Embracing a Digital Future
Vanson Bourne research findings & benchmark methodology
Contents

Section 1: Research methodology

Section 2: Pressures to transform & disruptive trends

Section 3: What does a successful digital business look like?

Section 4: How are organizations doing it – what is the process?

Section 5: How are organizations measuring up?

Section 6: Digital Transformation Index

Appendix: Key regional differences
  Key sector differences
  Developed vs. emerging differences
Research methodology
Vanson Bourne

Respondents scored according to responses to four key questions. Businesses then split into five maturity groups.

4,000 QUANTITATIVE Responses from Director, C-Suite, mid-size to enterprise w/key functions

12 INDUSTRIES
- Automotive
- Financial Services
- Public Healthcare
- Private Healthcare
- Technology and Telecoms
- Insurance
- Life Sciences
- Manufacturing
- Media and Entertainment
- Oil and Gas
- Retail and Consumer

16 COUNTRIES
- AMERICAS
  USA, Canada, Brazil, Mexico
- APJ
  Australia, China, India, Japan
- EMEA
  France, Germany, Italy, Switzerland, The Netherlands, UAE/Saudi Arabia, United Kingdom

- Finance
- Sales
- IT/Tech
- Customer services
- Marketing
- Production & Manufacturing
- Owner/Executive
- R&D
- Digital
- Customer Experience
- Logistics and Supply Chain
Section 2
Pressures to transform & disruptive trends
We have fully embraced a digital way of working and are confident in our ability to compete with start ups (66%)

Competition from non-traditional start-ups is incentivizing us to invest in IT infrastructure and digital skills leadership (66%)

My industry has seen the entrance of new competitors (in particular non-traditional start-ups) as a result of digital technologies and initiatives (62%)

My industry has experienced significant disruption as a result of digital technologies in the last three years (52%)

We do not know what our industry will look like in three years’ time (48%)

There is a possibility our company may become obsolete in three to five years’ time (45%)

Analysis of respondents who agree with the above statements when it comes to their own organization and industry. Base: all respondents (4000)
Do non-traditional start-ups built in the digital age pose a threat to your business?

- Yes - right now: 26%
- No, not yet but we expect they will in four years or more: 10%
- No, not yet but we expect they will in the next three years: 20%
- No, not yet but we expect they will in the next 12 months: 21%
- No, and we don't expect them to pose a threat in the future: 18%

Around 8 in 10 (78%) respondents say that digital start-ups pose a threat to their organization, either now or in the future.

“Do non-traditional start-ups built in the digital age pose a threat to your business?” Base: all respondents (4000)
Reasons to be cheerful or naïve?

Of respondents who say that digital start-ups do not pose a threat…

…around half (47%) claim it’s because they don’t have an established reputation; 44% credit a lack of extensive industry knowledge.

They do not have an established reputation: 47%
They do not have extensive industry knowledge: 44%
They do not have our extensive customer database: 39%
They do not have access to sophisticated information infrastructure: 35%
They do not have an extensive network of open and collaborative partnerships to lean on: 31%
They do not have the financial resources to invest in the latest digital technologies or talent: 24%
We can acquire them: 12%

“Why don’t non-traditional start-ups built in the digital age currently pose a threat to your organization?”
Base: only respondents who say that non-traditional start-ups do not yet pose a threat/do not pose a threat/don’t know (2947)
“Why do (or will) non-traditional start-ups built in the digital age pose a threat to your organization?”
Base: only respondents who say that non-traditional pose a threat or will do in the future (3120)
Why do (or will) non-traditional start-ups built in the digital age pose a threat to your organization?

Base: only respondents who say that non-traditional pose a threat or will do in the future (3120)

1. Early adopters of smart machine technologies (advantages over recruiting human labor) - 48%
2. They are more agile, free-of legacy technology and traditional business culture - 41%
3. They have easy access to seed/VC funding so they can make an impact very quickly - 40%
4. They are run by millennials and are better able to envision future customer demands - 40%
5. They are run by millennials who have grown-up with digital technology - 38%
6. Greater flexibility to build a distributed workforce of entrepreneur programmers - 32%
7. They are obsessed with data to pre-empt and solve future challenges and to inform R&D - 29%
8. They are not afraid to take risks and learn through failure - 21%
9. Able to attract and retain talent by offering strong digital career prospects - 12%

"Why do (or will) non-traditional start-ups built in the digital age pose a threat to your organization?"

