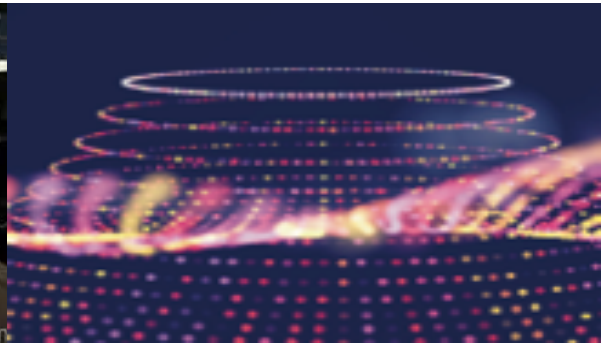
Bakrie & Brothers

Human Resources and Digital Transformation



Prof. Firmanzah., PhD
Komisaris Independen BNBR

Today's world

Today companies operate in an increasingly complex global environment, defined by four key trends:

Growth

Now that economies, particularly developed economies, have largely rebounded from the late recession, companies are once again starting to look for opportunities for growth. With that, big projects such as product expansions and mergers and acquisitions are back on the table.

> The main driver of change is our growth agenda. This is a very competitive marketplace and there are lots of changes in the industry.
>
> **Sales director, Manufacturing sector**

> Our goal is to take out substantial savings, but the intention is to use savings to reinvest in the business and fuel growth. We are looking at our product set to make sure that it meets the current needs of consumers and we are reinvesting in some existing brands to reposition them.
>
> **IT director, Manufacturing sector**

Digitization

Although the talk for many years, digitization arguably reached a tipping point in 2014. The digital revolution is now a huge driver of change across sectors and geographies as companies are trying to figure out what big data and the internet of things mean for their businesses.

> We're investing in digitization; we're playing catch-up in many areas. My area is sales and marketing and certainly in those areas it is impacting everything from customer and consumer relationships, go to market strategy, and selling products – everything.
>
> **Sales director, Energy and resources sector**

> Digital will grow exponentially in the next few years – it's urgent that we act now.
>
> **Finance director, Manufacturing sector**

Risk and regulatory compliance

With an increasingly complex regulatory environment, particularly in Europe and the United States, companies are feeling the pressure to stay compliant and are facing high costs if they do not. Furthermore, they are looking to navigate the risks that the new digital economy poses along with the opportunities.

> Information security is a huge risk – and this probably held us back from exploiting options such as mobile technology in the past. There are technical issues to take into account and one of the biggest constraints is information security.
>
> **Operations director, Public sector**

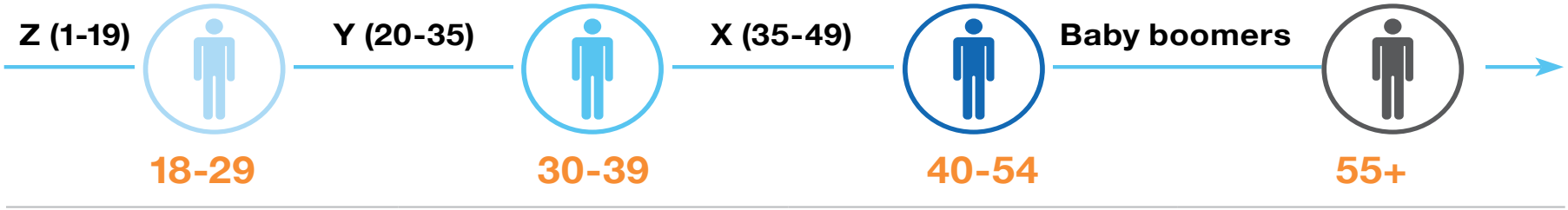
Talent – An enduring challenge

The challenges differ across sectors; however, talent is a primary concern across the board. Some sectors that are perceived as less attractive by millennials, like manufacturing, find it difficult to attract young employees; others, like digital, although attractive, are fiercely competing for the same pool of qualified candidates. Add to that the fact that companies are facing the pressure of baby boomers reaching retirement and it is easy to understand why talent is one of the biggest issues on the agenda.

> The shortage of talent is being compounded by what we've all seen coming for a long time – baby boomers retiring. If companies don't address this issue, three years from now they'll have no bench to speak of.
>
> **CEO, Services sector**

KPMG

Illustration 2: **Generation Y-the Millennials-will represent half of the workforce by 2020 and three-quarters by 2025.**



- Recognize their own contributions
- Development opportunities, recognition, access to mentors
- Informal workspaces, volunteering opportunities and flexibility
- Learning opportunities extended outside the company
- New recruiting approaches
- Access to social networks and high-tech tools
- Save for housing

- Employer recognition of their invidual contributions
- Career path offering leadership opportunities
- Work-life balance
- Flexible schedules
- Save for their children's education
- Starting to think about retirement

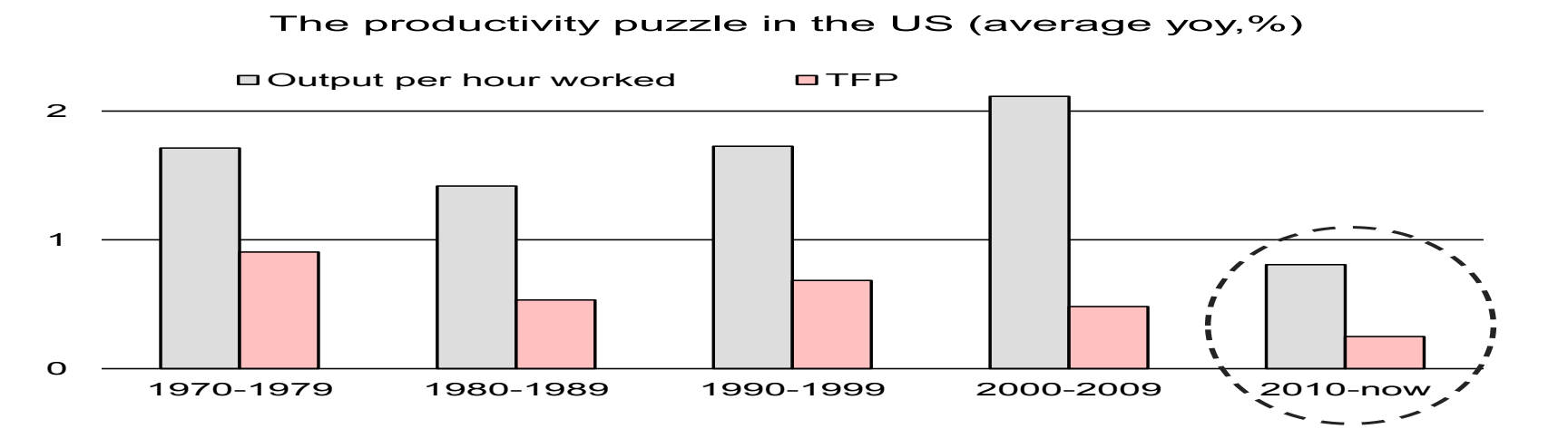
- Work hard to be recognized
- Save for their children's education
- Planning for retirement
- Better manage work-life balance
- Take care of a relative

- Want that their expertise/experience to be recognized
- Planning to leave for retirement
- Expect health coverage to be available on retirement
- Access to "flexible" work opportunities, meeting educational, professional, volunteering and/or leisure needs
- Responsibility for dependency is an issue for one-third of this segment

