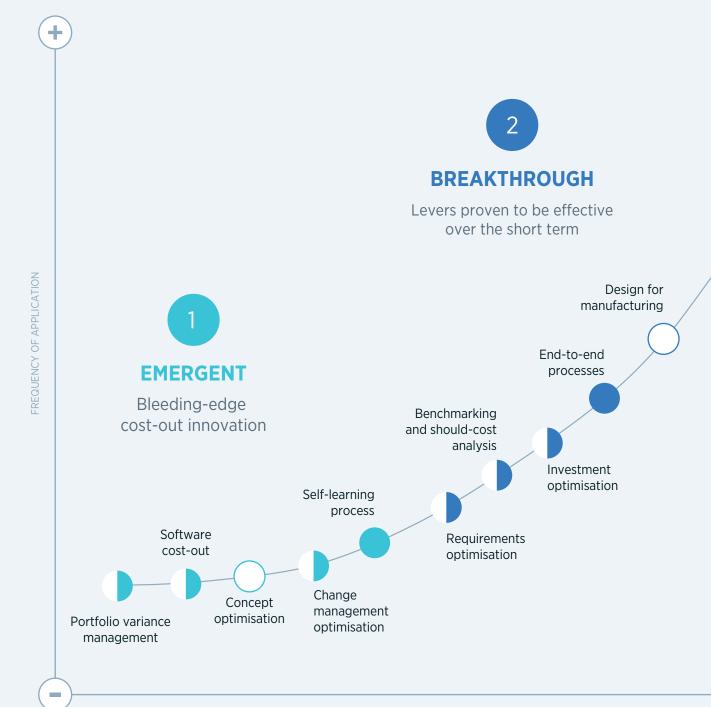
## Sharpen your competitive edge

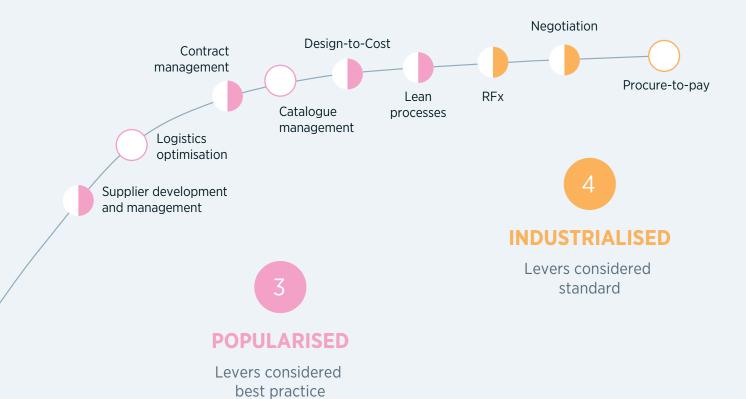
From our experience of delivering hundreds of global costout programmes, combined with our research findings, we've developed the **PA Cost-Out Competitiveness Curve**<sup>™</sup>. This shows the extent to which organisations use the different techniques at their disposal – with the least developed tools on the left and the tried and tested on the right.













We believe leaders can enhance their approach to cost-out by taking a broad view and balancing their portfolio of cost-out initiatives across the entire Cost-Out Competitiveness  $Curve^{TM}$ .

Many organisations tend to rely on traditional areas like procurement and Lean processes (on the right-hand side of the curve). But there are lesser-used opportunities that could make a real difference. This is where you can steal a march on competitors. The options on the left of the curve have the biggest potential as there's less focus on them – sometimes because they're more of a challenge. But all of these are perfectly achievable, and the rewards could be great.

For example, software costs are anticipated to make up 25 per cent of manufacturing costs by 2025, up from five per cent in 1995. But software development costs are often described as a 'black box' – suggesting they can't be analysed and optimised. We've helped organisations debunk this myth, see Example 4. With transparency, you're able to find levers that will allow you to negotiate with suppliers, for example.

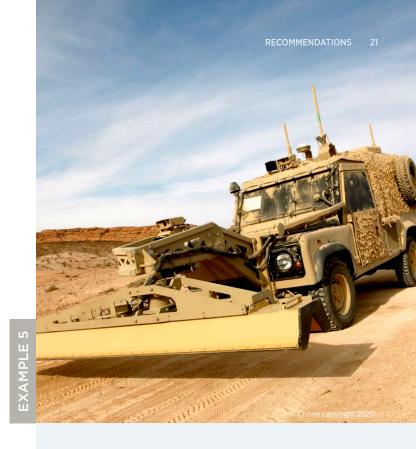
We're also working with a company that's made a large number of acquisitions to create valuable savings through portfolio variance management. With empowered customers increasingly seeking personalisation and products tailored specifically to deliver an outcome, many organisations are struggling to manage the cost variance within their product portfolios. Through our analysis of the organisation, we identified that out of the 730 product and service variants driving cost and complexity across the business, only the top 25 products and services contributed more than 80 per cent of revenue, while driving only 35 per cent of the cost – so this process represents a major opportunity to save and simplify at speed.

# Enhancing competitiveness by cutting software development costs by 25 per cent

A global energy business's product set required extensive software development. It was losing market share due to uncompetitive pricing. They asked us to carry out a review of their software architecture, and their software development process, to understand how they could optimise the cost of development and enhance their competitiveness.

We analysed the end-to-end development process and benchmarked the performance of the development team against industry best practice. That allowed us to make recommendations to achieve more cost-effective delivery. We also reviewed the software architecture of the product portfolio and identified potential improvements that would allow our client to extend the reach of their software around the world.

We helped the company understand how their software team could become more efficient. We identified cost savings equivalent to 25 per cent of software development costs.



And we made the most of benchmarking and target costing analysis for a premium car manufacturer. They were undertaking digital transformation of their quality control processes to reduce the time it takes from customers reporting issues to car dealers to be reported back and corrected. Our team analysed the quality process from mechanic to dealer and then applied best-practice thinking to redesign the entire process. As a consequence, issues were detected and solved far more quickly, reducing process time by 95 per cent. These examples show how cost-out cuts through to meeting customer needs, sharpening your competitive edge.

Your focus should be on relentlessly pursuing innovative ways to cut costs – both in your mindset of approaching cost-out and in the way you deliver it. While innovative approaches are easier to come by on the left-hand side of the curve, your empowered, agile teams, working to a clear strategy, may be able to find innovative ways to squeeze maximum value from the more traditional and standard options for cost-out on the right-hand side of the curve. As Example 5 shows, we have previously found innovative approaches to procurement to deliver multimillion-pound savings.