Base: only respondents who say that non-traditional pose a threat or will do in the future (3120)
### Countering the threat

<table>
<thead>
<tr>
<th>Approach</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have an obsessive focus on customer engagement and satisfaction</td>
<td>47%</td>
</tr>
<tr>
<td>We are constantly growing our software development teams and capabilities</td>
<td>42%</td>
</tr>
<tr>
<td>We have embedded digital across the organization</td>
<td>39%</td>
</tr>
<tr>
<td>We have mobile and social media technologies at the heart of our business</td>
<td>37%</td>
</tr>
<tr>
<td>We secured buy-in from our management - they appreciate the value of digital technologies</td>
<td>36%</td>
</tr>
<tr>
<td>We partner with start-ups and follow an open innovation model to integrate their thinking into our organization</td>
<td>35%</td>
</tr>
<tr>
<td>We’ve spun off a separate part of the organization – more agile and boutique in nature to test products/ways of working</td>
<td>28%</td>
</tr>
<tr>
<td>We acquire the skills and innovation we need through M&amp;A or joint ventures</td>
<td>28%</td>
</tr>
<tr>
<td>We have appointed a CDO (or similar) to lead our digital transformation efforts</td>
<td>14%</td>
</tr>
</tbody>
</table>

“What is your organization doing to counter the threat from the non-traditional start-up?” Base: all respondents (4000)
Main influencers driving digital transformation

For 2/5 of businesses, digital drivers are coming from IT (43%), the C-suite (41%) or other functional leaders (39%).

56% say customers are the driving force.

Customers: 56%
IT: 43%
C-Suite/board level/senior management: 41%
Functional leaders not including IT: 39%
Competition from traditional peers: 32%
General employee population: 30%
Competition from start-ups: 25%
Partners: 23%
Shareholders/financial community: 14%

There is no driving force to digital transformation: 1%

“Who are the main influencers driving your organization to become a more digital business?” Base: all respondents (4000)
Top customer demands

Today's community of connected digital citizens, increasingly expects more from the businesses they transact with. What are the top customer expectations that your organization experiences?

<table>
<thead>
<tr>
<th>Demand</th>
<th>Key customer demands</th>
<th>Ability to meet demands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater level of security</td>
<td>39%</td>
<td>66%</td>
</tr>
<tr>
<td>Faster access to services, 24/7</td>
<td>42%</td>
<td>65%</td>
</tr>
<tr>
<td>Faster access to information</td>
<td>41%</td>
<td>61%</td>
</tr>
<tr>
<td>Ability to use smart, sensor enabled devices</td>
<td>43%</td>
<td>51%</td>
</tr>
<tr>
<td>Greater level of privacy</td>
<td>39%</td>
<td>44%</td>
</tr>
<tr>
<td>An overall, more personalized experience</td>
<td>35%</td>
<td>43%</td>
</tr>
<tr>
<td>Greater transparency (e.g. track and trace)</td>
<td>36%</td>
<td>42%</td>
</tr>
<tr>
<td>To collaborate and share with other customers more easily</td>
<td>28%</td>
<td>36%</td>
</tr>
</tbody>
</table>

“Today's community of connected digital citizens, increasingly expects more from the businesses they transact with. What are the top customer expectations that your organization experiences?” – Table: those completely able to meet customer expectations/demands  Base: all respondents (4000)
Section 3

What does a successful digital business look like?
DNA of a best-in-class digital business

- **Digital technologies accelerate new products and/or services development**: 55%
- **Security and privacy is built into all devices, applications and algorithms**: 54%
- **Agile innovation**: 48%
- **Digital goals are integrated into all departmental/staff objectives**: 46%
- **Ability to act on intelligence in real-time**: 44%
- **Equipped with always connected, sensor enabled and location aware technologies**: 42%
- **Company-wide data-driven decision making**: 42%
- **Mature e-commerce and e-business models**: 41%
- **Company-wide automated decision-making**: 35%
- **Continued investment in digital skills/talent**: 34%
- **Ability to communicate through multi-sensory channels**: 34%
- **Cross-functional knowledge**: 27%

“A digital business has technology that accelerates product development (55%), has security built into all devices (54%) and a track record in agile innovation (48%).”

“What does a best-in-class digital business look like?” Base: all respondents (4000)
DNA of a best-in-class digital business

*Thinking about customers, employees and other stakeholders, do you agree with the following statements about what a best-in-class digital business looks like?* Base: all respondents (4000)

- Strong online and digital collaboration among customers and key influencers: 66%
- Mobile technologies embedded into business activity and interactions: 64%
- Easy to provide personalized offerings and interactions: 59%
- Total 24/7 access and connectivity: 58%
- Social media technologies embedded in business activity and interactions: 58%
- Access and connectivity on any device or platform: 57%
- Easy to make predictive recommendations to customers: 55%
- Deep digital and online interactions: 45%
- Fast access to information and offerings: 38%

“A digital business collaborates with customers, is mobile at the core and offers personalized services.”
Section 4

How are organizations doing it?
How organizations are going digital

- Over half of businesses are using digital technologies to accelerate product/service development (51%)
- 46% are integrating digital goals into departmental and staff objectives