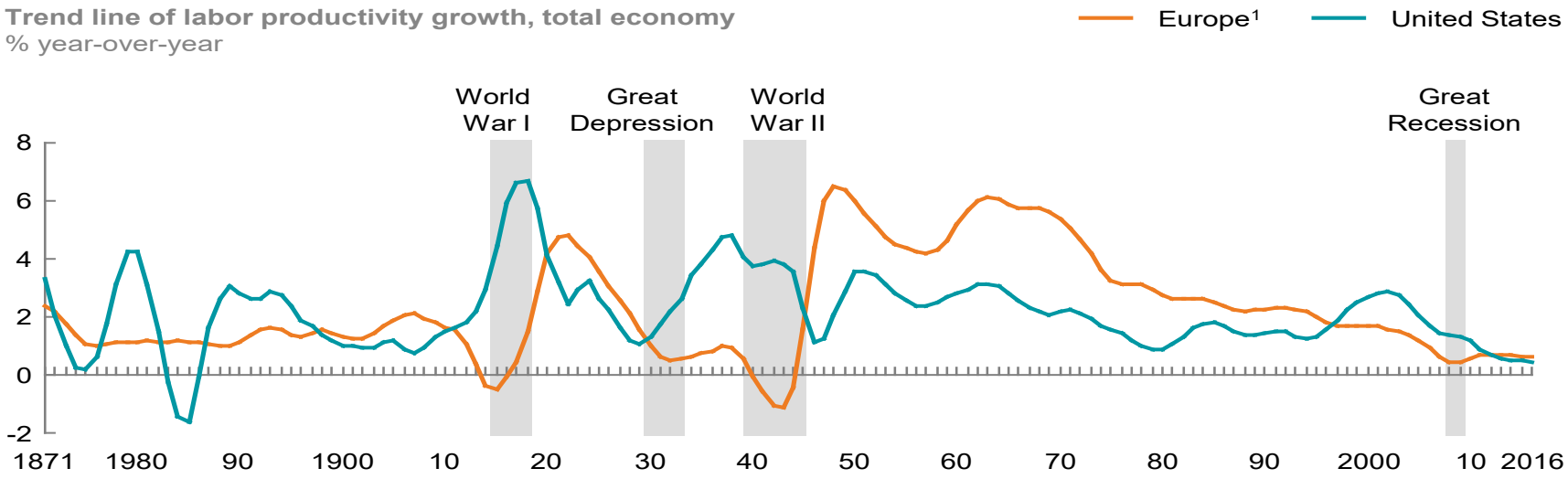
Four Forces of Future Work

Productivity Puzzle

CHART 1: NOT PICKING UP



Source: Conference Board, UniCredit Research



McKinsey&Company

Disruptive Innovation Definition

- OECD Oslo Manual (2005): "*Innovation that has a significant impact on a market and on the economic activity of firms in the market. The impact can, for example, change the structure of the market, create new markets or render existing products obsolete*"

Figure 3-2: The conventional technology S-curve

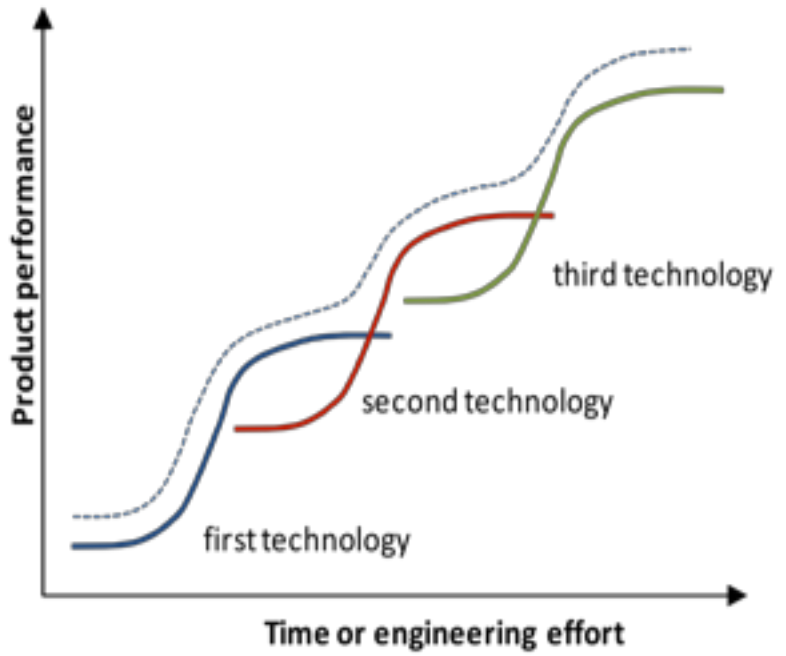
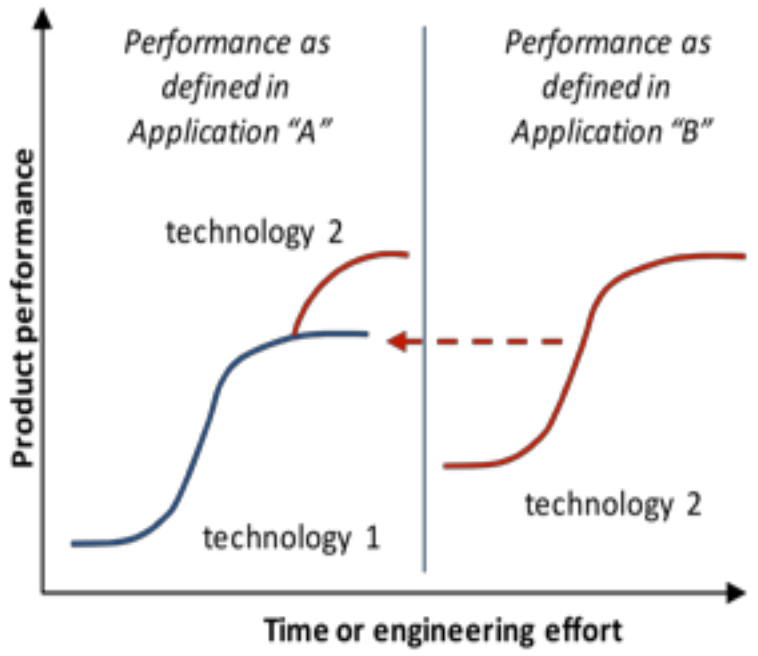


Figure 3-3: The disruptive technology S-curve



Source: adapted from Christensen (1997), p. 45f.

A Disruptive Technology is a technology or innovation, which is initially a combination of niche technologies or innovative ideas to create a high end product or service, typically such which the existing market does not expect; and when the technology becomes affordable and accessible, it eventually ends up disrupting the existing consumer market and creating a market of its own.