While traditional cost-out processes rely on spreadsheets, we believe competitive advantage can be created by seeking an innovative edge in all you do – looking at products, tearing them down and rebuilding them, and by using online user boards and customer interviews and so on. Talk to end users to find out what they really want and reshape/co-create your offering in a way that optimises costs but also provides a better outcome. And talk to people throughout the business, drawing on a diverse team of experts to come up with the best possible solutions, formed of entirely new ideas and new ways to think about existing tools and methodologies. Leaders should inspire and empower employees to find ingenious, inventive cost-out solutions.

# Using innovative procurement techniques to deliver an explosive device detection system

To protect soldiers in Afghanistan, the UK Ministry of Defence (MOD) urgently needed a vehicle-based system to detect improvised explosive devices hidden below road surfaces. Off-the-shelf solutions existed but were considered unsatisfactory. Customising a solution, however, would extend the timescale and leave soldiers at risk for longer.

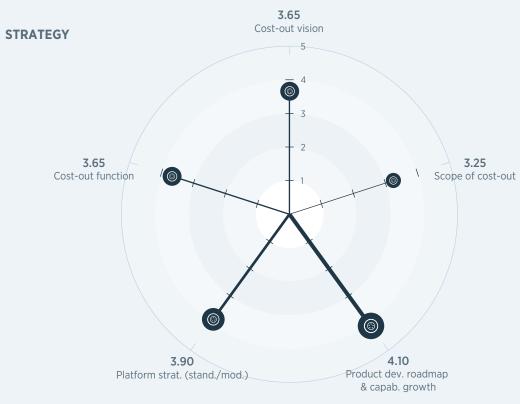
Our work included assessing a wide range of candidate systems and subsystems to help the MOD select the right solution. It took just 11 months to move from investment decision to operational use. The system has been saving lives since early 2011. The procurement approach saved an estimated £9 million of upfront costs plus projected lifetime costs of a further £8 million.

#### Emulate the best of the rest

Getting innovative ideas needn't mean reinventing the wheel. By comparing sector performance across the 30 subdimensions of cost-out, those lagging behind can identify other sectors they could learn from. Our graphs of the results show instantly there are sectors, like transport for example, who see the relevance of the six dimensions but lag far behind the leaders in terms of what they actually do.







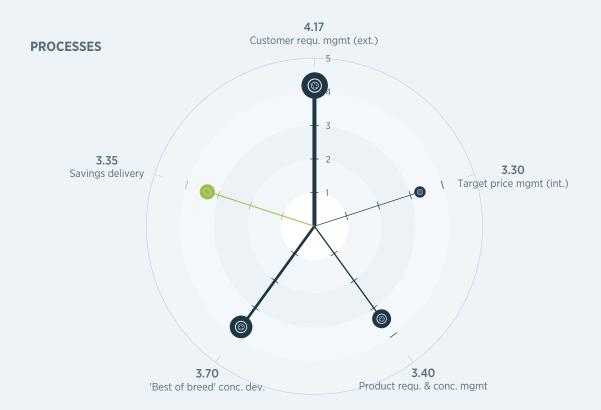




AUTOMOTIVE
 ENERGY & UTILITIES



DEFENCE & AEROSPACE

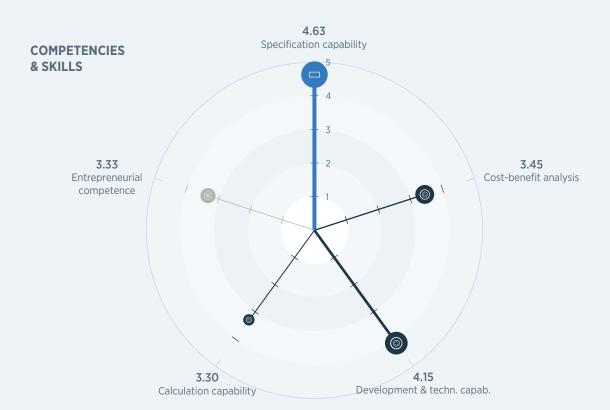


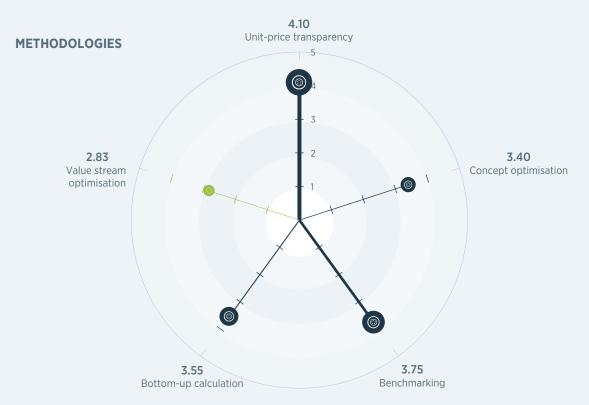


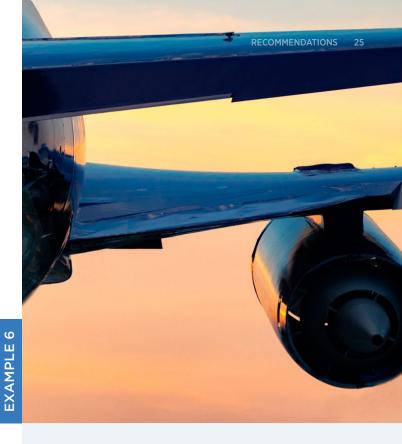


DEFENCE & AEROSPACE

LIFE SCIENCES







Example 6 describes the impact of transferring ideas from the automotive sector to a defence and aerospace organisation. This type of cross-sector learning is one of the best ways to gain a competitive edge over competitors who are often getting their own house in order or limiting their comparisons to industry peers.

It's often possible to get ideas for optimising costs from other industries – not just your own sector. We've found introducing such best-practice techniques makes a huge difference

Jost Kamenik PA cost-out expert

## Defence and aerospace supplier: using innovative optimisation levers delivers savings

A leading firm in aircraft propulsion and turbines wanted to grow their market but keep operational and capital expenditure down. We injected new thinking from leading sectors to help them do this.

Nowadays, car manufacturers often manage costs based on the end-to-end production of a specific vehicle rather than for the individual functions involved. We compared the automotive best-practice approach to the company's activities. Out of 25 potential levers for optimising cost, the company was only using five regularly. We helped integrate extra optimisation approaches and trained key staff in them. At the same time, we trained cross-functional teams so the new processes would be sustainable.

