#Digital

IN 30 SECONDS

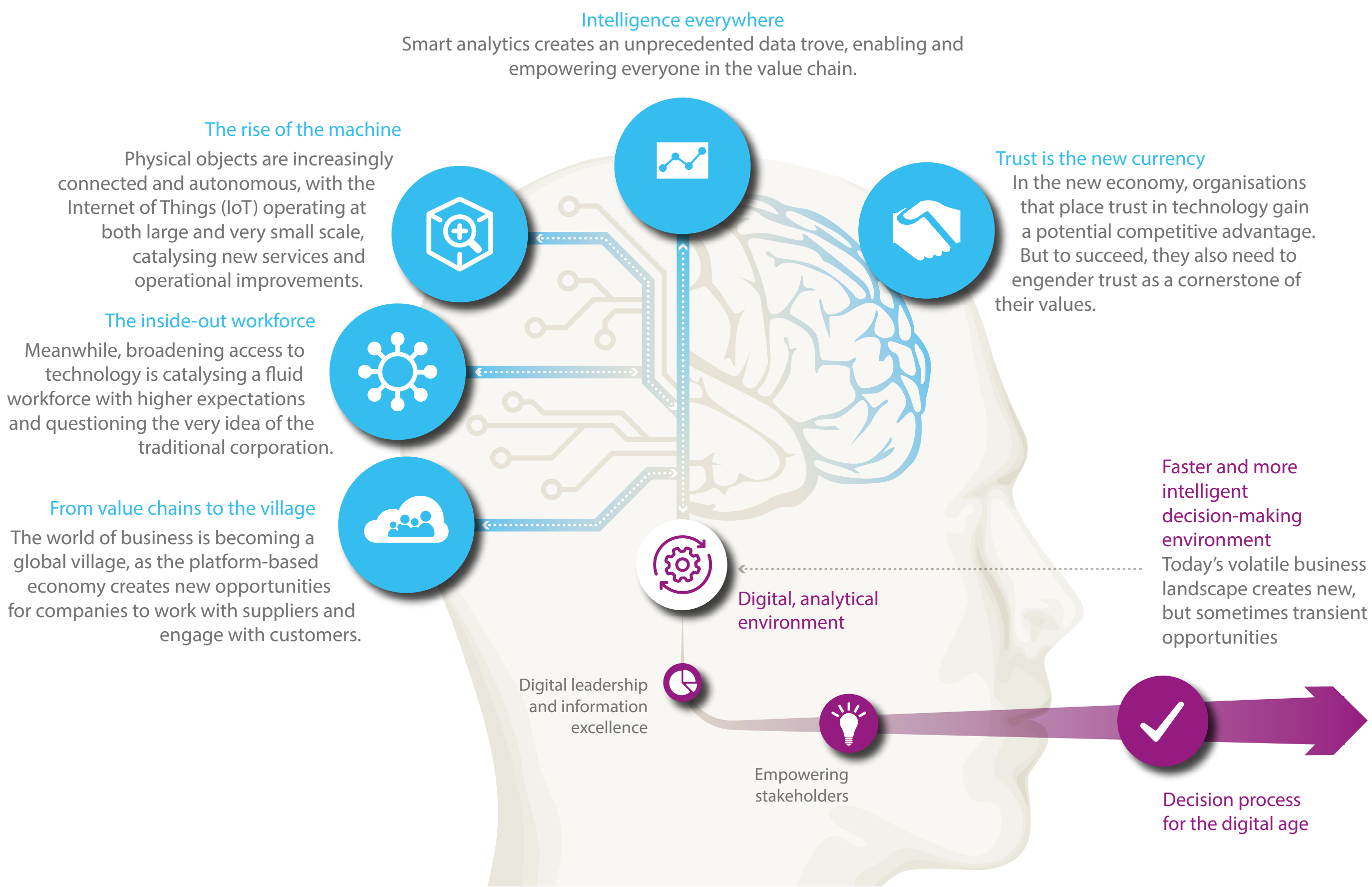
- Five concurrent, digital shifts are transforming the business scene: intelligence everywhere, increased connectivity and autonomy of objects, accelerating impact of technology, rise of the platform economy, increasing dependency on trust
- Whilst organisations want to adapt, they are often hampered by their own complexity and traditions
- New research suggests that in order to make faster, better decisions in the digital age, senior executives should be moving from unilateral, command and control models, to collaborative decisions by empowering stakeholders with information

Rewiring the corporate brain

Faced with a number of seismic digital shifts, organisations need to rethink how they approach strategic decision making if they want to break with the past

Digital leaders built for fast decisions

Five digital shifts are changing the landscape of business, impacting both strategic and operational decisions. To respond quickly and dynamically, organisations need to tap into the collective voices of their stakeholders, harnessing the power of digital to ensure the right information reaches the right people at the right time.



#Digital

'A fast decision is often better than no decision. Since no decision leads to delays or unwanted results. No decision therefore is also a decision but it's passive and with high risk!' – THOMAS LÜNENDONK, JULY 2015[1]

What happened at Volkswagen? What chain of events led to the collapse in share price by 40%, the resignation of its CEO and the irreparable damage to the company's reputation? With the dust still settling on one of the biggest corporate scandals in recent years, its causes remain obscured by the sheer size and complexity of the organisation.

Whilst we may never get to the bottom of it, observers are clear on the drivers. Investigations will lead to 'another case study in the annals of bad decision making,' believes[2] *Fortune's* Ryan Derousseau. Volkswagen isn't alone: pick any recent corporate disaster and you will find a similar story. 'Toshiba had a corporate culture in which management decisions could not be challenged,' said the report[3] into the company's 2015 accounting scandal, also resulting in a CEO resignation.