- Building security and privacy into all devices, applications and algorithms (47%)
- Integrating digital goals into all departmental/staff objectives (46%)
- Developing mature e-commerce and e-business models (44%)
- Equipped with always connected, sensor enabled and location aware technologies (37%)
- Acting on intelligence in real-time (36%)
- Rolling out data-driven decision making across the business (36%)
- Evolving our ways of communicating and marketing to involve more innovative channels... (34%)
- Agile innovation (33%)
- Investing in digital skills/talent (27%)
- Rolling out automated decision-making (artificial intelligence) across the business (27%)
- Developing cross-functional knowledge (19%)

“Thinking about what a digital business looks like, which of the following is your organization doing?” Base: all respondents (4000)
For 45%, the CTO is leading the digital transformation but 38% have already employed a CDO to undertake this responsibility.
**Extent of IT strategic support for digital**

Only around a quarter say their organization has fully completed its investment in IT cloud infrastructure (26%) data storage (26%) & data analytics (22%).

“In terms of your organization’s existing IT strategy, to what extent are you doing the following to support your digital business transformation?”

**Base: all respondents (4000)**
Digital investment progress curve

- Increase investment in IT cloud infrastructure
- Increased investment in mobile technologies and accessibility
- Increased investment in social media platforms
- Increased investment in data analytics
- Increased investment in data storage
- Increased investment in open source technologies
- All device access, control and security are managed centrally

“In terms of your organization's existing IT strategy, to what extent are you doing the following to support your digital business transformation?” Base: all respondents (4000)
**Investment plans – Next 1-3 years**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Converged infrastructure</td>
<td>44%</td>
</tr>
<tr>
<td>Ultra high performance compute technologies</td>
<td>42%</td>
</tr>
<tr>
<td>Analytics/Big data and data processing</td>
<td>41%</td>
</tr>
<tr>
<td>Internet of Things technology</td>
<td>39%</td>
</tr>
<tr>
<td>Next gen mobile apps</td>
<td>38%</td>
</tr>
<tr>
<td>Technology to bring apps into the cloud</td>
<td>33%</td>
</tr>
<tr>
<td>Capabilities for application acceleration</td>
<td>32%</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>30%</td>
</tr>
<tr>
<td>Open-source technologies to avoid vendor</td>
<td>28%</td>
</tr>
<tr>
<td>Cognitive systems</td>
<td>20%</td>
</tr>
<tr>
<td>Multi-sensory communications</td>
<td>20%</td>
</tr>
<tr>
<td>3D printing</td>
<td>17%</td>
</tr>
</tbody>
</table>

“What new innovations or solutions is your organization investing in over the next 1-3 years to enable digital business?” Base: all respondents (4000)
Measuring digital performance

Customer satisfaction using digital analytics: 44%
Our speed to market: 43%
The proportion of customer interactions now handled digitally: 40%
We have a dedicated executive committee to assess digital transformation progress: 38%
We create a full digital profit & loss statement: 36%
The cost savings gained as a result of replacing human labor with smart technologies: 35%
The percentage of our employees who have received digital training: 31%
The ability to successfully facilitate human interactions with machines: 29%
Our ability to predict human behavior through data: 28%
The number of patents filed: 17%
By percentage of revenue spent on R&D and lessons learned: 15%

“How do you measure the progress and performance of your organization’s digital transformation efforts?” Base: all respondents (4000)
Section 5

How are organizations measuring up?
Implementing digital attributes

In 2015, business leaders noted these five attributes defined a digital business.

- Predictively spot new opportunities: 32% doing well, 68% needs improvement
- Innovate in an agile way: 28% doing well, 72% needs improvement
- Demonstrate transparency and trust: 31% doing well, 69% needs improvement
- Deliver a unique and personalized experience: 26% doing well, 74% needs improvement
- Always on, operating in real time: 31% doing well, 69% needs improvement

But only around three in ten (32%) are doing well, organization-wide.
You have indicated that your organization is addressing some of the attributes in pockets of your organization. In which specific areas is this taking place?

Base: only respondents whose organization is addressing at least one digital attribute in pockets of the organization (3150)

- **IT**: 50%
- **Marketing**: 40%
- **Finance**: 40%
- **Customer service**: 38%
- **Manufacturing/production**: 32%
- **R&D**: 29%
- **Human resources**: 29%
- **Sales**: 22%
- **Legal**: 19%

50% believe their IT dept. is adequately addressing digital attributes; marketing and finance teams follow closely behind.

"You have indicated that your organization is addressing some of the attributes in pockets of your organization. In which specific areas is this taking place?"