The company substantially improved throughput and cut the cost of all products. As a result, they identified ways to cut costs by up to 37 per cent.

## **RECOMMENDATIONS BY SECTOR**

We've ranked the 10 sectors according to their overall cost optimisation performance. The automotive sector is at the top but there are still opportunities to improve, while the government and public sector has the most significant opportunity to improve.

For each sector, we explain where the major gaps are and the steps organisations in each sector can take to ensure all dimensions are working at their best and in tandem with each other.

## THE **LEADERS**



AUTOMOTIVE



2/10 LIFE SCIENCES



3/10 INDUSTRIAL ENGINEERING



4/10 ENERGY & UTILITIES



5/10 CONSUMER PRODUCTS

## **LAGGARDS**



**6**/10 IT & TELECOMMUNICATIONS



7/10 DEFENCE & AEROSPACE



8/10 FINANCIAL SERVICES



TRANSPORT



10/10 GOVERNMENT & PUBLIC SECTOR

The product experience needs to be right. But you need to keep an eye on cost. You cannot run the business by focusing only on product

Dr. Herbert Diess CEO Volkswagen<sup>2</sup>

## **Automotive**

Key focus areas: getting better at managing risks, drawing up specifications for hardware and software development and understanding customer journeys.

The sector continues to lead the way. They're particularly strong in terms of strategy and methodologies. For decades, automotive businesses have been challenged by strong competition and pressure to globalise and standardise the supply chain. This means they've made cost optimisation a priority and have developed sophisticated and successful methods to make it part of 'business as usual'.

But right now, fundamental change is going on. Manufacturers need to manage significant technological, commercial, market and political developments like autonomous driving, new mobility platforms, connectivity, customer demand for low-emission vehicles and both the short-term and longer-term impact of Brexit. They'll have to be very clear about the strategy and technology they'll need to invest in. There'll also be challenges when changes to emissions testing come into force for regulatory purposes. Another key challenge is ensuring customers are considered alongside the end-to-end production process, keeping them excited rather than over-engineering solutions.

## Room for improvement

Automotive has been the global cost-out lead for many years. Yet, in recent years they've lost ground as firms failed to act rigidly on complexity reduction while being unprepared to cope with growing relevance of software development and electronics cost that will soon comprise up to 30 per cent to 50 per cent cost of a car.

The sector hasn't yet adapted to the latest challenges. The increasing importance of software solutions, end-to-end process integration and global just-in-time supply chains offer the chance to improve.

#### Sector priorities

Tools: Risk management - initiatives have a better chance of success if strong risk management is implemented to help identify and mitigate risk over short-, mid- and long-term horizons.

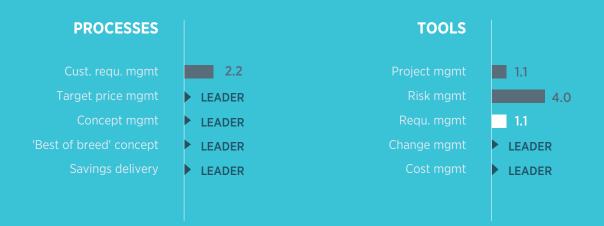
Competencies and skills: Specification capability organisations need to be able to develop new hardware and software simultaneously in a multi-partner environment.

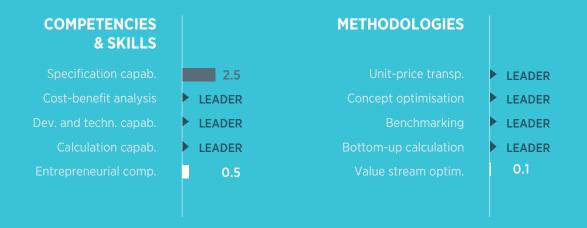
Processes: Customer requirements management - it's essential to expand customer requirements analysis to cover the entire journey and deliver the research systematically.



## FOCUS INDICES OF SUBDIMENSIONS maturity gap x relevance







## Life sciences

Public and political attention is focused on the cost and value of medicine, placing increased pressure on industry to innovate for better, faster and cheaper drug development

Kelsey Jakee PA life sciences expert

Key focus areas: unit-price transparency, developing a cost management toolset and benchmarking.

Life sciences comes in at second place. Like the automotive sector, life sciences has faced cost-cutting pressures for some time. Public and political attention has been focused on the cost and value of medicine, pushing the industry to innovate for better, faster and cheaper drug development. What's more, a firm's revenues can 'fall off a cliff' when one or more established products go off-patent. Another factor is increasingly long cycles in drug creation. And more stringent regulation has forced higher standards in processes and operating procedures.

Now, patients, customers and regulators are all more demanding than ever. Many organisations struggle to respond to consumer-led disruption in a way that's relevant and valuable, often because they mistakenly believe that incremental improvement is all that's needed.

Life sciences organisations – be they biotech, pharma or medtech organisations – need more than patented drugs or devices to keep themselves profitable. They need to achieve faster time to market at even lower cost. The challenge is to harness data to understand diseases, run better clinical trials and develop treatments more efficiently. It also means pinpointing the parts of operation that can bring the most value.

## Room for improvement

We found that competencies in areas like project, requirements and specification management are seen as at a high standard consistently across the sector. The cost-out dimension where life sciences organisations are furthest away from the leaders is strategy. They're achieving some success, but there are still opportunities for improvement. There's upside in driving Design-to-Cost – where products are designed with the eventual cost in mind from the outset – and standardisation strategies more effectively.

### Sector priorities

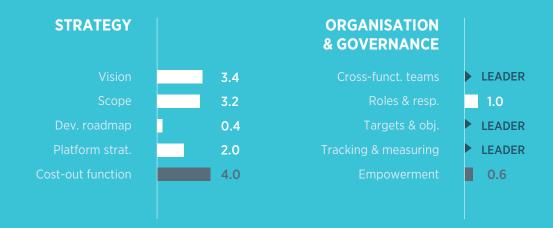
**Methodologies: Unit-price transparency** – for every development project, organisations need to assess and track the unit cost of processes and products against budget and historic data.