DIAGRAM 1: Big Bang Market Adoption

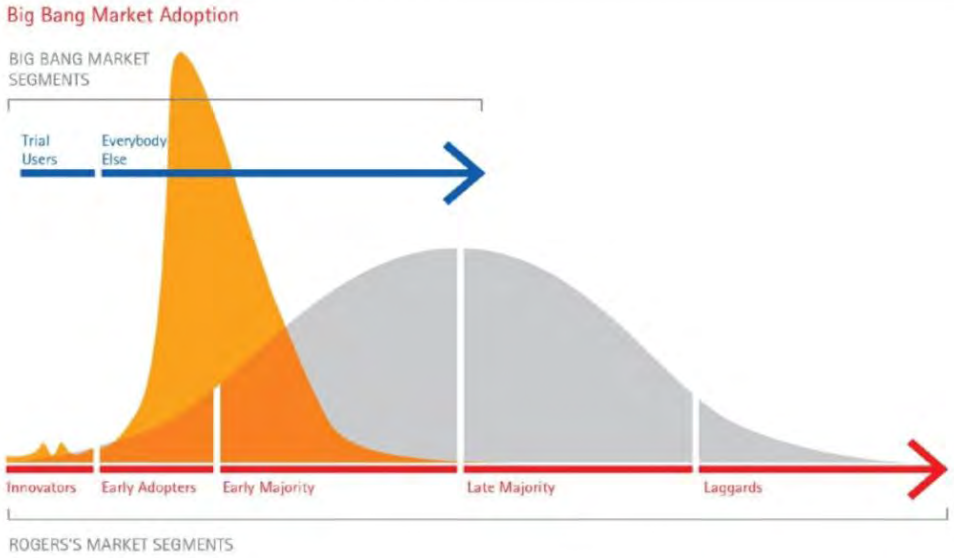


FIGURE 1:
Different types of theories used to describe the market response to Disruptive Technologies. The Rogers' theory explains this response in the form of a bell curve (grey), while the recent Big Bang theory explains it in the form of a shark fin curve (orange)

- Sustaining Technologies are different from Disruptive Technologies in such that they only rely on evolutions and advancements in existing products, thus making firms compete against one another leveraging the improvements each firm can make in their product
- In the nascent stage of a disruptive innovation, the market is largely exploratory and mostly led by smaller, innovation driven and entrepreneurial firms. Larger firms tend to stay away from disruptive innovations because either the margins are too tight for them; or their business structure is such that even willingly, they cannot enter the disruptive innovation market due to potential tradeoffs such as cannibalization
- Every product market is dynamic and bound to encounter disruptions at some stage or the other. Disruptive innovations can even hurt successful, well managed companies that are responsive to their customers and have excellent R&D. Hence incumbent firms must constantly try to innovate and keep their products relevant in the market

Source: KPMG, McKinsey & Company, Accenture

Time to Reach 50 Millions Users

Radio: 38 years

Television: 13 years

Internet: 4 years

Facebook: 3.5 years

Twitter: 9 months

Instagram: 6 months

Angry Birds: 35 days

Source: Bernd Leger, "20 fresh mobile trends," Localytics, May 13, 2013, http://www.localytics.com/blog/2013/mobile-statistics.

The Most Innovative Companies 2018

"Every Company (is) Now A Technology Company"
Joe Mckendrick
Forbes.Com, April 2015

1	Apple	11	Airbnb	21	Siemens	31	Intel	41	3M
2	Google	12	SpaceX	22	Unilever	32	NTT Docomo	42	SAP
3	Microsoft[1]	13	Netflix	23	BASF	33	Daimler[3]	43	DuPont
4	Amazon	14	Tencent	24	Expedia	34	AXA	44	InterContinental Hotels Group
5	Samsung[2]	15	Hewlett-Packard	25	Johnson & Johnson	35	Adidas	45	Disney
6	Tesla	16	Cisco Systems	26	JPMorgan Chase	36	BMW	46	Huawei
7	Facebook	17	Toyota	27	Bayer	37	Nissan	47	Procter & Gamble
8	IBM	18	General Electric	28	Dow Chemical	38	Pfizer	48	Verizon
9	Uber	19	Orange	29	AT&T	39	Time Warner	49	Philips
10	Alibaba	20	Marriott	30	Allianz	40	Renault	50	Nestlé

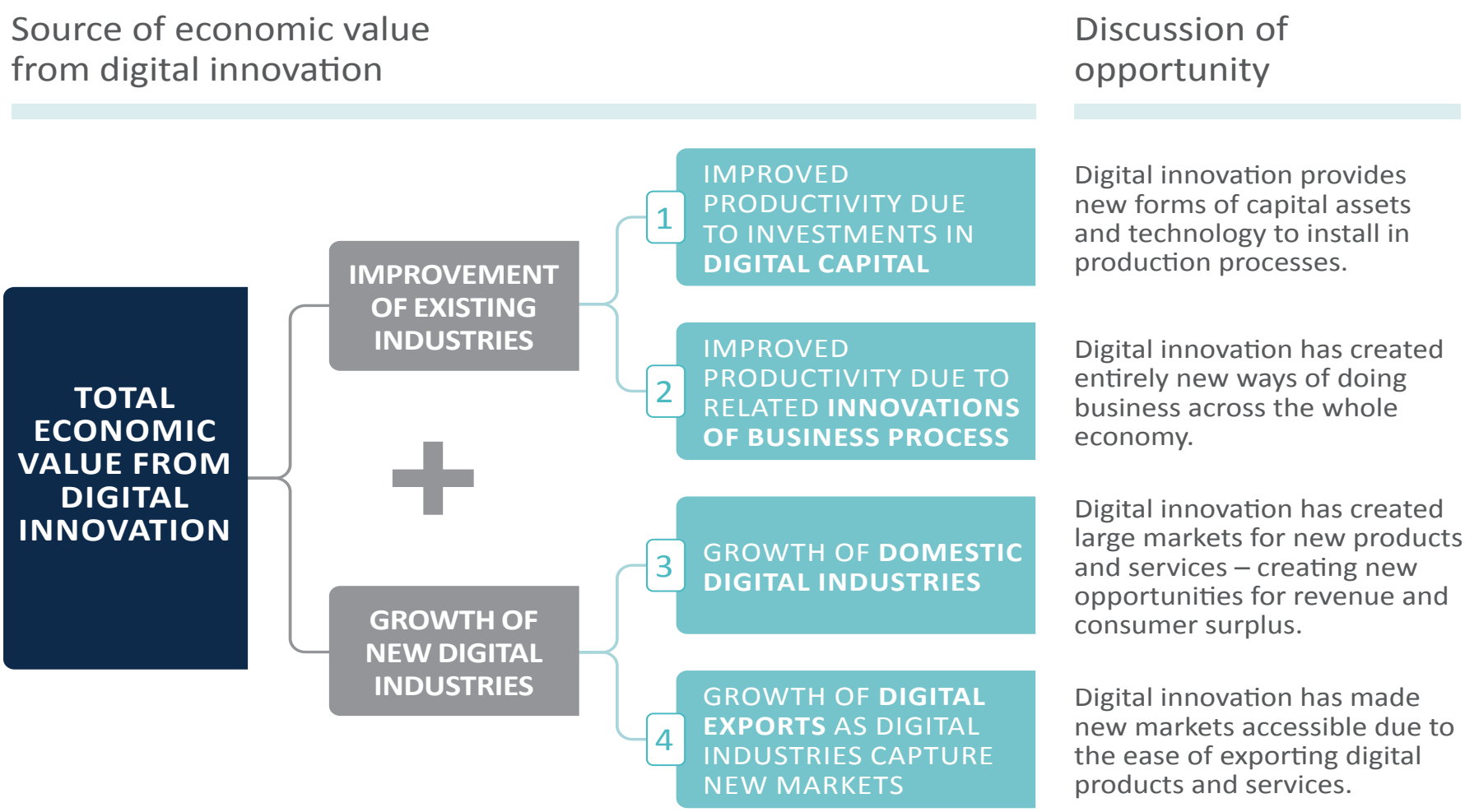
Source: 2017 BCG global innovation survey.
[1]Includes Nokia.
[2]Includes all Samsung business groups (electronics and heavy industry).
[3]Includes Mercedes-Benz.