Volkswagen and Toshiba are just two more cases in a series of mega-failures, their causes obscured by complexity but their effects linked to failures to respond to the changing context within which they operate. A number of technological shifts have catalysed a business landscape where such failures are not tolerated for long, even as it transforms the business models and operational processes upon which companies depend.

Rooted in the accelerating spread of technology, the digital wave is creating as many opportunities as risks, driving a need for faster decision making as organisations look to benefit from all-too-brief market advantage. Writes[4] Rita Gunther McGrath, professor at Columbia Business School[5], 'Transient-advantage leaders recognise the need for speed. Fast and roughly right decision making will replace deliberations that are precise but slow.'

A number of technological shifts have catalysed a business landscape where such failures are not tolerated for long, even as it transforms the business models and operational processes upon which companies depend

#Digital

Having carried out some research to understand decision making better, we have found that many firms struggle over complex structures, systems and processes. Respondents were 2.0x as likely to think that new market entrants and more agile competitors using digital technologies are a significant threat, even as they recognise time is not on their side (figure 1). And inevitably, bigger (and therefore more complex) companies have less efficient decision processes – 'too big to fail' can become 'too slow to succeed'.

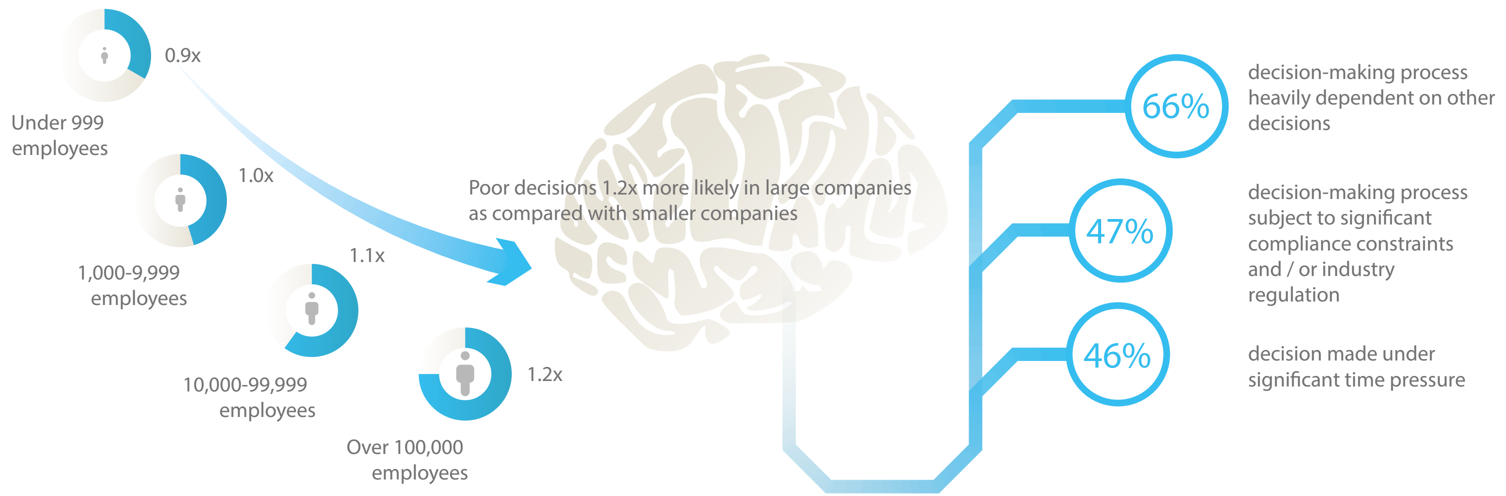
Time is not on any organisation's side. Whereas industries once changed slowly, the digital wave has first impacted more susceptible sectors (taking down Kodak, Borders, Blockbuster and others) and is continuing its relentless progress into previously immune verticals such as financial services, automotive and healthcare. A key element of an organisation's strategic response, clearly, is to make better, faster decisions that will stand the test of time. But how can this outcome be achieved, given just how complex and downright opaque organisations are today?

Strategic decisions are over 1.3x as likely to lead to good outcomes if a number of inter-related elements are in place

Using the BearingPoint Hypercube smart analytics solution we found that strategic decisions are over 1.3x as likely to lead to good outcomes if a number of inter-related elements are in place. Top of the list, according to our research, is empowerment.

Figure 1: Size and complexity are hindering good decisions

Left: Respondents' company size and the likelihood of making poor decisions
Right: Respondents' report impediments asssociated with strategic decision-making



Source: BearingPoint Institute survey, 2015

#Digital

Staff and customers should be directly involved in decisions

Human involvement in decisions is fundamental to both driving strategic insights and steering day-to-day priorities. In our research, when we looked at behavioural factors, we found that 60% of decisions were influenced by people who provided information, even if they were not direct participants in the decision process. This increased to 71% when high levels of business risk were a factor.

Significantly, different types of decision can be seen to benefit from involving different stakeholder groups. In general terms, while the bulk of decisions involved only senior executives, decision processes were 2.2x as likely to be effective when all levels of staff were involved.