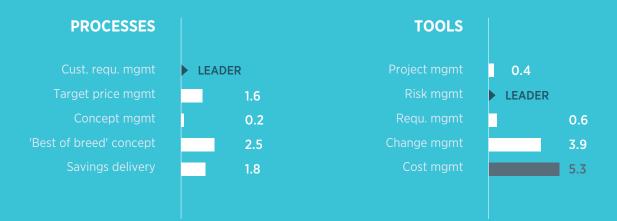
**Tools: Cost management** – organisations need an integrated, web-based toolset for planning, delivering and tracking cost that allows all stakeholders immediate and comprehensive access to one consistent and reliable set of data.

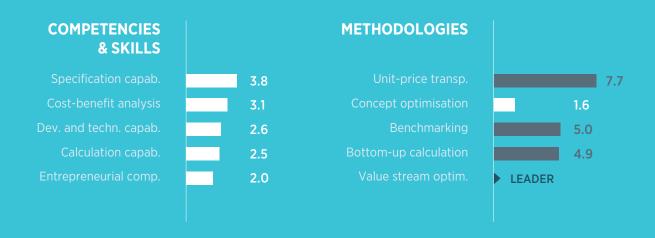
Methodologies: Benchmarking – measuring how performance compares to other organisations within the sector and against other industries and global best-practice leaders is always extremely valuable. It helps inject new ideas and set the challenging targets needed to stay competitive and grow back margins.



## FOCUS INDICES OF SUBDIMENSIONS maturity gap x relevance







## **Industrial engineering**

Key focus areas: following through intentions for cost management, giving people responsibility for keeping costs down and using benchmarking to evaluate decisions.

Industrial engineering companies can no longer differentiate with brilliant engineering alone. Their customers now focus on total cost of ownership, not just capital expenditure.

Although the demand for industrial products looks promising and growth may continue for a while, most industrial companies face challenges on costing, and servitisation is now a well-established sector feature. These organisations know they need to manufacture and maintain their products cost-effectively and efficiently.

We have successfully executed the largest restructuring in our company's history, while continuing to grow our revenue and backlog to new records. As a result of the confidence this has inspired, we are evaluating additional opportunities to reduce costs and to maximize the value of future wins

Michael S. Burke Chairman of the Board and CEO AECOM<sup>3</sup>

## Room for improvement

The traditional way of organising in functional silos is no longer suitable for optimising costs. The opportunities lie in organising differently: with cross-functional teams and a clear steer from the top, based on evidence and setting challenges. And there's a massive opportunity to generate margin through maintenance contracts and offering other services. Companies need digitisation to deliver these services. Industrial companies need to go through a learning cycle fast to stay competitive.

### Sector priorities

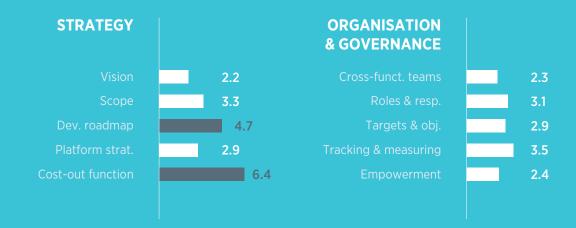
**Tools: Cost management** – an integrated, web-based toolset for planning, delivering and tracking cost allows all stakeholders immediate and comprehensive access to one consistent and reliable set of data.

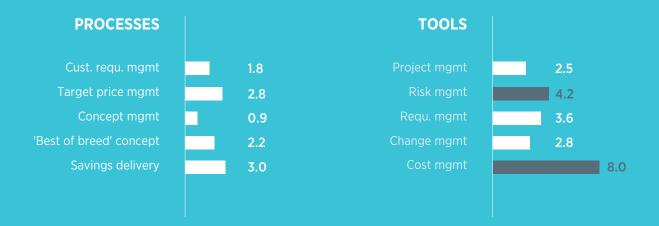
Strategy: Cost-out function – industrial organisations need a strategic cost-out function that's empowered to lead, challenge and veto proposed business solutions – as opposed to being seen as a function that only supports decision-taking. Without that, cost-out experts and engineers come into the process too late, with recommendations and requests that can't be followed.

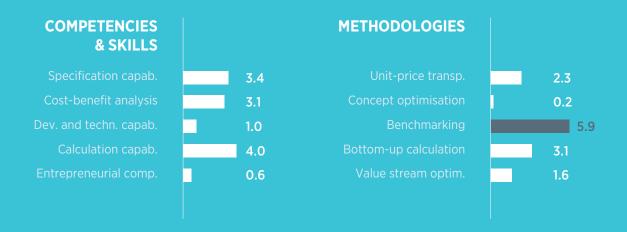
Methodologies: Benchmarking – it's extremely valuable to be able to measure how performance compares to other organisations within the sector and against other industries. This helps inject new ideas and set the targets needed to stay competitive and grow back margins.



## FOCUS INDICES OF SUBDIMENSIONS maturity gap x relevance







## **Energy and utilities**

We will see larger multioperating company utilities, who
have already embarked on the
journey, consolidate platforms
within their portfolio of
companies to reduce operating
complexity and cost

Gregg Edeson PA technology expert

Key focus areas: setting up a dedicated cost optimisation operation including a cost management toolset and cross-functional teams, and unit-price transparency.

The energy and utilities sector falls within the middle of the pack. There have been cost-out successes in offshore wind achieved primarily through competition in the supply chain. We expect cost reductions here will continue in a variety of ways, including further technology improvements and larger wind turbines.

Our research suggests the sector has a significant opportunity to look at cost in terms of meeting customer requirements. Liberalisation, to some extent, caught businesses off guard in terms of the need to understand customers better – and the opportunities that presents. Our research also shows energy and utilities organisations could use methods and tools from other industries. Automotive businesses have well-developed systems in place for engaging with suppliers, for example. This could work well in this sector, where it might be possible to collaborate and set up power-sharing agreements.

The lines between oil and gas companies and electric utilities are beginning to blur as traditional fossil fuel companies invest in the low-carbon transition. Funding infrastructure and ensuring equal access to affordable clean energy are central challenges for the sector.

We expect to see more mergers between oil and gas companies, electric utilities and third-party renewable energy companies. An increasing number of energy companies will invest in renewable energy and electric vehicle charging infrastructure. Blockchain technology will continue to spur the take-up of innovation. All of this requires significant investment and could – if not managed well – lead to higher costs.

## Room for improvement

The sector is strongly influenced by the focus on large-scale, high-cost and complex assets. Unsurprisingly, our research found a strong toolset in project and risk management, supported by strong competencies in these areas. But the gap between this sector and the leaders is significant in most other areas, particularly in the strategy and methodologies dimensions.