Largest US companies in 2018 vs 2008

2018				2008			
Rank	Company	Founded	USbn	Rank	Company	Founded	USbn
1.	Apple	1976	890	1.	Exxon	1870	492
2.	Google	1998	768	2.	General Electric	1892	358
3.	Microsoft	1975	680	3.	Microsoft	1975	313
4.	Amazon	1994	592	4.	AT&T	1885	238
5.	Facebook	2004	545	5.	Proctor & Gamble	1837	226
6.	Berkshire	1955	496	6.	Berkshire	1955	206
7.	J&J	1886	380	7.	Google	1998	198
8.	JP Morgan	1871	375	8.	Chevron	1879	192
9.	Exxon	1870	367	9.	J&J	1886	192
10.	Bank of America	1909	316	10.	Walmart	1962	184

Source: Bloomberg, Google

Economic Benefit of Digital Innovation



αlphaβeta
strategy x economics

Industry 4.0 Consequences

Figure 1: Which of the following entities do you believe will have the most influence over how Industry 4.0 will shape society? (Select up to 3)

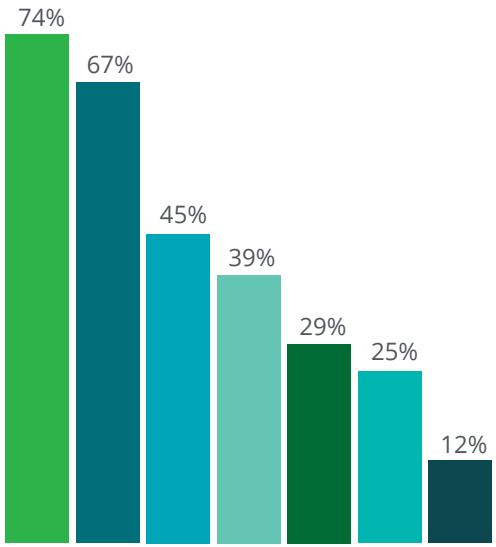


Figure 2: To what degree does your organization consider itself able to influence the following issues?
Number of respondents who answered, "To a significant degree"

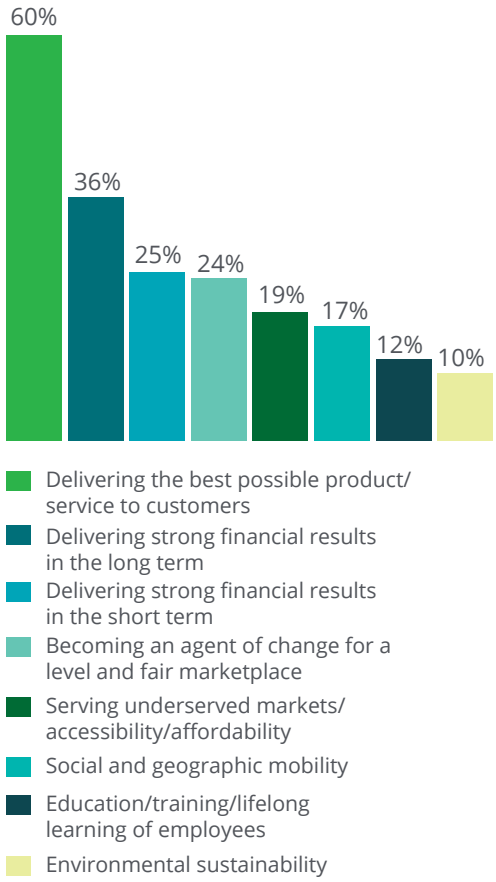
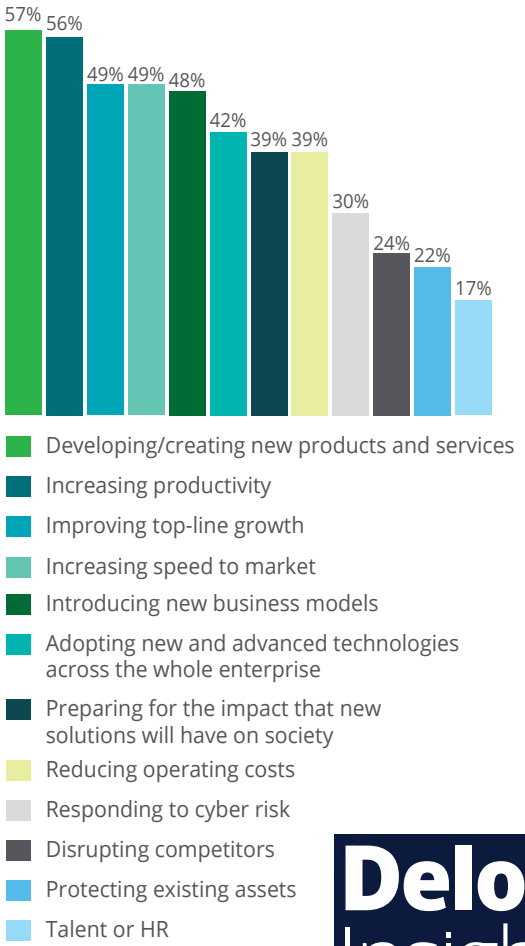


Figure 3: Over the course of a year, what topics do you discuss most frequently as an organization? (Select up to 5)



Deloitte. Insights

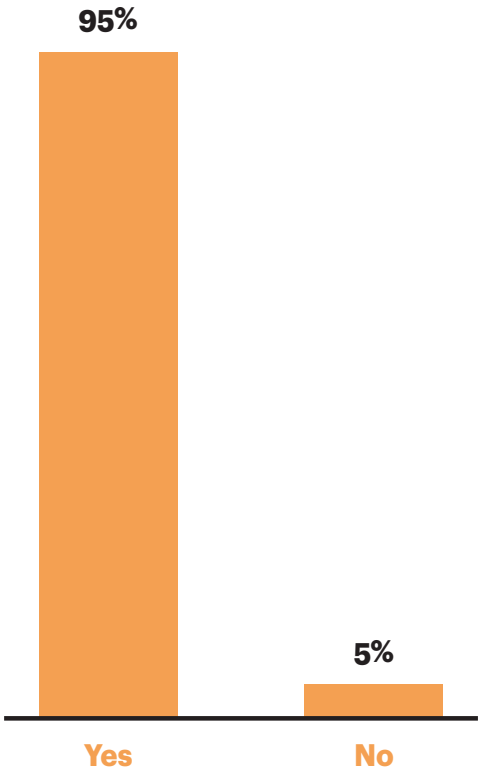
Disruptive Technologies and Competition

(Source: Selhofer et al., 2012)

Competitive force	Examples of disruptive innovations and their impact
Rivalry in the market	Internet: sales of used cars are increasingly initiated on specialised internet platforms
Threat of new entrants	Digital photography has enabled electronics companies to enter the camera market Online intermediaries taking commission from existing service providers (e.g. hotel reservation services, best price finders) Online retailers competing with conventional retail stores
Bargaining power of customers	Internet has increased price transparency in consumer goods Changes in the regulatory framework / liberalisation of markets, allowing customers to select providers (utilities, telecoms)
Bargaining power of suppliers	Electronic components requiring rare earth elements (dependence on raw material providers)
Substitution of products / services	Internet: substation of classified advertising Computers replace typewriting machines

Corporate Strategy and Digital Technology

Should digital strategy development be more incorporated into traditional strategy?