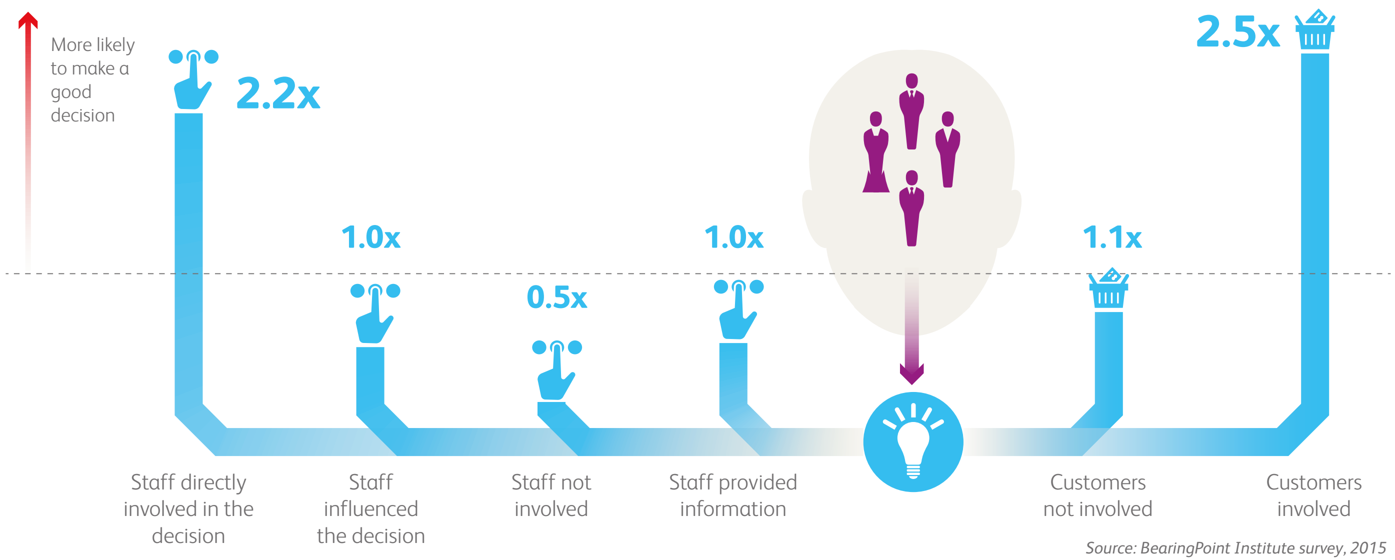
Where decisions have an impact on specific stakeholder groups, it becomes fundamental to involve those groups in the decision. For example, from the research we see that one in three marketing decisions met their expectations if customers were involved,

One in three marketing decisions met their expectations if customers were involved, compared to one in five where they were not

compared to one in five where they were not. Overall, whilst only 8% of decisions directly involved the customer, 49% of decisions where expectations were exceeded directly involved customers in the process (figure 2).

Figure 2: Better decisions involve customers, staff on other stakeholders

Left: Correlation between degree of staff involvement and quality of decision process
Right: Correlation between customer involvement and quality of decision outcome



Source: BearingPoint Institute survey, 2015

#Digital

The link to today's increasingly collaborative business landscape could not be more clear. As information sources diversify and extend beyond company boundaries, so must the pool of people involved in deriving insights, not as passive sources but as active participants in achieving a shared goal. 'Think tribes as well as teams,' explains Forrester's Allegra Burnette. 'Teams come together to win; tribes come together around common beliefs and work as a team for the interest of the whole community.'[6]

Information needs to be accessible to all stakeholders

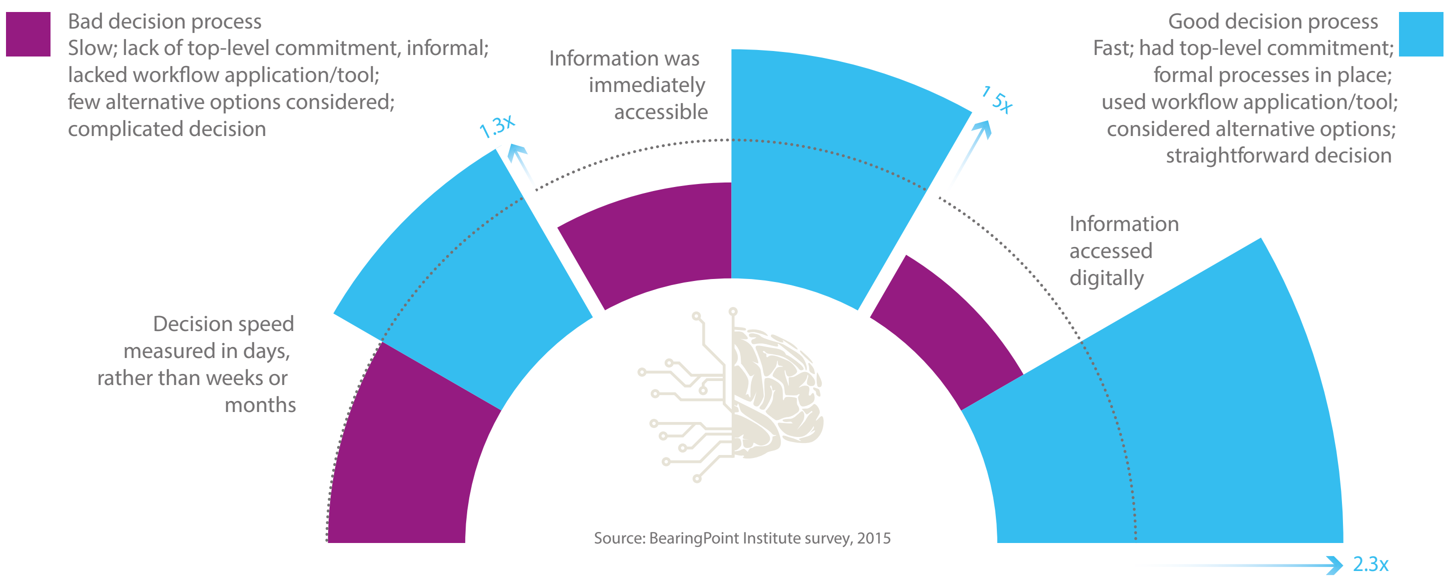
For improved decision-making, the research tells us information needs to be immediately and digitally accessible, reliable and of high quality.