#### Sector priorities

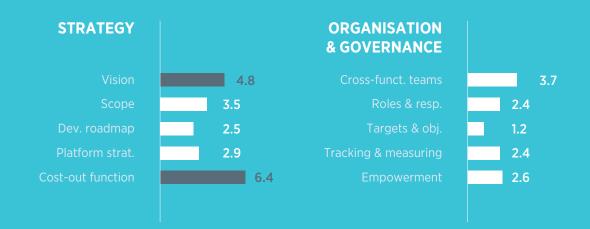
**Tools: Cost management** – in this asset-heavy sector, capital expenditure and operational expenditure need to be evaluated from day one, as the financial risk of failure is so high.

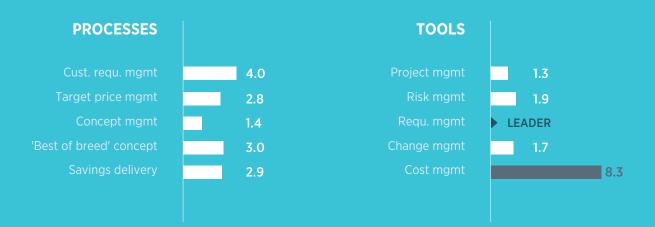
**Strategy: Cost-out function** – a strategic cost-out function is needed that's empowered to lead, challenge and veto proposed business solutions – and not just seen as a project. It can make sense to outsource this to a third party – especially when companies don't have the right expertise at the right time.

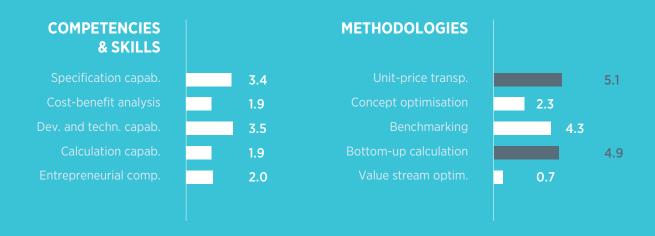
**Methodologies: Unit-price transparency** – the ability to assess and track the unit cost of processes and products against budget and historic data is vital for every development project.



## FOCUS INDICES OF SUBDIMENSIONS maturity gap x relevance







## **Consumer products**

Key focus areas: creating a product development roadmap, understanding customer requirements and developing a cost management toolset.

The consumer products sector falls within the middle of the pack. The sector is characterised by products with a rapid life cycle and constant pressure to develop new and differentiating features to meet real or perceived consumer demand. This is a significant challenge for cost optimisation, and is seeing many consumer organisations look to unlock additional opportunities from their supply chain.

Consumers expect more and more – whether it's new, personalised and sustainable products, or the certainty of getting these products exactly when and where they want. To keep up, manufacturers and retailers must innovate nonstop. That means businesses have to create new revenue streams, transform operations and create competitive advantage. They need to get faster at taking products from creative design through development and launch, and to find new ways to connect brands with customers. This requires major investment in all areas. Controlling capital and operational expenditure will be key.

We will continue to focus on superiority, productivity, constructive disruption and improving P&G's organization and culture to deliver sustainable, balanced top-line and bottom-line growth along with strong cash generation in a challenging competitive and macroeconomic environment

David Taylor Chairman, President and Chief Executive Officer P&G<sup>4</sup>

## Room for improvement

There's a significant opportunity for this sector to learn from other industries – particularly when it comes to making cost control a more strategic theme. Organisations should also learn to put stronger governance in place and give teams clear incentives to focus on cost at an early stage in product development.

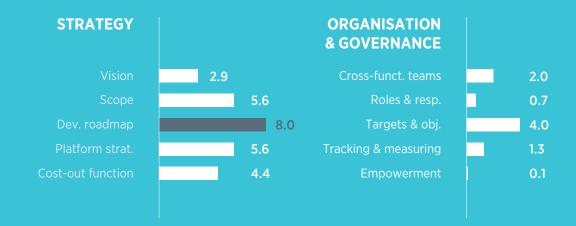
## Sector priorities

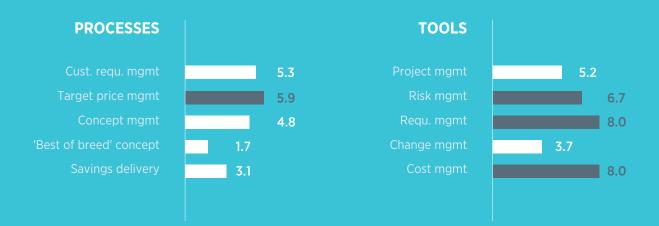
Strategy: Product development roadmap and capability growth – solutions have to be expanded beyond a single product like a chocolate bar, a soft drink and so on, towards a more integrated systems approach that includes additional services around this based on personalisation and customisation.

**Tools: Requirements management** – consumer businesses often go wrong because they only look at things in terms of products. By looking at requirements analysis around the entire journey, leaders can evaluate sooner and more stringently whether customers would be likely to cover the costs.

**Tools: Cost management** – stakeholders need to have immediate and comprehensive access to an integrated, webbased toolset for planning, delivering and tracking cost to one consistent and reliable set of data.









## We would expect to see downward cost pressures as network operators build at scale, refine their build processes and innovate with new techniques

## IT and telecommunications

Future telecoms infrastructure review, conducted by the UK Department for Digital, Culture, Media & Sport<sup>5</sup>

Key focus areas: rethinking traditional supplier negotiations, focusing on bottom-up calculations and setting up a dedicated cost-out function.

Telecommunications companies remain under tremendous cost pressure. They need to continuously invest in new generations of network infrastructure and yet customers expect 'more for less'. The sector has already undertaken cost reduction campaigns, so a new approach is needed.

Their markets are undergoing another generation of fundamental change. The roll-out of 5G technology is driving the need to manage cost rigorously. And the renewed investment in alternative fibre operators and the regulatory push for full-fibre networks is creating even more aggressive competition.

#### Room for improvement

These trends are forcing telecommunications businesses and key technology suppliers to rethink their business models, revisit their talent and competence management strategies, review their product portfolio and adjust their global footprint. They need to streamline operations and improve overall cost structures.