Why?

"In the future, everything will be digitized, and corporate strategy cannot be formed without it."

"Digital strategy fully depends on corporate strategy."

"It is an increasingly important part of the way we interact with our customers."

"The business model, functions, and operations have highly integrated digital components."

"Corporate strategies should be mirrored digitally."

"Digital strategy receives more attention when it is included as part of the overall strategy."

"All aspects of strategy development must be aligned. Therefore, they should not be created in isolation."

"It's the 21st century. Adapt or get eliminated."

Source: 2016 A.T. Kearney survey of 446 global executives

Importance of Challenges in Different Regions

(Survey in 7.096 business and HR leaders)

	AMERICAS		EUROPE, MIDDLE EAST, & AFRICA					ASIA PACIFIC		
Region	North America	Latin & South America	Nordic countries	Western Europe	Central and Eastern Europe	Middle East	Africa	Asia	Oceania	Southeast Asia
Organizational design	90	92	87	92	88	93	95	95	88	91
Leadership	87	89	89	87	89	87	90	90	93	97
Culture	87	86	87	84	86	90	87	89	93	90
Engagement	86	85	79	85	84	80	86	86	91	92
Learning	79	87	75	81	83	89	87	88	80	91
Design thinking	70	80	71	75	78	83	85	85	81	84
Changing skills of the HR organization	73	78	67	76	81	73	86	80	78	87
People analytics	78	77	76	72	78	76	80	81	83	85
Digital HR	69	71	74	73	74	74	79	74	77	83
Workforce management	67	74	63	65	74	67	73	72	81	80

Higher percentages  Lower percentages

Graphic: Deloitte University Press | DUPress.com

Importance of Challenges in Different Industries

(Survey in 7.096 business and HR leaders)

Industry	Consumer business	Energy & resources	Financial services	Life sciences & health care	Manufacturing	Professional services	Public sector	Technology, media, & telecommunications
Organizational design	93	92	93	92	94	91	87	92
Leadership	88	86	91	89	92	90	85	88
Culture	89	83	89	88	86	86	80	85
Engagement	86	82	87	87	88	85	83	85
Learning	83	81	86	84	83	86	83	83
Design thinking	77	75	81	79	79	82	74	83
Changing skills of the HR organization	81	79	81	83	80	71	74	76
People analytics	79	77	80	80	76	74	73	78
Digital HR	73	72	76	75	68	72	73	78
Workforce management	69	73	65	68	73	71	74	69

Higher percentages — Lower percentages

Graphic: Deloitte University Press |

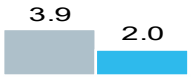
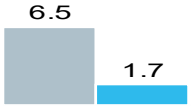
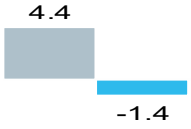
Digital and Productivity

McKinsey&Company

Contribution to overall productivity growth slowdown (%)[1]

Productivity growth
Compound annual growth rate (%)

2000–04 2010–14

Automotive[2] 	4	Wave 1	▪ Benefits of US restructuring post-2001 and NAFTA-wide footprint optimization waned
		Wave 2	▪ Excess capacity and low profits as demand dropped, slowing investment in equipment and structures (not R&D); slow demand recovery was met with hours expansion ▪ About 0.2 percentage point productivity drag from slower shift to higher-value vehicles
		Wave 3	▪ Investment in digital currently under way (autonomous vehicles, connectivity, electric vehicles, industry 4.0) but still subscale; highly or fully autonomous cars not yet commercially available but could represent up to 15% of sales by 2030
Finance[2,3] 	18	Wave 1	▪ n/a
		Wave 2	▪ Slow growth in lending/deposit volumes due to deleveraging, weak credit demand, stricter regulation, together with difficulty streamlining fixed labor ▪ Regulatory changes, settlements dampened value-added growth and occupied management attention
		Wave 3	▪ Digitization, fintech are reshaping front and back end of banks, yet transformation takes time ▪ Potential to boost productivity from online and automation (e.g., up to 60% of total costs of retail and commercial banking could benefit from automation and shift to online banking) ▪ Strong customer willingness to move to digital products (e.g., only about 13% of North American customers obtain an account online but 56% are willing to do so)
Retail[2,4] 	17	Wave 1	▪ Benefits from ICT-enabled supply-chain efficiencies and business process transformations reached saturation
		Wave 2	▪ Weak demand reduced sales growth (by ~3 percentage points on average) without easy options to scale down labor ▪ Shift to higher value-per-unit goods waned, dragged down productivity growth ▪ Low wages limited automation (e.g., checkouts) and allowed redeployment into low-value tasks (meeter-greeter)
		Wave 3	▪ Online is twice as productive as offline yet makes up only ~10% of total retail ▪ Shift to online involves transition costs (e.g., revenue loss for incumbents' stores)
Technology[2] 	18	Wave 1	▪ Mobile and graphics use broadened performance requirements and added complexity without Moore's law improvement dynamics ▪ Benefits from restructuring and manufacturing offshoring after 2001 waned
		Wave 2	▪ n/a
		Wave 3	▪ Rapid innovations and performance improvements across broad range of industries, devices, applications (e.g., virtual reality, autonomous/electric vehicles, crypto-currencies) ▪ Continued growth of software and services (e.g., cloud services) with robust productivity growth, including driven by AI and machine learning (a growing measurement challenge across broadening performance dimensions)
Tourism	n/a	The exception, with slow but sustained productivity growth from industry restructuring and consolidation (airlines and hotels), early introduction of digital (e.g., online transactions), and new business models (Airbnb, TripAdvisor); helped by robust yet at times volatile demand	
Utilities[2] 	15	Wave 1	▪ Efficiency gains from increasing competition after liberalization in the 1990s/2000s in electricity generation and retail subsectors waned along with incentives for the transmission and distribution subsector to drive efficiency, e.g., performance-based ratings schemes
		Wave 2	▪ Energy efficiency efforts and the financial crisis eroded electricity demand (e.g., demand growth declined by ~3.5 percentage points in Europe between 2000–04 vs. 2010–14), while labor in transmission and distribution (60% of employment) could not be streamlined
		Wave 3	▪ Smart meters and grids, digital productivity tools for employees, and automation of back-office processes could boost profitability by as much as 20 to 30%; however, investments are still subscale and come with a learning curve ▪ Solar and wind technologies have higher labor productivity but legacy plants cannot yet be decommissioned, resulting in transition costs and revenue losses

New Culture and Engagement

Trusted leadership

Hands-on management

Meaningful work

Risk and governance

Mission and purpose

Clear goals

Courage

Recognition

Innovation

Culture:
The way things work around here

Inclusion

Engagement:
The way people feel about the way things work around here

Compensation

Reward systems

The work environment

Development and career

Graphic: Deloitte University Press | DUPress.com

Current and Digital HR

Deloitte University Press

Current HR delivery	Digital HR
Transactions and processes	Integrated HR platform (policy, process, systems, operations)
Systems with web browser access	Mobile-first apps
Paper-based forms moved to web forms	Digital design
Process-based design	Human-centered, experience-driven design
SLAs (service level agreements)	Real-time (once and done)
HR (and shared) service centers	Operations centers
Periodic reports	Real-time interactive dashboards
Analytics add-ons	Integrated analytics platform and dashboards

