The Future Enterprise

Apply Technology to Gain Intelligence, Empathize with Customers and Engage Employees

Meredith Whalen
Chief Research Officer
Traditional Enterprises Are Digitally Transforming

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Digitally Determined Hospitals

The First Affiliated Hospital of University of Science and Technology of China (USTC)

- Patient-centric; uses AI-assisted diagnosis
- Guided medical robot, performing 1,000 patient interactions daily
- Physicians update medical records by speaking into smart phone

A patient uses a robot to find his way around the USTC hospital in Hefei, Anhui province
Digitally Determined Libraries

Chattanooga, TN Library

From consumption of knowledge to creating and sharing knowledge

• Recording Studio
• Maker Space
• Tools Library

The Shape of the Future Enterprise is Clearer

**Future of Customers**
Empathy at Scale

**Future of Operations**
Operations at Scale

**Future of Work**
Work Model at Scale

**Future of Intelligence**
Insights at Scale

**Future of Culture**
Leadership at Scale
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Leadership at Scale

IDC Digital Transformation MaturityScape, 2019
Leadership at Scale

A deeply ingrained culture that supports flexibility, collaboration, empowered decision making, and can readily adapt as business needs change.

Digital Transformation 1.0 – Digital Leadership

The ability to sense changes in the ecosystem and the mobilize the organization to transform
Culture is the Single Most Important Success Factor

**DBS – Bank of Singapore**

“We emphasized a dynamic start-up culture - one that is customer-obsessed, data-driven, takes risks and experiments, is agile and constantly learning.”

- We saw ourselves not as another bank, but an organization that could be on par with the technology greats
- Investing in People and Skills – Create a culture of learning in our people.
- Build a strong start-up culture. Conducted over 1000 experiments. 15,000+ employees have engaged in innovation programs.
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Future of Customers

**Empathy at Scale**
Leveraging technology and data to develop a deep relationship with customers by understanding a situation from a customer’s point of view and taking the appropriate action.

**Digital Transformation 1.0 – Omni-experience Transformation**
Continually attract and grow loyalty with customers by having a holistic view of the customer.
Continuous Personalized Experiences

TGI Fridays

Our mission is to understand our guests at the individual level; then engage with them in a personalized fashion.

• Creates individual content for over 1 million guest daily with AI tools and messaging platforms.

• Personalizes the experience once guest is inside the restaurant - greeting guests by name with favorite drink offer.

• AI powered virtual bartender creates one-of-a-kind drinks that are uniquely tailored to their likes, mood, dinner.

Guest frequency: 50% | NPS: 20+ % | Guest check value: 10%
A Roadmap for Building Empathy with Your Customers

HORIZON 1
- Order Management
- Partner and Channel Integration
- Content Design and Creation
- Digital Asset Management
- Digital Marketing
- Secure Transactions
- Order Fulfillment
- Customer Care and Support
- Customer Satisfaction Measurement
- AI Driven Engagement
- Ubiquitous Commerce
- Omni-channel Content
- Interaction Management

HORIZON 2
- Predictive Upsell and Resell
- Product Customization
- Digital Based Training and Education
- Digital Self Support
- Crowd Sourced Support
- Voice of the Customer
- Secure Customer Data
- Social Influence
- Customer Journey Analysis
- Customer Action Tracking and Analysis
- Brand Sentiment
- Secure Customer Data
- AI Driven Engagement
- Implementatio
- n, Assessment, and Modification
- Ubiquitous Commerce
- Digital Asset Management
- Customer Satisfaction Measurement
- Secure Transactions
- Order Fulfillment
- Customer Care and Support
- Digital Marketing
- Digital Asset Management
- Order Management
- Partner and Channel Integration
- Content Design and Creation

HORIZON 3
- Integrated Customer Information
- Continuous Engagement
- External Customer Analysis
- Secure Transactions
- Order Fulfillment
- Customer Care and Support
- Customer Satisfaction Measurement
- AI Driven Engagement
- Ubiquitous Commerce
- Omni-channel Content
- Interaction Management
- Predictive Upsell and Resell
- Product Customization
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- Content Design and Creation

Advertising and Marketing
Sales and Renewals
Customer Sat and Trust
Implementation & Customer Support
Customer Data and Intelligence
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Future of Intelligence

Insights at Scale
Create value by continuously infusing the contextual collective intelligence of human-machine learning networks into work, operations, and experiences.