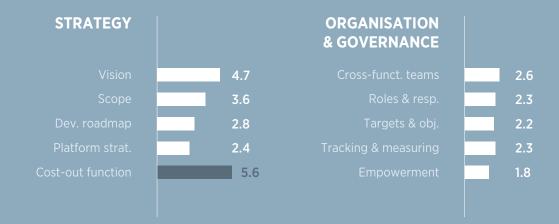
#### Sector priorities

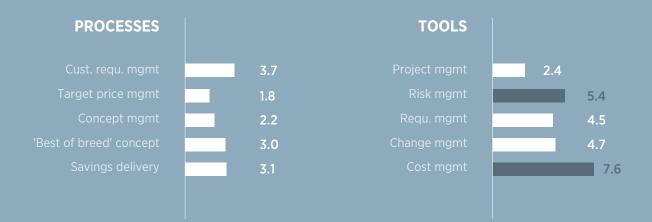
Tools: Cost management - in such an asset-heavy sector, capital expenditure and operational expenditure need to be evaluated from day one as the financial risk of failure is so high.

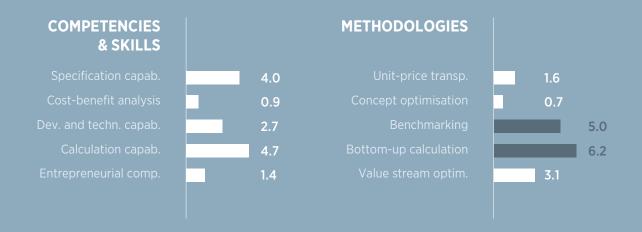
Methodologies: Bottom-up calculation - here, assessing the cost of design and build of every network element enables companies to define cost savings in detail for every component of the network. While progress has been made for physical networks in the past, the increasing importance of software development costs keeps up the pressure to improve in this field.

**Strategy: Cost-out function** – a strategic cost-out function should be in place that's empowered to lead, challenge and veto proposed business solutions. It can make sense to outsource this to a third party, especially if companies don't have the right expertise at the right time.









## **Defence and aerospace**

It is difficult to remember a time when the defence equipment budget was not over budget. And these cost pressures undoubtedly reflect the particular complexities of the defence sector

Jonathan Evans
PA defence and security expert

Key focus areas: setting up a dedicated cost-out function, getting better at using bottom-up calculation and benchmarking.

While the aerospace sector is projected to continue to grow, the need to improve cost optimisation performance is key. Drivers for this include the higher transparency public contractors want, and the arrival of new players competing with highly attractive commercial models. For example, Elon Musk's company SpaceX has designed a launch system for satellites that allows them to return to earth – bringing substantial savings through reusable rockets and economies of scale. And other start-ups are coming up with much simpler engineering for satellites.

Demand for commercial aerospace and defence witnessed robust growth in 2018 – a rare market situation as these markets have historically been countercyclical. But there's still significant disruption. This is driven by innovation and digital transformation, as well as geopolitical situations like the unknown implications of Brexit.

#### Room for improvement

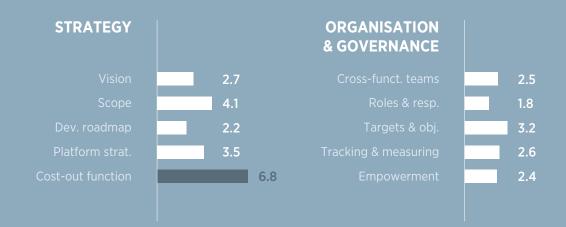
Emerging markets and disruptive business models are gaining in importance while competition and cost pressure are increasing. These trends are forcing original equipment manufacturers and key technology suppliers to make significant changes across all areas of their organisations.

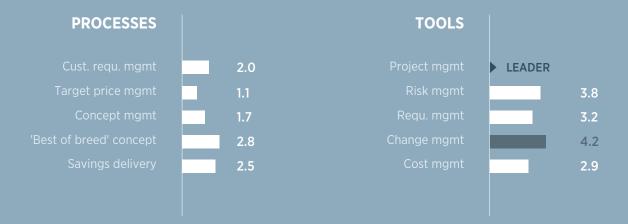
#### Sector priorities

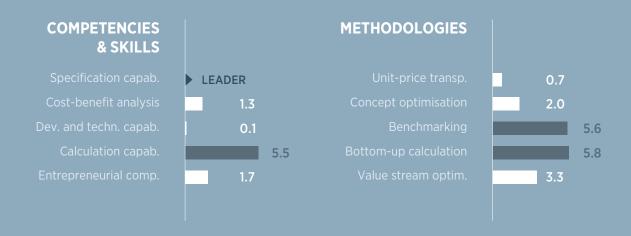
**Strategy: Cost-out function** – cost-out needs to be seen as more than a project. Organisations need a strategic cost-out function that's empowered to lead, challenge and veto proposed business solutions. It may make sense to outsource this to a third party – especially if you don't have the right expertise in place.

Methodologies: Bottom-up calculation – here, assessing all product parts or services sets a fact-based baseline for optimisation. This approach improves cost control and transparency. While progress has been made for physical systems in the past, the increasing importance of electronics and software development cost optimisation keeps up the pressure to improve in this field.

**Methodologies: Benchmarking** – in this sector, product teardown, to evaluate design and materials used, needs to be the rule, not the exception.







#### **Financial services**

Financial businesses must find technologies that will allow them to provide the best service at the lowest cost. To do this, they'll have to co-operate with those firms or individuals that will deliver the optimal solutions they need

Martin Tillisch
PA financial services expert

Key focus areas: unit-price transparency, improving skills in development and technology and getting better at translating customer requirements into product and process specifications.

The sector is the weakest commercial sector in the methodologies dimension – for example, in cost transparency and the use of benchmarks. Because customer engagement is habitually part of service sector work, applying these methodologies is more complex than for product-heavy sectors. But we've found that investing to overcome these challenges is one way sector leaders have of differentiating themselves.

The industry is facing unprecedented challenges: uncertain markets, regulatory pressure, increasing competition, groundbreaking innovations and diminishing margins. New technologies and start-ups develop innovative products and channels, challenging established and traditional players. Today's customers are increasingly sensitive to cost but unwilling to compromise on quality.

#### Room for improvement

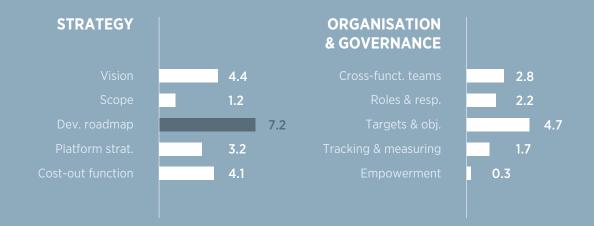
Benchmarks show that the cost per contract still varies significantly across the players – the difference can be by three times as much. The leaders achieve this by cutting out complexity and limiting human interaction in the signing-up process, for example. So, there's clearly still more organisations in this sector can do.