Visionary Roles of HR

Network Connector
- Fostering networking, exchange & intercultural understanding
- Establishing relationships exceeding the organizational chart

Agile Enabler
- Evaluating where agility makes sense
- Coaching agile working methods
- Acting as role model for agility

Innovation Architect
- Providing an environment for innovation
- Anchoring innovative ways of working

Data Analyst
- Making productive use of available data
- Using insights from data to drive strategic decisions

Digital Consultant
- Providing support for digital challenges
- Acting as owner of digital HR apps
- Building a compelling employee experience

Current Roles of HR

Health Guide
- Acting as Feel-Good Manager
- Keeping employees satisfied
- Ensuring Work-Life Balance

Culture Builder
- Actively shaping culture with Top Management
- Ensuring that culture change is people centered

People Manager
- Being the expert for all people related topics
- Ensuring employee-centricity

Talent Accelerator
- Keeping overview of competencies needed vs. existent
- Allocating talent effectively

Organization Shaper
- Supporting organization's shared vision proactively

The Future of Job Skills Requirements

Abilities

Cognitive Abilities
- Cognitive Flexibility
- Creativity
- Logical Reasoning
- Problem Sensitivity
- Mathematical Reasoning
- Visualization

Physical Abilities
- Physical Strength
- Manual Dexterity and Precision

Basic Skills

Content Skills
- Active Learning
- Oral Expression
- Reading Comprehension
- Written Expression
- ICT Literacy

Process Skills
- Active Listening
- Critical Thinking
- Monitoring Self and Others

Cross-functional Skills

Social Skills
- Coordinating with Others
- Emotional Intelligence
- Negotiation
- Persuasion
- Service Orientation
- Training and Teaching Others

Systems Skills
- Judgement and Decision-making
- Systems Analysis

Complex Problem Solving Skills
- Complex Problem Solving

Resource Management Skills
- Management of Financial Resources
- Management of Material Resources
- People Management
- Time Management

Technical Skills
- Equipment Maintenance and Repair
- Equipment Operation and Control
- Programming
- Quality Control
- Technology and User Experience Design
- Troubleshooting

Source: World Economic Forum, based on O*NET Content Model.

The Agile, Digitally-Savvy Leader

Figure 2. Leadership capabilities needed to succeed in a digital world

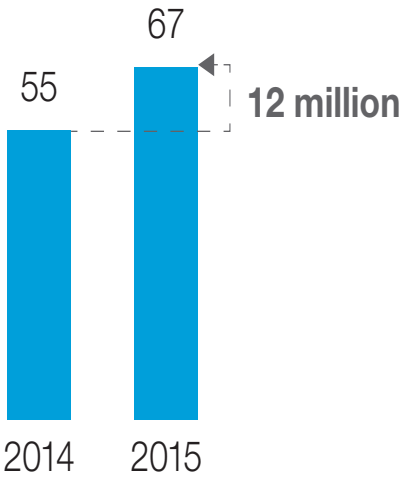
Leaders need to think, act, and react differently to make their organizations succeed in a digital world		
Cognitive transformation (THINK differently)	**Behavioral transformation (ACT differently)**	**Emotional transformation (REACT differently)**
Conceptualizing possibilities in a virtual world	Adapting to constantly shifting power and influence	Tolerating an environment of risk and ambiguity
Handling ever-increasing cognitive complexity	Collaborating with ease across many different teams	Showing resilience in the face of constant change
Thinking divergently about new ways of doing things	Valuing the contribution of new work partners and different interest groups	Being brave in challenging how things are being done
Making decisions quickly without all of the information	Investing huge amounts of energy into getting things right; try, fail, try again	Having the confidence to take the lead in driving change