A significantly higher proportion of decisions – 28% compared to 18% – had their goals exceeded when information was immediately available, for example (figure 3). And a good decision-making process is over 2.0x as likely to have used digitally accessible information.

Given how many business decisions rely on gaining even the smallest advantage over the competition, this finding is highly significant. Says Sir Clive Woodward, who pioneered the use of data in sports science in 2003, 'Whoever wins in information technology tends to win.'[7]

Figure 3: Good decisions are driven by speed and information accessibility

Correlations between companies reporting a good decision process and respondents agreeing with the statements below



Source: BearingPoint Institute survey, 2015

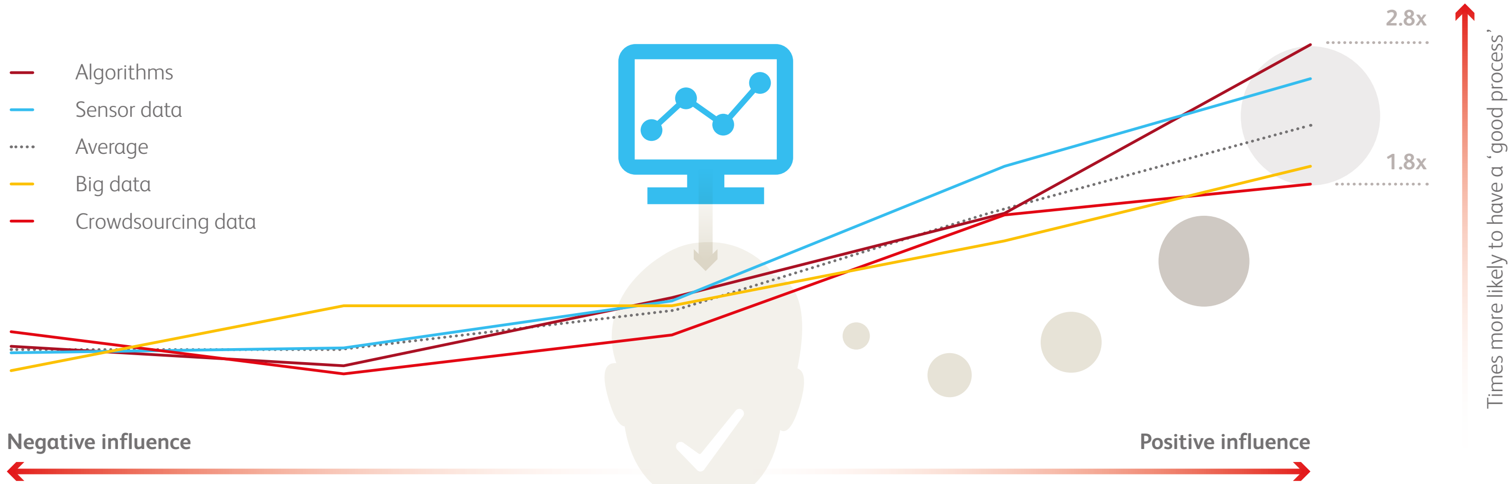
#Digital

In the digitally enabled world, organisations need to take into account an increasingly diverse and complex range of information inputs, driving the need for a well-architected digital platform. From the research we can see that a good decision-making process is 1.5x more likely to include immediately accessible information; indeed, it is 2.3x more likely to have used digitally accessible information, such as via portals or reporting systems. Similarly, a good outcome is 1.8x more likely when the information needed to make a decsion was totally automated. And, as shown in figure 4, decisions using algorithms to analyse data and deliver insights were 2.8x as likely to yield better outcomes.

From the research we can see that a good decision-making process is 1.5x more likely to include immediately accessible information

Figure 4: Decision processes based on algorithms are more effective

Relative influence of digital technologies on quality of decision process



Source: BearingPoint Institute survey, 2015

#Digital

Leaders need to drive digitally enabled decisions

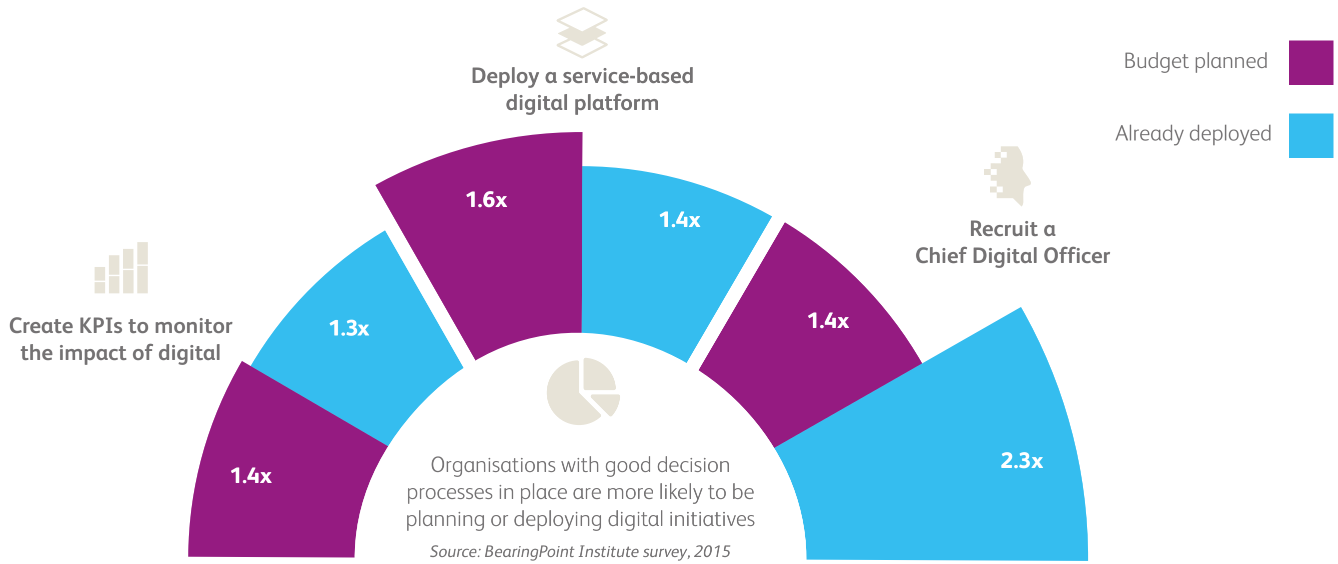
To many organisations, empowering stakeholders by giving them the right information at the right time is going to raise a number of challenges. As we covered at the start of this paper, no business is operating in a vacuum with unlimited resources. However, some organisations are taking the bull by the horns and recognising the importance of improving their capabilities.