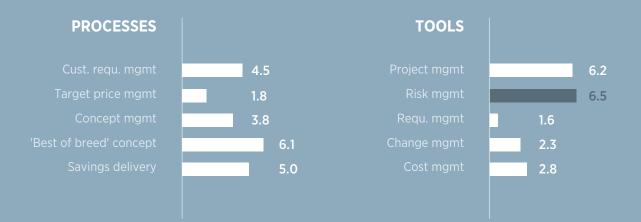
#### Sector priorities

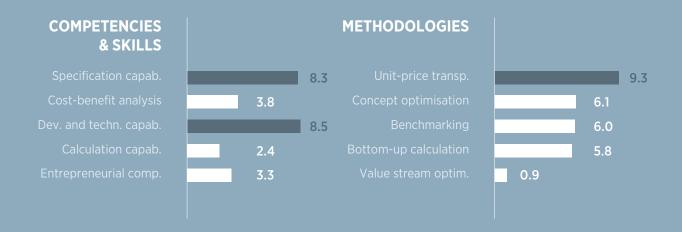
**Methodologies: Unit-price transparency** – for every development project, leaders need the ability to be able to assess and track, against budget and historic data, the unit cost of processes and products. Looking at cost per contract provides extra information to help identify cost drivers.

Competencies and skills: Development and technology capability – financial services businesses are fighting on two sides: trying to keep established legacy systems running while having to invest heavily in new technologies. This means they need to make sure they have a diverse set of capabilities – some of which are in increasingly short supply.

Competencies and skills: Specification capability – a key factor for organisations is the ability to develop new hardware and software simultaneously in a multipartner environment.







# Because costs are rising and revenues remain under pressure across the entire breadth of the business, saving costs remains our priority

### **Transport**

Pieter Elbers President and CEO KLM<sup>6</sup>

Key focus areas: developing a cost management toolset, setting up a dedicated cost-out function and getting better at managing risks.

The transport sector is at the bottom of our scale of forprofit sectors. Across all dimensions, the gaps between transport organisations and leaders are significant – whether in strategy, organisation and governance, or in more operational areas like processes and methodologies. That suggests programmes to optimise cost in the past haven't resulted in a fundamental change in cost management, but rather on short-term, more tactical effects.

Challenges in the sector have been steadily increasing because of the opening of international markets and new entrants, as well as the recent impact of the coronavirus pandemic. With competition broadly intensifying, operators are faced with a unique double challenge – reducing costs while at the same time making offers more attractive. There's a major shift towards 'mobility as a service', where customers will have access to an array of public and private transport options through a single platform. Users will expect seamless travel from one place to another – an outcome rather than the traditional view of operators providing one component of a larger journey. It means playing a new game for which the rules are yet to be established.

#### Room for improvement

Cost optimisation is especially relevant for the transport sector because significant investment is needed across all areas – in infrastructure like rail networks or greening the future of aviation, for example. Improvements here would have a huge impact in terms of infrastructure outlay and ongoing cost of ownership.

#### Sector priorities

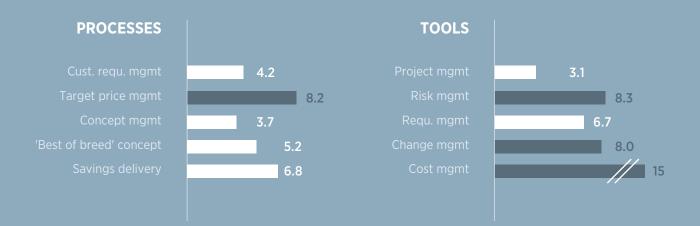
**Tools: Cost management** – in such an asset-heavy sector, capital expenditure and operational expenditure need to be evaluated from day one, as the financial risk of failure is so high.

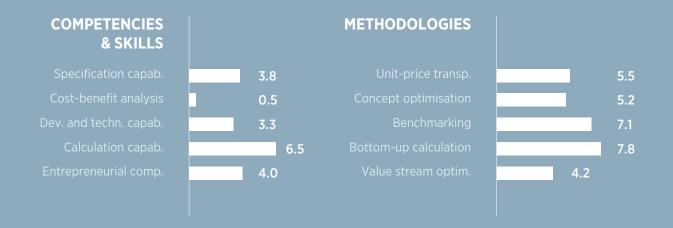
**Strategy: Cost-out function** – organisations need a strategic cost-out function that's empowered to lead, challenge and veto proposed business solutions – as opposed to being seen as a project. Or it can make sense to outsource this to a third party – especially when companies don't have the right expertise at the right time.

**Tools: Risk management** – strong risk management helps identify and mitigate risk, avoid surprises and give initiatives a better chance of success.









# Government and public sector

Key focus areas: getting better at managing risks, setting up a dedicated cost-out organisation including crossfunctional teams and developing a cost management toolset.

The largest of all the sectors, the government and public sector faces very different challenges. This sector is required to fulfil statutory obligations to provide services that are usually under great pressure to reduce cost. The challenge is to determine how public services will be provided in the digital age, with greater accessibility and lower cost.

Over the last decade, organisations in this sector have been recovering from the financial crisis, with most low-hanging fruit savings having already been picked. The sector now has to focus on ensuring services meet long-term aspirations, while reorganising them so they stick to cost forecasts. There are many instances of large-scale projects where costs run out of control. All too often that's because the complexity of these projects requires highly skilled, cross-functional input, but it's left to too few people to manage.

As budgets have been reduced and cost pressure increased, departments have had to make tactical decisions about what can be outsourced to reduce costs

Mark Brett
PA government and public sector expert

#### Room for improvement

The sector has the problem of being underfunded. Lower pay than in the private sector means there's always a shortage of skills. The priority in providing public services should be to limit unnecessary and unforeseen expenditure. That's why we see the need for a focus on risk management.

Organisations here should be undertaking significant programmes that join up functions and seriously challenge the status quo in terms of operation.

#### Sector priorities

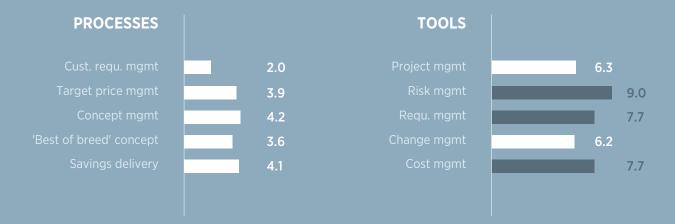
**Tools: Risk management** – governments and public sector organisations around the world have to deal with incredibly complex challenges. The impact of things going wrong is substantial. Stronger risk management can help improve the chances of success.