Base: only respondents whose organization is addressing at least one digital attribute in pockets of the organization (3150)
Digital transformation approach

- Our strategy and vision could be improved: 75%
- My organization is ready for upcoming digital legislation and compliance commitments: 73%
- Digital transformation could be more widespread throughout the organization: 73%
- A centralized technology strategy should be more of a priority for our business: 73%
- We are planning to expand our software development capabilities: 72%
- Our cloud strategy is fundamental to the success of our business: 70%
- Our organization can benefit from digital transformation but is held back by too many traditional applications that are still important to the business: 69%

Analysis of respondents who agree with the above statements when it comes to their own organization's digital transformation. Base: all respondents (4000)
Barriers to digital progress

- Lack of budget and resources: 33%
- Lack of the right in-house skill sets and expertise: 31%
- Lack of senior support and sponsorship: 29%
- Lack of the right technologies to work at the speed of business: 29%
- Data privacy and security concerns: 29%
- Reactive approach to competitor activities: 26%
- Lack of a coherent digital strategy and vision: 26%
- Immature digital culture: 26%
- Regulation or legislative changes: 23%
- A fragmented or siloed computing environment: 22%
- Weak digital governance and structure: 17%
- Unable to extract valuable insights from data: 10%
- Information overload: 8%

“In general, what are the biggest barriers to progress with digital business projects in your organization?” Base: all respondents (4000)
Methodology: Index based on respondents’ performance and progress against digital business attributes they agreed were imperative; current and planned investments for digital transformation.

All performance related questions from research were filtered through, and 1000 points allocated across the curve.

**Thinking about what a digital business looks like, which of the following is your organization doing?**

- 14%
- 14%
- 14%
- 60%

**In terms of your organization’s existing IT strategy, to what extent are you doing the following to support your digital business transformation?**

- 12%

**What new innovations or solutions is your organization investing in over the next 1-3 years to enable digital business?**

- 14%

**How would you categorize how your organization is addressing each of the below digital attributes in order to stay competitive and succeed in this increasingly digital world?**
Benchmark questions and scores
S NUMBER=DATA SUMMARY SHEET REFERENCE

How would you categorize how your organization is addressing the provision of digital skills and training to stay competitive and succeed in this increasingly digital world?

• Predictively spot new opportunities
• Innovate in an agile way
• Demonstrate transparency and trust
• Deliver a unique and personalized experience
• Always on, operating in real time

For each of the above, respondents selected one of the below statements (score in brackets):

Doing well, organization-wide (100)
Doing well, in pockets of the organization (30)
Not doing well, organization-wide (20)
Not doing well, in pockets of the organization (10)
Research/ planning stage (5)
No plans (0)
I don’t know (0)

Maximum score = 600

Thinking about what a digital business looks like, which of the following is your organization doing?

• Integrating digital goals into all departmental/staff objectives
• Developing mature e-commerce and e-business models
• Using digital technologies to accelerate new product/services development
• Equipped with always connected, sensor enabled and location aware technologies
• Building security and privacy into all devices, applications and algorithms
• Rolling out data-driven decision making across the business
• Rolling out automated decision-making (artificial intelligence) across the business
• Acting on intelligence in real-time
• Evolving our ways of communicating and marketing to involve more innovative channels such as multi-sensory
• Agile innovation – software developers can begin coding and securely launch new applications within much shorter cycles
• Investing in digital skills/talent
• Developing cross-functional knowledge

Respondents scored 15 for each outcome selected (in bold) and 5 for each foundational element selected

Maximum score = 140
In terms of your organization’s existing IT strategy, to what extent are you doing the following to support your digital business transformation?

- Increase investment in IT cloud infrastructure
- Increased investment in mobile technologies and accessibility
- Increased investment in social media platforms
- Increased investment in data analytics
- Increased investment in data storage
- Increased investment in open source technologies
- All device access, control and security are managed centrally

For each of the above, respondents selected one of the below statements (score in brackets):

- Fully completed for now (20)
- In process of doing – mature stages (10)
- In process of doing – early stages (5)
- Planned to do (1)
- Not done and no plans to do (0)
- I don’t know (0)

Maximum score = 140

What new innovations or solutions is your organization investing in over the next 1-3 years to enable digital business?

- A converged infrastructure that simplifies data management and allows information to flow quickly across platforms
- Analytics/Big data and data processing
- Next generation mobile applications
- Ultra high performance compute technologies for rapid digital communication/data access/data processing
- Capabilities for application acceleration
- Open-source technologies to avoid vendor lock-in
- Technology to bring apps into the cloud for public or private access
- Internet of Things technology
- 3D printing
- Artificial intelligence
- Multi-sensory communications
- Cognitive systems