For example, of those respondents achieving better outcomes, 45% have already changed their business processes and systems to support better decision making. In addition, whilst up to 55% of companies had no plans to invest in digital, companies with good decision processes are 2.3x more likely to have recruited a Chief Digital Officer (figure 5).

Other factors, such as using key performance indicators (KPIs) to assess how well digital tools are being implemented, are at least 1.3x more likely to be in place. Note that such factors may be transient – for example, a CDO or digital-specific KPIs may not be necessary in organisations that have already embraced digital capabilities.

Figure 5: Digitally-enabled decision processes need to be driven proactively

Correlation between quality of decision process and planned/deployed digital business initiatives



Source: BearingPoint Institute survey, 2015

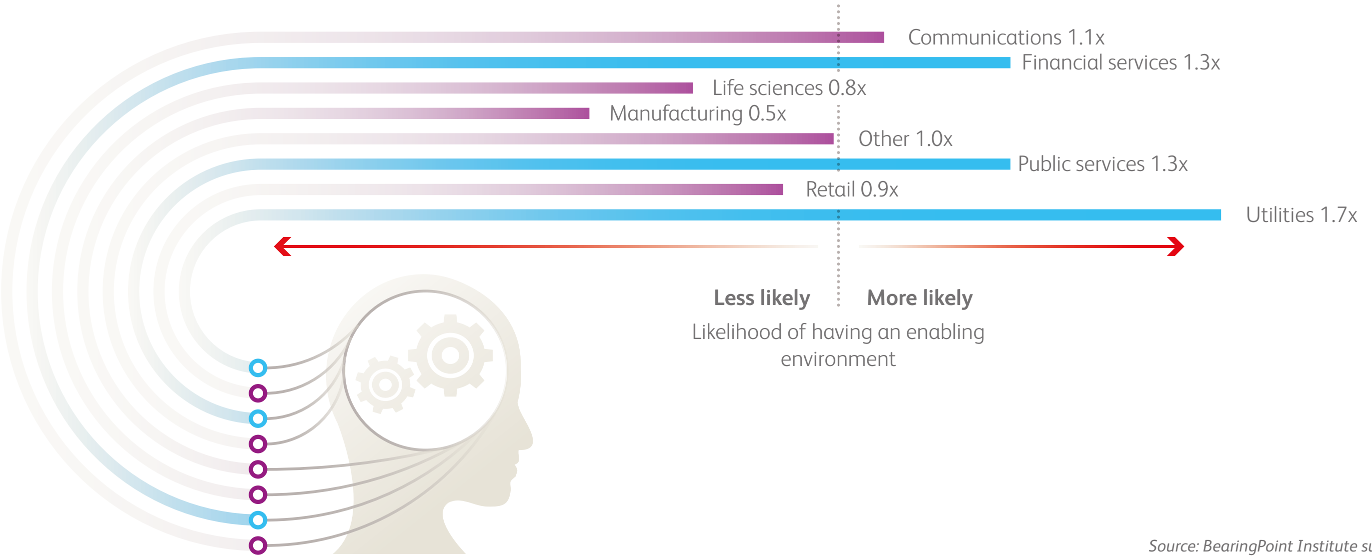
#Digital

Certain industries appear better at creating enabling environments for good decision making, not least utilities – which has a higher level of senior executive support than other industries (figure 6). Meanwhile the communications and media industries appear to have a head start on other sectors in regard to agile methodologies and the use of KPIs.

Ultimately, in today's fast-moving business context, the main crime any company can commit is to act as if nothing is happening, or to merely tinker at the edges of 'transformation' without making the deep changes that are actually required. To paraphrase an old joke, for change to happen, the organisation itself has to want to change – from the front lines to the very top of the hierarchy.

Figure 6: Certain industries are better at creating enabling environments

Relationship between industry vertical and likelihood of having enabling environment for decision-making



Source: BearingPoint Institute survey, 2015

#Digital

Stop deciding unilaterally, start enabling good decisions to happen

Even as the world becomes more complex, the answer is simple. Future decision-making success will be defined through harnessing the skills, insights and experiences of an increasingly broad and diverse ecosystem. There is no going back to traditional, command and control: the future will be defined by those who rethink their strategic decision-making approaches to engage with the collective voices of their stakeholders, both internally and externally.

For Volkswagen this knowledge may have come too late: interestingly, in the company's new drive for transparency, it has extended an amnesty across the organisation such that staff could speak out without fear of dismissal. Even as traditional organisations fear opening up in case they release some competitive advantage, new upstarts throw caution to the wind in the understanding it is speed, not secrecy, that holds the key.