Digital Revolution Has Arrived In Indonesia

Mobile Internet

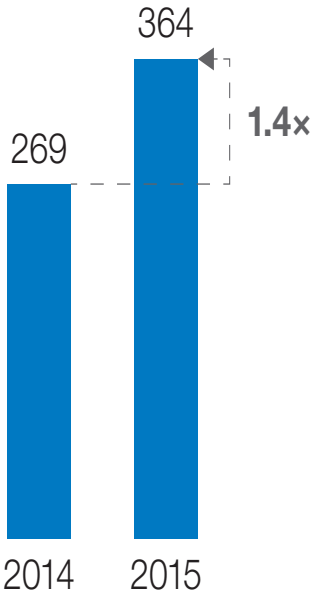
Total mobile Internet users, million

73% of total Internet users access via mobile



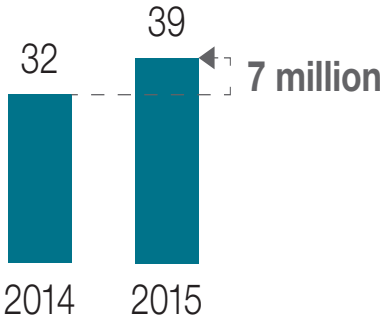
Cloud technology

Total cloud services vendor revenues,[1] $ million



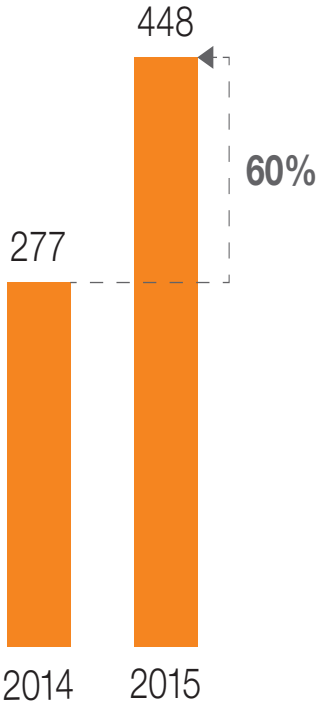
Internet of Things

Total connected devices, million units



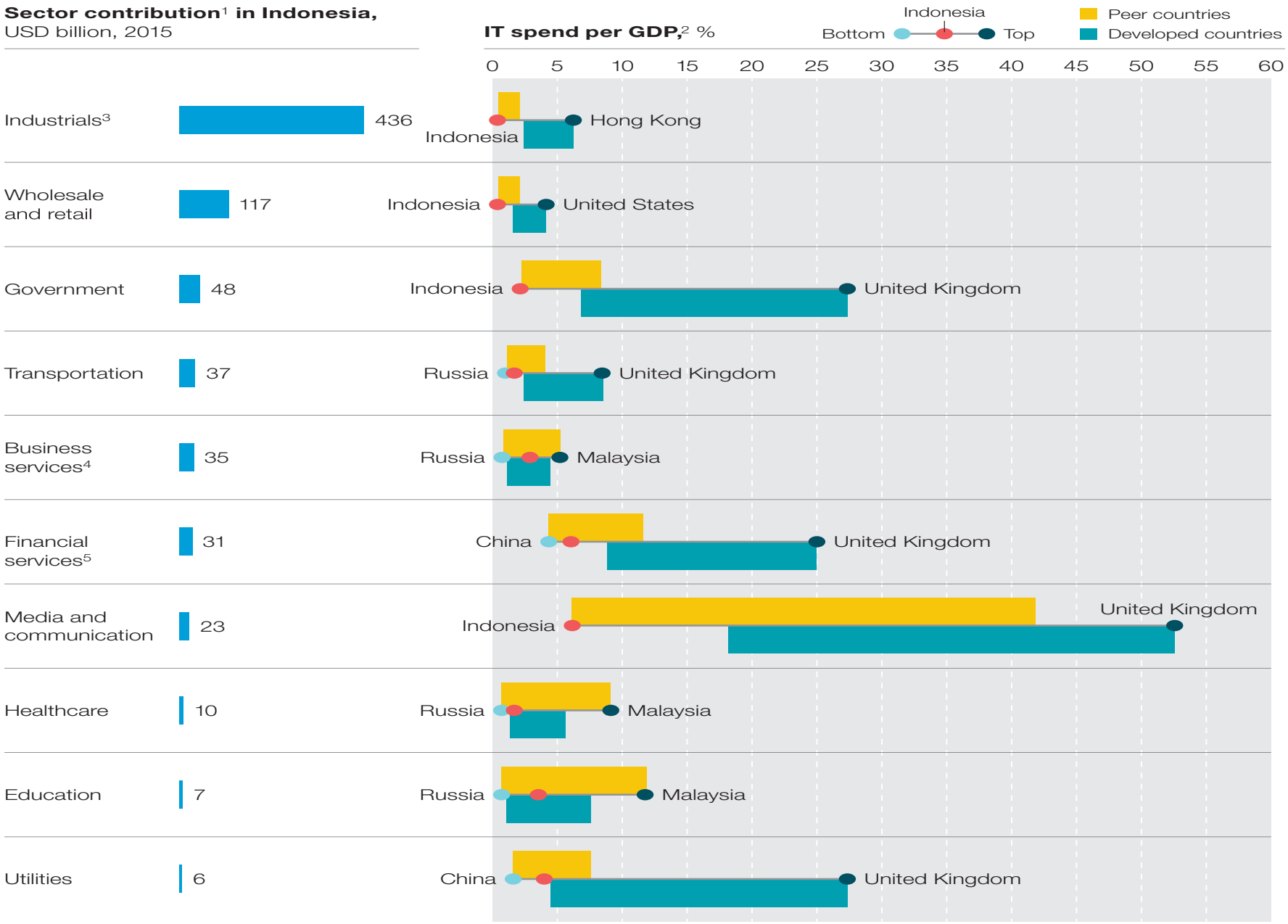
Big data and advanced analytics

Internet protocol traffic per month, petabyte



McKinsey&Company

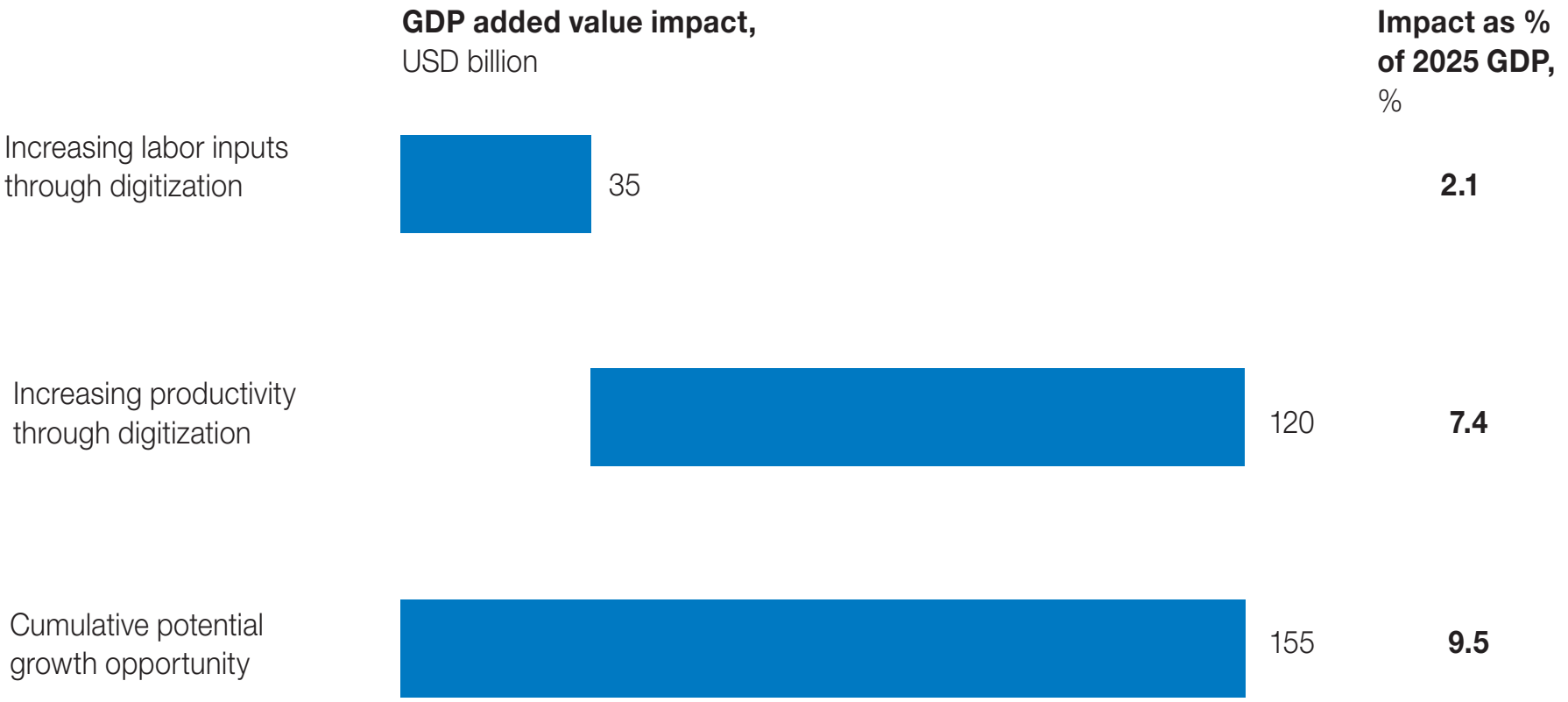
Across ten sectors, Indonesia's IT spend lags behind even its peer countries.



McKinsey&Company

Digitization and Productivity

Digital technology can play a key role in boosting growth for both labor and productivity factors with estimated impact of USD 150 billion in 2025.

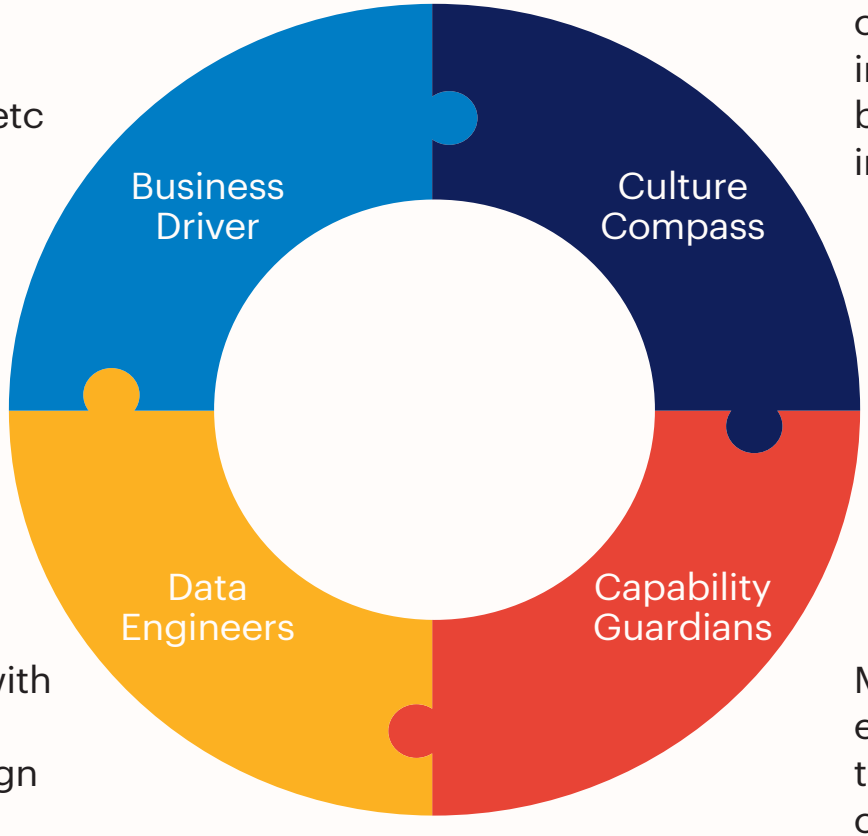


Source: Global Insight (WMM), IHS data, Euromonitor International, Team analysis

Reimagined HR Organization Architect

Co-create solutions to prepare organization for future readiness -leaders, people, structure, resources, etc