Respondents scored 10 for each element selected

Maximum score = 120

MAX TOTAL SCORE = 1000
Digital Transformation Index

- **Digital Laggards**: Do not have a digital plan; limited initiatives and investments in place. 15% of total respondents.
- **Digital Followers**: Very few digital investments; tentatively planning for the future. 32% of total respondents.
- **Digital Evaluators**: Gradually embracing digital transformation and planning for the future. 34% of total respondents.
- **Digital Adopters**: Have a mature digital plan, investments and innovations in place. 14% of total respondents.
- **Digital Leaders**: Digital transformation is ingrained in the DNA of the business. 5% of total respondents.
<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>DIGITAL LAGGARDS</th>
<th>DIGITAL FOLLOWERS</th>
<th>DIGITAL EVALUATORS</th>
<th>EARLY ADOPTERS</th>
<th>DIGITAL LEADERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTRIBUTE PERFORMANCE</td>
<td>Not done, in planning</td>
<td>Limited to pockets, poorly done</td>
<td>Spread more widely yet not done well</td>
<td>Done well in pockets</td>
<td>Well done and organization wide</td>
</tr>
<tr>
<td>DIGITAL INITIATIVES</td>
<td>Limited</td>
<td>A small number</td>
<td>4-5 initiatives</td>
<td>5-6 initiatives</td>
<td>8+ adopted</td>
</tr>
<tr>
<td>ADOPTED CURRENTLY</td>
<td>Little or none</td>
<td>In planning or early stages</td>
<td>Early to mid stages</td>
<td>In mature stage, few fully completed</td>
<td>Most fully completed</td>
</tr>
<tr>
<td>IT STRATEGY &amp; DIGITAL INVESTMENT</td>
<td>Very few in line</td>
<td>A handful in scope</td>
<td>3-4 innovations in scope for future investment</td>
<td>Growing number of innovations (4-6)</td>
<td>8+ in line for future investment</td>
</tr>
<tr>
<td>INNOVATION &amp; FUTURE INVESTMENT</td>
<td>15%</td>
<td>32%</td>
<td>34%</td>
<td>14%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Maturity by country and region

Average score out of 100

<table>
<thead>
<tr>
<th>Country</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>53</td>
</tr>
<tr>
<td>Brazil</td>
<td>50</td>
</tr>
<tr>
<td>Mexico</td>
<td>47</td>
</tr>
<tr>
<td>Australia</td>
<td>44</td>
</tr>
<tr>
<td>Germany</td>
<td>43</td>
</tr>
<tr>
<td>UAE &amp; Saudi Arabia</td>
<td>42</td>
</tr>
<tr>
<td>Netherlands</td>
<td>42</td>
</tr>
<tr>
<td>France</td>
<td>41</td>
</tr>
<tr>
<td>Italy</td>
<td>41</td>
</tr>
<tr>
<td>US</td>
<td>41</td>
</tr>
<tr>
<td>Switzerland</td>
<td>40</td>
</tr>
<tr>
<td>UK</td>
<td>38</td>
</tr>
<tr>
<td>Canada</td>
<td>38</td>
</tr>
<tr>
<td>China</td>
<td>33</td>
</tr>
<tr>
<td>Japan</td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERICAS</td>
<td>45</td>
</tr>
<tr>
<td>EMEA</td>
<td>41</td>
</tr>
<tr>
<td>APJ</td>
<td>41</td>
</tr>
</tbody>
</table>

Developed vs. Emerging

<table>
<thead>
<tr>
<th>Developed</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emerging</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Vertical</td>
<td>Average Score out of 100</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>46</td>
</tr>
<tr>
<td>Technology</td>
<td>45</td>
</tr>
<tr>
<td>Media and entertainment</td>
<td>44</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>43</td>
</tr>
<tr>
<td>Life sciences</td>
<td>43</td>
</tr>
<tr>
<td>Oil and gas</td>
<td>42</td>
</tr>
<tr>
<td>Automotive</td>
<td>42</td>
</tr>
<tr>
<td>Financial services</td>
<td>42</td>
</tr>
<tr>
<td>Retail and consumer products</td>
<td>42</td>
</tr>
<tr>
<td>Insurance</td>
<td>41</td>
</tr>
<tr>
<td>Private healthcare</td>
<td>39</td>
</tr>
<tr>
<td>Public healthcare</td>
<td>37</td>
</tr>
</tbody>
</table>
## Best and worst performers

<table>
<thead>
<tr>
<th>Countries</th>
<th>Industry/Verticals</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>Telecoms</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
</tr>
<tr>
<td></td>
<td>Media and entertainment</td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>Insurance</td>
</tr>
<tr>
<td></td>
<td>Private healthcare</td>
</tr>
<tr>
<td></td>
<td>Public healthcare</td>
</tr>
<tr>
<td>China</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
</tr>
</tbody>
</table>
Section 7: Appendix
Key regional differences
Customers (52%) remain the key influence but competition from peers (36%) and start-ups (29%) play an increased role.

UK respondents most likely to believe that best in class means digital technologies accelerating new products (58%).

Agreement that a best in class digital business means digital technologies accelerate new products and/or services development.