Today's volatile business landscape creates a transience of opportunity and of insight that cannot be met by making decisions in isolation. A better alternative, indeed the only one, is to stop making decisions unilaterally, and start enabling decisions to happen – by listening first, then acting fast. 'We are perpetually listening and watching what's happening out there, and we are testing a lot of things,' says Lubomira Rochet, CDO at beauty products company L'Oréal, which is pioneering this new way of thinking strategically[8].

Other firms such as GE and UK retailer John Lewis have also proved they can be just as innovative as start-ups, if they act in harmony with the ecosystem rather than fighting against it. Such companies recognise the need for fast, reliable decision processes that take into account digitally enabled information flows, which put the right information into the hands of customers and staff, partners and suppliers and delivers insights stakeholders need to contribute at a strategic level.

In the future, no room exists for opaque decision-making structures which seek to protect senior management rather than enable the business

In the future, no room exists for opaque decision-making structures that seek to protect senior management rather than to enable the business. Change can only come from the top: for efforts across the organisation to bear fruit, the leadership team needs to fully embrace the collaborative, information-enabled future, and so create the enabling culture their organisation needs to thrive.

As writes Isaac Getz, co-author of the book *Freedom, Inc* on the skills required for future leaders, 'We did find three distinguishing character and psychological traits: egalitarian value – respect, dignity, consideration, trust, fairness and equity; creativity – an ability to redefine problems; and wisdom – holistic and thinking style.'

Future decision-making success will be defined through harnessing the skills, insights and experiences of an increasingly broad and diverse ecosystem

#Digital

The need for a strong, experienced, visionary corporate brain does not diminish, but it needs to be tightly integrated with the ecosystem within which it participates – engaging as a peer, not making pronouncements like some disengaged dictator.

To this end organisations can take actions such as:

- Implementing a data lab, so that the firm has state of the art analytical capabilities that deliver the right information to the right people.
- Adopting experimentation-based approaches, as every business has different needs – building experience of what works should be a higher priority than assuring the ROI of each initiative.
- Institutionalising co-creative activities, expanding their scope beyond product development to decision making across the board.

KEY TAKEAWAYS

Hypotheses on which this paper is based:

- Multiple digital shifts are acting in tandem to have an unprecedented impact
- Empowerment of staff, customers and other stakeholders should be the focus of any business looking to improve its decision-making
- Digital technologies are enablers of significantly better business decision making
- Becoming smarter requires a significant change in mindsets, structures and skills.

Conclusion: Embracing digital technology, in an actionable way, leads to improved decision making. To achieve this, there needs to be a breakthrough in thinking from the top of the organisation.

Achieving these changes in thinking are not for the many, but for the few who want not only to ride, but become part of the digital wave. The alternative is a continued disconnect from an increasingly integrated, dynamic world, leaving the organisation on an accelerating slide towards oblivion.

About the author

Eric Falque
Regional leader France & Benelux,
BearingPoint, Paris

Eric is a member of the Global Management Committee at BearingPoint and regional leader for France & Benelux, responsible for client relations, service lines and industries as well as profitable and sustainable growth for this region. He has more than 20 years' experience in Digital Marketing, Sales & Customer management, both playing a role in worldwide firm management and working for global accounts. He has led various projects in the manufacturing, media, utilities, telecoms, services, retail and automotive industries in the areas of customer and relationship marketing strategy. Eric has co-created a Business Award (Podium de la Relation Client), the results of which are eagerly awaited every year by the largest French firms. Furthermore he has co-written a book – *Addressing customer paradoxes in the digital world* – as well as contributing to several BearingPoint Institute papers in the past.

eric.falque@bearingpointinstitute.com

Project team
Ludovic Leforestier and Sharon Springell from the BearingPoint Institute, Jon Collins from InterOrbis.

Acknowledgements

The author would like to thank Erik Campanini, Angus Ward, Damien Palacci, Caroline Viarouge, Matthew Hoffbrand, Jonathan Stephens, Tanja Schwarz and Simon Torrance from BearingPoint and Paul Hagen from WestMonroePartners for their analysis and insights. The author would also like to thank Angelique Tourneux from BearingPoint, Michael Agar from Agar Design and Chris Norris from CopyGhosting as well as Prof. Jonathan Freeman from i2 media research / Goldsmiths University of London.

#Digital

LESSONS FROM PSYCHOLOGY ON DECISION-MAKING

Are decisions always rational? The psychology literature says not: emotion and social influence often get in the way.

Academic and applied psychologists have long studied the processes and mechanisms of decision-making on an individual and group basis, defining decision making as the process by which individuals identify an option from an array of alternatives after the evaluation of possible outcomes (Wang and Ruhe, 2007).

Decisions are not 'rational'

Originally, decision making was identified as a rational process whereby the decision maker(s) carefully evaluates information – until the concept of 'bounded rationality' was established, which highlights that humans have limited resources (time and information) on which to base decisions. Subsequently, a large body of research focused on differentiating slower (more methodical) from faster (more instinctive) decision styles, with the latter relying more on implicit and emotional drivers (e.g. Kahneman and Tversky, 1979).

Organisational decision making is a social process

Whilst psychology's understanding of biases and factors affecting individuals' decisions is interesting, when considering decision making in organisations, even more important is an awareness of the group nature of most organisational decision making. In this context, an understanding of social influence (conformity, compliance, obedience), group dynamics, and the composition of a decision-making team is essential. Effective organisational decision-making processes work best when risks arising from potential sources of social bias are actively managed. How? Through open, transparent processes so all ideas are considered. And safe, privacy-maintaining mechanisms so that uncomfortable facts are considered and not avoided.

Good decisions flow from well-defined, specific questions

One of the key determinants of the quality of a decision, and indeed the mechanism by which the decision is reached, is the character, certainty or specificity of the question or problem being addressed.