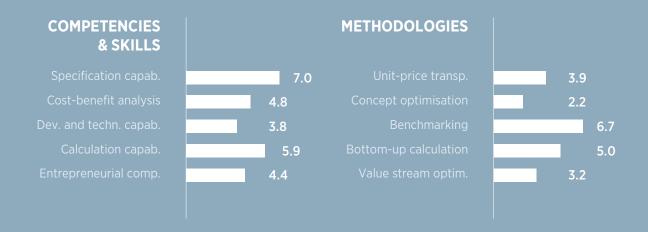
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## **METHODOLOGY**

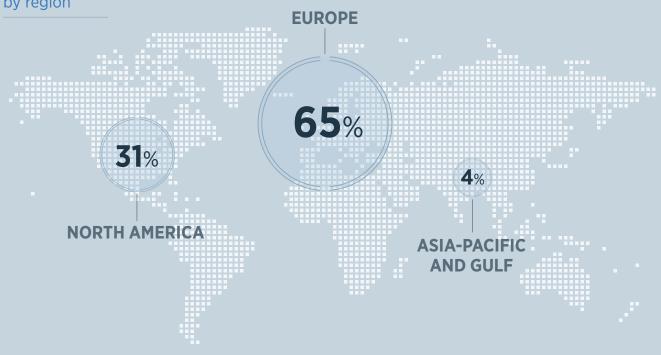
We asked senior executives how well they think their organisation is doing in terms of each of our 30 subdimensions of cost-out by giving a score between 1 and 5. That allowed us to create an index for each sector and to measure the differences between the leaders and the rest.

We also asked respondents from 90 organisations more recently how relevant those subdimensions are for their sector – scoring the relevance from 1 (low) to 5 (high). We used this to weight the gaps we'd calculated for each subdimension in each sector, giving us unique, sector-led insight into the areas of improvement for each sector.

#### The respondents

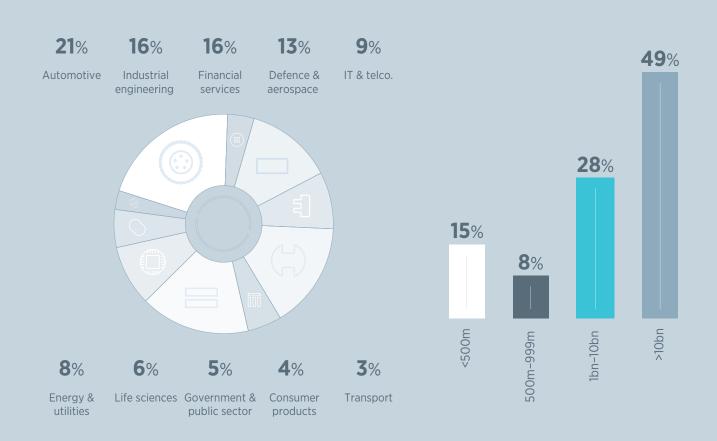
Building on our 2016 survey of 90 global organisations, for this report we surveyed global industry leaders across an additional 90 organisations. Europe and the USA make up 95 per cent of all respondents. We analysed organisations from 10 different sectors. Automotive, financial services, industrial engineering, and defence and aerospace make up two-thirds of all respondents. Half of the respondents are from organisations with an annual revenue of €10 billion or more.





#### Respondents by sector

#### Respondents by annual revenue (€)



## **CONTRIBUTORS**



**CHRIS SHERYN**Operational excellence expert



**SØREN KNUDSEN**Transformation expert

Chris has successfully led performance transformations for large, complex businesses in a variety of sectors. He brings a deep knowledge of methodology and combines it with the breadth of experience to confidently tailor approaches, meeting the specific operational, performance and cultural client environments. Through his broad cross-sector experience, Chris knows what makes performance improvement work and, most importantly, stick.

Søren is an experienced leader and trusted adviser for business leaders, CxOs and boards. He specialises in delivering technology-driven transformation programmes, turnarounds, growth strategies and intelligent cost base reduction. He's driven by the possibility of making a real difference by helping companies simplify their operating models to drive increased focus, true client value creation and operational effectiveness.



**KEN TOOMBS**Head of Americas and strategy expert



**SHANTON WILCOX**Manufacturing expert

Ken is passionate about helping clients drive their transformation agenda by leveraging disruptive technologies to progress further, faster. With over 30 years' experience, his energy comes from using diverse teams of experts to convert brilliant ideas into enduring business results.

Shanton focuses on applying advanced operations capabilities to consumer products and manufacturing organisations to integrate and streamline value chain operations, improving service and lowering costs. He has a record of outstanding success with a deep set of experiences across several industries; including luxury retail, specialty food, consumer durables, life sciences, automotive, industrial products, aerospace and defence, and high tech.

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opportunity + innovation = competitiveness

#### **Endnotes**

- <sup>1</sup> The evolution of the agile organisation: old dogs. Ingenious new tricks. PA Consulting, October 2018
- <sup>2</sup> 'VW CEO shifts strategy from empire building to efficiency', uk.finance.yahoo.com, 13 September 2019
- <sup>3</sup> 'Q2 2019 AECOM earnings call', Thomson Reuters, 8 May 2019
- <sup>4</sup> 'P&G announces fourth quarter and fiscal year 2019 results', P&G, 30 July 2019
- <sup>5</sup> 'Future telecoms infrastructure review', Department for Digital, Culture, Media & Sport, gov.uk, July 2018
- <sup>6</sup> 'KLM traffic results October: +3.6%', aviation24.be, 12 November 2019



#### About PA.

We believe in the power of ingenuity to build a positive human future in a technology-driven world.

As strategies, technologies and innovation collide, we create opportunity from complexity.

Our diverse teams of experts combine innovative thinking and breakthrough use of technologies to progress further, faster. Our clients adapt and transform, and together we achieve enduring results.

An innovation and transformation consultancy, we are over 3,200 specialists in consumer, defence and security, energy and utilities, financial services, government, health and life sciences, manufacturing and transport. Our people are strategists, innovators, designers, consultants, digital experts, scientists, engineers and technologists. We operate globally from offices across the UK, US, Europe and the Nordics.

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