<table>
<thead>
<tr>
<th>Region</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>55%</td>
</tr>
<tr>
<td>EMEA</td>
<td>53%</td>
</tr>
<tr>
<td>UK</td>
<td>58%</td>
</tr>
<tr>
<td>Italy</td>
<td>56%</td>
</tr>
<tr>
<td>UAE and Saudi Arabia</td>
<td>55%</td>
</tr>
<tr>
<td>France</td>
<td>53%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>51%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>51%</td>
</tr>
<tr>
<td>Germany</td>
<td>50%</td>
</tr>
</tbody>
</table>
How are organizations doing it?

Outside IT, the marketing (56%) function is most likely to drive digital programs; the manufacturing sector (39%) is least likely to be involved (compared to the global average).
**EMEA variances**

The future and disruptive trends

Switzerland (60%) and Netherlands (52%) respondents are even more concerned that their organization may become obsolete in 3-5 years’ time.

A greater number of EMEA respondents believe that non-traditional start-ups pose an immediate threat (29%).

Agreement with the statement: ‘There is a possibility our company may become obsolete in three to five years’ time’

<table>
<thead>
<tr>
<th>Region</th>
<th>Global</th>
<th>EMEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>60%</td>
<td>-</td>
</tr>
<tr>
<td>Netherlands</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>France</td>
<td>48%</td>
<td>-</td>
</tr>
<tr>
<td>UAE and Saudi Arabia</td>
<td>45%</td>
<td>-</td>
</tr>
<tr>
<td>Germany</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Italy</td>
<td>41%</td>
<td>-</td>
</tr>
<tr>
<td>UK</td>
<td>32%</td>
<td>-</td>
</tr>
</tbody>
</table>

Respondents who believe non-traditional start-ups pose an immediate threat to their organization

<table>
<thead>
<tr>
<th>Region</th>
<th>Global</th>
<th>EMEA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26%</td>
<td>29%</td>
</tr>
</tbody>
</table>
Americas variances

Where are digital demands coming from?
In the Americas, security is the key customer demand (70%) for even more organizations – particularly in Brazil (76%) and Mexico (71%)

What does a digital business look like?
There is a higher focus on 24/7 access and connectivity, compared to the global average – particularly for respondents in Brazil (68%) and Mexico (65%)
How are organizations doing it?

Other than the IT department, Marketing (59%), Customer Service (57%) and Sales (41%) functions are more likely to drive organizations’ digital transformation.
**Americas variances**

The future and disruptive trends

**Top means of countering a digital start-up**

Much less likely to report that non-traditional start-ups pose a current threat to their organization (16%). But most likely to forecast a threat from digital start-ups further down the line.
In contrast to the other countries, fewer Japanese respondents report that their organizations’ digital transformation is driven by customers (38%).
APJ variances

How are organizations doing it?

Least likely to invest in digital skills (23%) compared to the global average

Outside of IT, a greater spread of functions are involved in digital including Customer Service (51%), Finance (47%), Manufacturing (48%) and R&D (47%)

Investing in digital skills/talent to drive digital transformation

Functions driving digital (outside of IT)
Majority (52%) are concerned about their organization becoming obsolete over the next 3-5 years.

Agreement with the statement: ‘There is a possibility our company may become obsolete in three to five years’ time’

- Global: 45%
- APJ: 52%
- India: 62%
- China: 57%
- Australia: 54%
- Japan: 27%

Around a third (32%) believe that non-traditional start-ups pose a threat.

Respondents who believe non-traditional start-ups pose an immediate threat to their organization:

- Global: 26%
- APJ: 32%
Regional variances

What does a digital business look like?

Respondents from organizations in the Americas appear to have greater confidence in customer digital demands being completely met: in particular privacy (50%), security (47%) and the ability to use smart devices (50%).

"To what extent is your organization able to meet these customer expectations and demands?"

Showing those who are completely able to meet this demand.

<table>
<thead>
<tr>
<th>Feature</th>
<th>EMEA</th>
<th>Americas</th>
<th>APJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ability to use smart, sensor enabled devices</td>
<td>41%</td>
<td>41%</td>
<td>39%</td>
</tr>
<tr>
<td>Faster access to more information</td>
<td>44%</td>
<td>44%</td>
<td>37%</td>
</tr>
<tr>
<td>Faster access to services, 24/7</td>
<td>44%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>An overall, more personalized experience</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Greater transparency (e.g. track and trace)</td>
<td>34%</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>Greater level of security</td>
<td>37%</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>Greater level of privacy</td>
<td>37%</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>To collaborate and share with other customers more easily</td>
<td>47%</td>
<td>50%</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>33%</td>
<td>36%</td>
<td>33%</td>
</tr>
</tbody>
</table>

EMEA Americans APJ
Regional variances

What does a digital business look like?