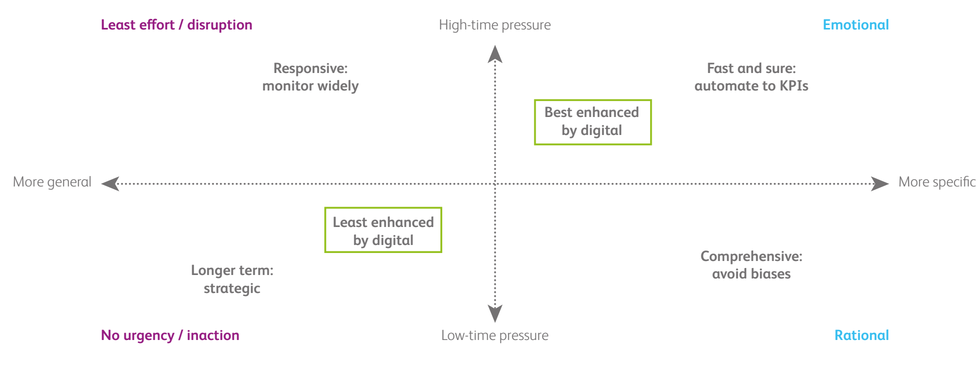
A typology of organisational decisions

i2 media research, led by Professor Jonathan Freeman, has developed a model of behaviour that has been applied in relation to search behaviours, and is applicable to understanding decision making. The model makes explicit two dimensions – the time pressure under which a decision is needed, and the granularity (and scope) of the decision. Mapping these out produces four quadrants, which describe types of organisational decision.

As reported in the main text, decisions made under high time pressure tend to be evaluated as better than decisions made under less time pressure. We have all seen occasions where more drawn out decisions can enable the amplification of social biases. In these situations, low time pressure can allow biases to accumulate,

Decision-making diagram

How limited resources such as time and information effect the basis of a decision:



#Digital

with more selective 'rational' consideration of information sources – risking giving greater weight to those sources consistent with incorrect gut feelings or assumptions of the decision-makers. Indeed, advice on minimising decision biases often focuses explicitly on decision-making processes in less time pressured contexts.

Especially for high time pressure, specific decisions, excellent information is clearly a determinant of good decision making. For information to be excellent, it needs to be information about something relevant and specific. Digitally accessible, excellent quality information has the biggest impact in specific and time-pressured decision contexts. High time pressure decisions without the correct information are the highest risk decisions.

So what? For fast-moving business critical decisions, it is essential to have decision-making processes that are reliant on instantly available, excellent quality information.

Manage potential social biases in organisational decision-making processes

Organisational decision making is an inherently social process; and social decision making involves collective confrontation that can foster creativity, knowledge, awareness and lead to inclusive decisions. Pellosniemi, in his book *Social Decision Making*, describes that the decision-making process starts with a draft and continues with proposing and sharing information to arrive at a decision. Then it's the turn of executing, evaluating and closing the process.

Social decision making has risks specific to its group nature: irrational decision making by the group (groupthink) and the tendency of individuals in a group to take extreme positions (polarisation). Furthermore, the presence of a strong majority and social pressure can crush and silence the contrasting voice of a minority, resulting in the suppression of valid dissenting viewpoints. The result? Bad decisions.

So what? Decision-making processes in organisations should explicitly mitigate against the risks inherent to social decision-making.

So, the quick insights from psychology?

For the best organisational decision-making, time pressure can help, if organisational decision-making processes incorporate excellent information systems and effective management of potential social biases.

References:

- Wang, Y., & Ruhe, G. (2007). The cognitive process of decision making. Int'l Journal of Cognitive Informatics and Natural Intelligence, 1(2), 73-85.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47, 262-290.
- Pellosniemi, J (2014). Social decision-making: the introduction, Libris oy, Finland.

Prof. Jonathan Freeman is a leading expert in media and consumer psychology and human factors of digital media. Taking as his starting point fundamental psychology research and methods, he has developed and applied a body of knowledge to the evaluation and optimisation of digital and traditional media products and services, focusing on user experience, effectiveness, accessibility and monetisation.

Jonathan is Professor of Psychology at Goldsmiths University of London in which role he leads large scale national and international multidisciplinary projects innovating at the cutting edge of the intersection between humans and media technology. He is also Managing Director of i2 media research, as a spin-off company from his academic research team at Goldsmiths University of London.

#Digital

METHODOLOGY

As part of our review of the current state of strategic decision making, between July and August of 2015 we undertook some primary research into decision-making practices across a number of European countries. 300 senior roles were interviewed from France, Germany and the UK.

In our research we asked about a recent, strategic decision: 50% of the 300 decisions directly involved the board, and the board was consulted in a further 29%. As well as painting a picture of current practice we wanted to identify how to enable better strategic decisions, more frequently and with better outcomes.

In order to qualify answers we used the following definitions:

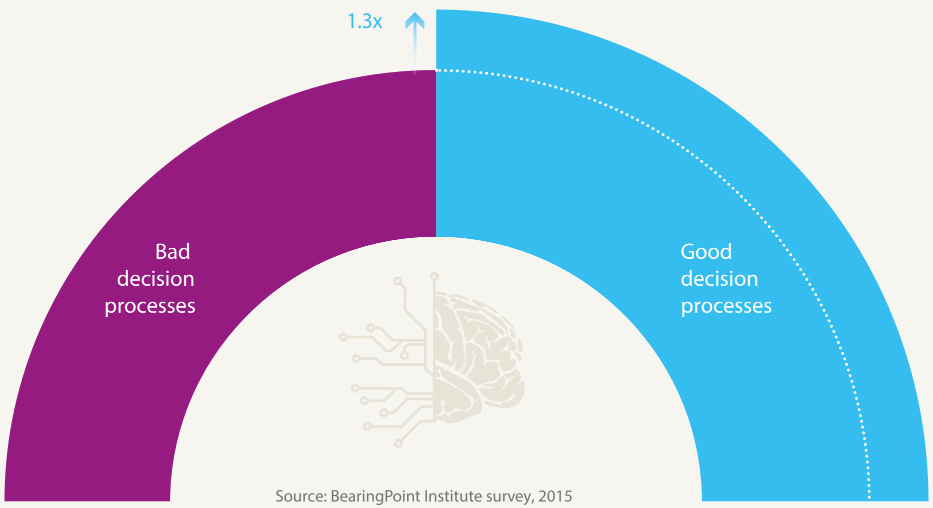
Good outcome: 100% of outcomes listed EITHER Exceeded expectations OR Met expectations