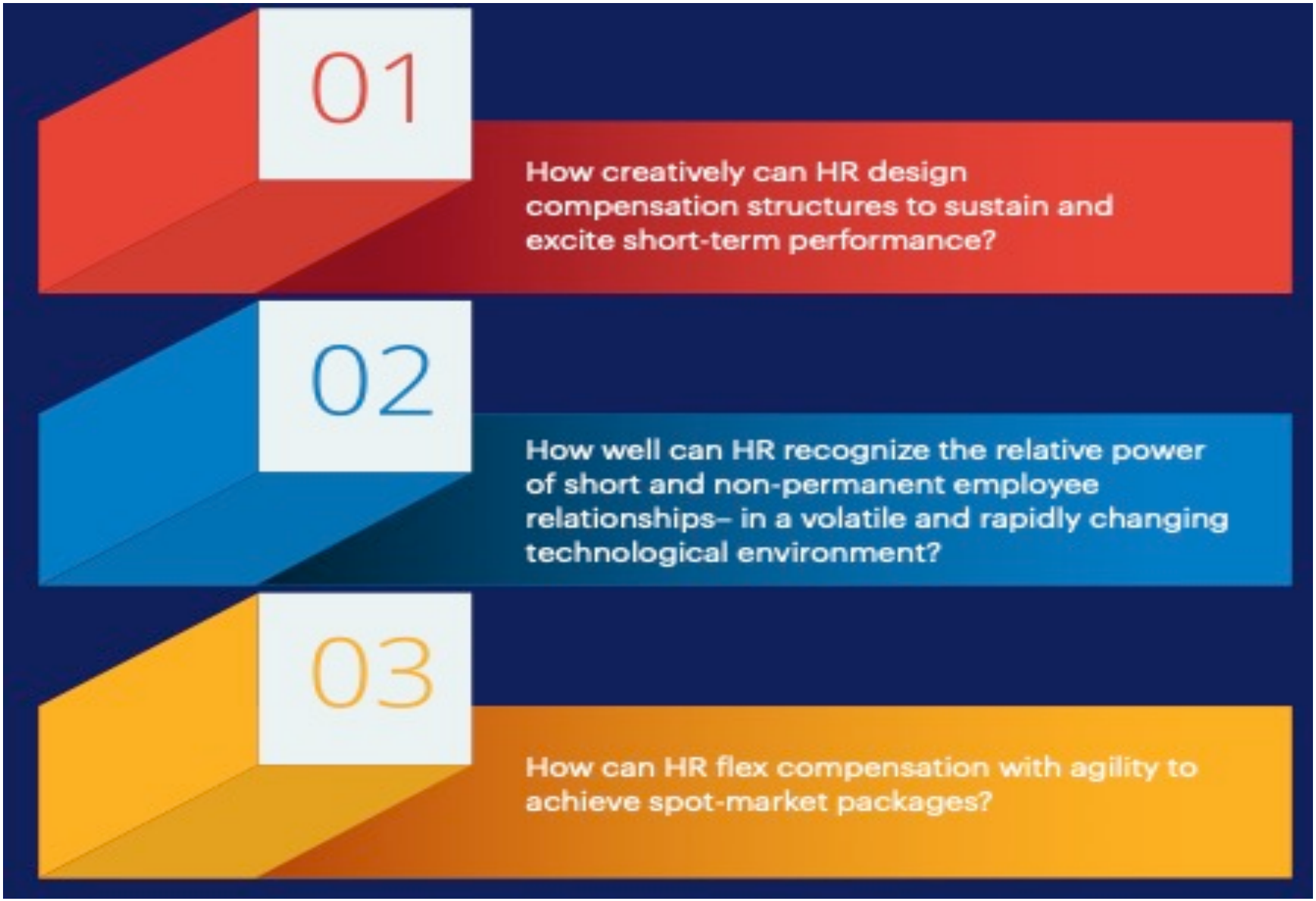
Embed cultural differentiators into organizations DNA - innovation, sustainability, brand reputation, ethics, inclusion, etc.



Empower managers with insights to drive outcomes; apply design thinking to workforce management; Deploy predictive analytics to be 'always ready'

Multi-faceted skills to empower business transformation; change drivers; workforce agility; proactive trend spotter

Question for HR in The Future Workplace



Call to Action: Businesses

- ***Is your business strategy fit for today's world?***

  Regularly consider how business strategy, growth targets, and investment plan may be affected by technological shifts

- ***Does your digital strategy deliver?***

  Adopt a comprehensive digital strategy that takes into consideration how the digital economy will affect all employees, products and service offering and deliver models

- ***Are your team up-skilling?***

  Develop a plan for employees to prepare for the impact of technological change and encourage on the job-training and up-skilling throughout employees careers

- ***Are you experimenting?***

  Be fast adopters-experiment with the new technologies that can deliver the same, or better, outcomes for customers

- ***Have you enhanced the key of 'human' elements?***

  Enhance the key elements of your business that utilize the human interaction, such as developing network and enhancing human experience

Call to Action: Individuals

- ***Do you know what lies a head?***

  Active build awareness of the technological changes affecting your occupation. Understand the implication for future careers

- ***Is retraining an option?***

  Be ready to re-invest in training several times in your career and proactively pursue retraining opportunities if you find yourself in sunset occupation

- ***Are you a fast-adapter?***

  Be fast adopters-realize the increased consumption choices , cost savings, and potential income sources that new technologies can bring

- ***Are you thinking outside the box?***

  Avoid being constrained by perception of traditional roles in your career choice

- ***Get involved!***

  Engage in the public debate around the appropriate role of technology in our society

Time-Based Competition

- Digital technology accelerates the pace of innovation, adds unexpected competitors, blurring traditional industrial boundaries and destroy conventional industrial arrangements. It makes competitive advantage life cycle of the firm rapidly becomes obsolete.
- Time-Based Competition (TBC) is a broad-based competitive strategy which emphasize time as the major factor for achieving and maintaining sustainable competitive advantage (e.g., Stalk, 1988; 1990; Lee et al., 2001)
- TBC seeks to permanently compress the Time and to improve the Timing required to develop, propose, manufacture, market and deliver product/services better, faster, cheaper than competitors
- The Speed and The Timing at which organization adapts its business process will be the strategic-capability to maintain sustainable competitive advantage in the edge of digital transformation.

Thank You !