Even greater numbers of Americas respondents see customers (68%) as their main digital influence.

Customers are the main influencers driving our organization to become a more digital business.

Fewer respondents in APJ regard agile innovation (42%) as part of what a best in class digital business looks like.

What does a best-in-class digital business look like? (%age who ranked these in their top 5)

- Digital technologies accelerate new products and/or services development
- Security and privacy is built into all devices, applications and algorithms
- Agile innovation

<table>
<thead>
<tr>
<th>Region</th>
<th>Digital technologies</th>
<th>Security and privacy</th>
<th>Agile innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMEA</td>
<td>53%</td>
<td>57%</td>
<td>55%</td>
</tr>
<tr>
<td>Americas</td>
<td>53%</td>
<td>59%</td>
<td>52%</td>
</tr>
<tr>
<td>APJ</td>
<td>49%</td>
<td>51%</td>
<td>42%</td>
</tr>
</tbody>
</table>

(EMEA, Americas, APJ)
Regional variances

How are organizations doing it?

Organizations in the Americas are much more likely to believe the CTO (56%/54%) should lead digital transformation efforts. There is a greater likelihood the CDO will be involved in EMEA (42%/45%) and APJ (45%/42%).
Regional variances

The future and disruptive trends

Looking ahead, APJ respondents are more likely to articulate concerns for the future – over half don’t know what their industry will look like (58%) or even whether their organization will still be here (52%). As a result, more claim that disruption is incentivizing them to invest in IT infrastructure and digital skills (70%).

**Percentage who agree with the following statements about their industry/organization**

- **My industry has experienced significant disruption as a result of digital technologies in the last three years**
  - EMEA: 52%
  - Americas: 44%
  - APJ: 61%

- **My industry has seen the entrance of new competitors (in particular non-traditional start-ups) as a result of digital technologies and initiatives**
  - EMEA: 57%
  - Americas: 63%
  - APJ: 68%

- **We do not know what our industry will look like in three years’ time**
  - EMEA: 46%
  - Americas: 42%
  - APJ: 58%

- **There is a possibility our company may become obsolete in three to five years’ time**
  - EMEA: 45%
  - Americas: 36%
  - APJ: 52%

- **We have fully embraced a digital way of working and are confident in our ability to compete with start-ups**
  - EMEA: 64%
  - Americas: 69%
  - APJ: 68%

- **Competition from non-traditional start-ups is incentivizing us to invest in IT infrastructure and digital skills leadership**
  - EMEA: 64%
  - Americas: 66%
  - APJ: 70%
Regional variances
The future and disruptive trends

APJ (32%) and EMEA (29%) respondents are much more likely to see non-traditional start-ups as an immediate threat. To counter the threat, organizations in the Americas are most likely to focus obsessively on customer engagement (51%) and APJ organizations are more active in growing their software development capabilities (46%).

Do non-traditional start-ups built in the digital age pose a threat to your business? Yes - right now

EMEA | Americas | APJ
--- | --- | ---
29% | 16% | 32%

What is your organization doing to counter the threat from the non-traditional start-up?

- We have an obsessive focus on customer engagement and satisfaction
- We are constantly growing our software development teams and capabilities
- We have embedded digital across the organization
- We have mobile and social media technologies at the heart of our business
Key sector differences
More respondents from financial services organizations say that customers are demanding faster access to services, 24/7.

Respondents’ organizations from financial services are least likely to be investing in digital skills (21%)
Half (50%) of respondents from financial services organizations agree that their company may become obsolete in 3 to 5 years’ time.

Respondents in financial services are least likely to say that non-traditional start-ups pose a threat (20%) to their organization.
Customers in insurance (72%) organizations are more likely to demand faster access to services.

Respondents in the insurance sector are more likely to agree that a centralized strategy should be a priority (81%).
More than half (52%) of respondents from insurance organizations agree that their company may become obsolete in three to five years’ time.

The majority of respondents in the insurance organization (53%) do not know what their industry will look like in 3 years’ time.
Respondents from the Oil and Gas sector most likely to agree that digital transformation could be more widespread in their organization (78%)
Oil and Gas

Oil and gas respondents most likely to agree that their organization could become obsolete in three to five years' time (52%)

Majority of oil and gas sector respondents (54%) do not know what their industry will look like in 3 years' time

There is a possibility our company may become obsolete in three to five years' time

We do not know what our industry will look like in three years' time

45% 52%

48% 54%

Global Oil and gas Global Oil and gas

Automotive, Financial Services, Public healthcare, Private healthcare, Technology, Insurance, Life sciences, Manufacturing, Media & entertainment, Oil & Gas, Retail, Telecommunications, Other commercial
81% of respondents from technology organizations believe their strategy and vision could be improved.

36% of technology respondents report that their organizations face a lack of budget and resources as a barrier to digital business – higher than the global average.