Good process: Agree OR Strongly agree:

- There was top level commitment
- Decision was formal
- Decision used workflow application/tool
- Alternatives considered were appropriate for decision
- Decision was straightforward

Good decision processes result in good outcomes

Respondents reporting good decision outcomes as opposed to bad decision outcomes are 1.3x more likely to have sound decision processes in place



Source: BearingPoint Institute survey, 2015

#Digital

Notes and Bibliography

1. *Trends und themen,* Lünendonk, Mindleheim, Germany, web, PDF, Thomas Lünendonk, 07/15, http://bit.ly/LDonkTrends
2. 'The four horsemen of bad decision making', *Fortune*, New York, NY, USA, web, Ryan Derousseau, 28/10/15, http://bit.ly/Fortune4Horse
3. 'Toshiba just lost its CEO to a huge accounting scandal', *Fortune,* New York, NY, USA, web, Geoffrey Smith, 21/07/15, http://bit.ly/FortuneTosh
4. 'Transient advantage' *Harvard Business Review,* Boston, MA, USA, web, Rita Gunther McGrath, 06/13, http://bit.ly/HBRTransAdv
5. 'How to live with risks', *Harvard Business Review,* Boston, MA, USA, web, editorial, 07-08/15, http://bit.ly/HBRRisks
6. 'Brief: Staffing For Data-Driven Design', *Forrester Research*, US, web, Allegra Burnette http://bit.ly/1QDrMOL
7. 'Sir Clive Woodward: "Understanding digital data is key"', *The Telegraph*, London, UK, web, Oliver Pickup, 09/07/15, http://bit.ly/TelSirCW
8. 'L'Oreal: How technology is transforming beauty' *The Telegraph*, London, UK, web, Sophie Curtis, 18/07/15, http://bit.ly/1I5YXI1

- 'The onrushing wave', *The Economist,* London, UK, web, editorial, 18/01/14, http://bit.ly/OnrushWave
- 'Home', *Freedom, Inc.*, USA, web, Brian M Carney and Isaac Getz, http://freedomincbook.com
- 'Message not received: why business communication is broken and how to fix it', *Amazon*, Seattle, WA, USA, web, Phil Simon, 02/03/15, http://bit.ly/AznSimon
- 'Huit questions sur l'entreprise libérée', *Les Echos,* Paris, France, web, Yves Cavaret, 09/04/15, http://bit.ly/Echos8Q
- 'The best data storytellers aren't always the numbers people', *Harvard Business Review,* Boston, MA, USA, web, Alexandra Samuel, 28/10/15, http://bit.ly/HBRDataStory
- 'Everyone says they listen to their customers – here's how to really do it', *Harvard Business Review,* Boston, MA, USA, web, Ana Brant, 28/10/15, http://bit.ly/HBRListen
- 'Observing culture: differences in US-American and German team meeting behaviors', University of Nebraska Omaha, Omaha, NE, USA, web, PDF, Nale Lehmann-Willenbrock et al., 08/13, http://bit.ly/UNOObsCulture
- '3 timeless rules for making tough decisions' *Harvard Business Review,* Boston, MA, USA, web, Peter Bregman, 02/11/15, http://bit.ly/HBR3Rules
- 'The visionary rebuilding GE from scratch to become a digital powerhouse', *The Telegraph*, London, UK, web, James Quinn, 03/10/15, http://bit.ly/TelGE
- 'Can we design trust between humans and artificial intelligence?', *Fast Company,* Harlan, IA, USA, web, Patrick Mankins, 19/06/15, http://bit.ly/FastcoTrust

#Digital

About the BearingPoint Institute

At the BearingPoint Institute, our ambition goes beyond traditional 'thought leadership'. We aim to contribute original ideas to the science of business management whilst equipping decision makers with practical advice gained in the field and through our research projects.

www.bearingpointinstitute.com

About BearingPoint

BearingPoint consultants understand that the world of business changes constantly and that the resulting complexities demand intelligent and adaptive solutions. Our clients, whether in commercial or financial industries or in government, experience real results when they work with us. We combine industry, operational and technology skills with relevant proprietary and other assets in order to tailor solutions for each client's individual challenges. This adaptive approach is at the heart of our culture and has led to long-standing relationships with many of the world's leading companies and organizations. Our global consulting network of 9700 people serves clients in more than 70 countries and engages with them for measurable results and long-lasting success.

www.bearingpoint.com

CONNECT

Follow us on Twitter at @institute_be

Join us on LinkedIn at www.inst.be/linkedin

www.bearingpointinstitute.com

Send us your comments, thoughts and feedback:

editor@bearingpointinstitute.com

www.inst.be/feedback

DOWNLOAD

Read the BearingPoint Institute on your tablet with the mobile app:

iOS version from the iTunes AppStore

Android app on Google Play

Amazon Kindle (Fire only) store

(to guarantee a good reading experience, these apps are for tablets only)

BEI007-13-INT