- **Our strategy and vision could be improved**
  - Global: 75%
  - Technology: 81%

- **Lack of budget and resources**
  - Global: 33%
  - Technology: 36%
Technology

52% of technology respondents do not know what their industry will look like in three years’ time (52%)

Technology respondents are more likely to agree that their industry has seen new competitors (73%) of late
Developed vs. emerging differences
Developed vs. emerging

Where are digital demands coming from?

Organizations in emerging markets are most likely to have customers as their main influence driving digital transformation (61%)

Customers as a key influence on digital transformation

- Emerging: 61%
- Developed: 54%
- Global: 56%

Developed: UK, France, Germany, Italy, Switzerland, Netherlands, US, Canada, Australia, Japan
Emerging: UAE and Saudi Arabia, Mexico, Brazil, India, China
Developed vs. emerging

Where are digital demands coming from?

In emerging markets, finance (54%) and manufacturing (53%) are much more likely to be driving digital transformation outside of the IT department.

Developed: UK, France, Germany, Italy, Switzerland, Netherlands, US, Canada, Australia, Japan
Emerging: UAE and Saudi Arabia, Mexico, Brazil, India, China
Developed vs. emerging

How are organizations doing it?

As part of their digital transformation approach, emerging markets are more likely to be using digital technologies to accelerate development (56%), build security into all devices (52%) and integrate digital goals in objectives (51%).

<table>
<thead>
<tr>
<th>Element</th>
<th>Developed</th>
<th>Emerging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using digital technologies to accelerate new product/services development</td>
<td>51%</td>
<td>56%</td>
</tr>
<tr>
<td>Building security and privacy into all devices, applications and algorithms</td>
<td>47%</td>
<td>44%</td>
</tr>
<tr>
<td>Integrating digital goals into all departmental/staff objectives</td>
<td>46%</td>
<td>43%</td>
</tr>
<tr>
<td>Developing mature e-commerce and e-business models</td>
<td>44%</td>
<td>35%</td>
</tr>
<tr>
<td>Equipped with always connected, sensor enabled and location aware technologies</td>
<td>37%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Developed: UK, France, Germany, Italy, Switzerland, Netherlands, US, Canada, Australia, Japan
Emerging: UAE and Saudi Arabia, Mexico, Brazil, India, China
Developed vs. emerging

How are organizations doing it?

The CEO is much more likely to be leading digital transformations in emerging markets (40%) compared to developed markets (28%).

CEO (Chief Executive Officer) as the leader of digital transformation

- Total: 33%
- Developed: 28%
- Emerging: 40%

Developed: UK, France, Germany, Italy, Switzerland, Netherlands, US, Canada, Australia, Japan
Emerging: UAE and Saudi Arabia, Mexico, Brazil, India, China
Developed vs. emerging

The future and disruptive trends

Emerging markets are more likely to have experienced significant disruption from digital technologies (58%) and the entrance of new competitors (73%). A larger proportion (49%) question their organization’s prospects in three to five years’ time.

%age who agree with the following statements about their industry/organization

- My industry has experienced significant disruption as a result of digital technologies in the last three years: Total 52%, Developed 49%, Emerging 58%
- My industry has seen the entrance of new competitors (in particular non-traditional start-ups) as a result of digital technologies and initiatives: Total 62%, Developed 55%, Emerging 73%
- There is a possibility our company may become obsolete in three to five years’ time: Total 45%, Developed 42%, Emerging 49%

Developed: UK, France, Germany, Italy, Switzerland, Netherlands, US, Canada, Australia, Japan
Emerging: UAE and Saudi Arabia, Mexico, Brazil, India, China
Developed vs. emerging
The future and disruptive trends

Organizations in emerging markets are more likely to take actions to counter the threat of non-traditional start-ups, including having an obsessive focus on the customer (53%), constantly growing software development (49%) or placing mobile and social technologies at the heart of the business (44%).

What is your organization doing to counter the threat from the non-traditional start-up? Showing global top five actions

- We have an obsessive focus on customer engagement and satisfaction
  - Total: 47%
  - Developed: 44%
  - Emerging: 53%

- We are constantly growing our software development teams and capabilities
  - Total: 42%
  - Developed: 37%
  - Emerging: 49%

- We have embedded digital across the organisation
  - Total: 39%
  - Developed: 35%
  - Emerging: 45%

- We have mobile and social media technologies at the heart of our business
  - Total: 37%
  - Developed: 32%
  - Emerging: 44%

- We secured buy-in from our management - they appreciate the value of digital technologies
  - Total: 36%
  - Developed: 32%
  - Emerging: 42%

Developed: UK, France, Germany, Italy, Switzerland, Netherlands, US, Canada, Australia, Japan
Emerging: UAE and Saudi Arabia, Mexico, Brazil, India, China