Digital Transformation 1.0 – Information Transformation
Deriving intelligence from within a single operational area of the business to gain a competitive advantage.
Insights at Scale in Healthcare

AdventHealth

*Develop an AI-powered “Mission Control” program to optimize operational efficiency across nine hospitals.*

- Patient care operations uses a digital twin simulation model of nine-hospitals to test ideas in hospital environment to understand trade-offs.
- Mission Control provides real time decision support. Wall of Analytics engine ingests 200 - 300 messages per second from 20 different IT systems to bring situational awareness and trigger action.

More Patients Seen Annually | Reduction in Stays | Shorter ED Waiting times
Levels of AI-Based Automation

1. Who produces insights?
   - Human-led: limited IT
   - Human-led Machine-supported: portfolio of IT
   - Machine-led Human-supported: reviews
   - Machine-led Human-governed: governs

2. Who decides and how?
   - Human-led: experience and rules
   - Human-led Machine-supported: based on limited optimization
   - Machine-led Human-supported: based on fully optimized prescriptions
   - Machine-led Human-governed: based on governance framework

3. Who acts based on the decision?
   - Human-led: with oversight
   - Human-led Machine-supported: with oversight
   - Machine-led Human-supported: with oversight
   - Machine-led Human-governed: with oversight

Images sourced to: HAL9000 by Grafiker61; R2D2 copyright by Lucasfilms; The Thinker by Philip Toledano, Times 8/19/2017; Boston Dynamics Big Dog image from DARPA
# Levels of AI-Based Automation

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<tr>
<th>Scope of Automation</th>
<th>Human-led</th>
<th>Human-led Machine-supported</th>
<th>Machine-led Human-supported</th>
<th>Machine-led Human-governed</th>
<th>Machine-controlled</th>
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<td>Task</td>
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*Image: IDC - Analyze the Future*
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Future of Operations

Operational Excellence at Scale
Agile and rapid decision making through closed loop decision models that are directly connected to operational data.

Digital Enterprise 1.0 – Operating Model Transformation
Making a business operation more responsive and effective through digitally connected assets.
Convergence of IT and OT

Which one of these governance models matches most closely with the structure you have in place in your organization today and in three years?

- Segregated: 30.7%
- Coordinated: 42.6%
- Integrated: 57.7%

Source: IDC IT/OT Convergence Survey, June 2018 (2016 N=794, 2018 N=905)
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Work Model at Scale
An enterprise wide approach to transforming the concept of work and how it is done. Using technology to support a dynamic, productive and empowered workforce

Digital Enterprise 1.0 – WorkSource Transformation
Transforming the way enterprises connect and leverage talent through the use of digital technologies
Future of Work
Future of Work

Which of the following best describes the greatest focus for your organization in 2019?

**CULTURE**
- Engaged and empowered workers aligned to new digital skills (47%)

**SPACE**
- Connected, secure work environment, independent of place or time (31%)

**FORCE**
- Collaboration between humans and technology (22%)
Future of Work

Which of the following best describes the greatest focus for your organization in 2019?

**Connectivity**
- Email/Conferencing, UCC, Endpoint management/endpoint security

**Digital Assistance**
- Digital Assistants, 3D Printing, Intelligent whiteboards

**Content and Collaboration**
- Enterprise social networks, Team collaboration, Enterprise content management

**Smart Facilities**
- Integrated workplace management software

**Culture**
- Engaged and empowered workers aligned to new digital skills

- **Future of Work**
  - 47% CULTURE
  - 31% SPACE
  - 22% FORCE

**Talent Acquisition**
- Talent Marketplaces, Recruitment Marketing Platforms, Applicant Tracking Systems

**Talent Development**
- Talent Management Systems, Training Delivery and Management

**Talent Retention**
- HR Information Systems, Workforce Management Systems

**Augment/Automate Operational Work**
- Robotics, AR/VR

**Augment/Automate Information Work**
- RPA, Decision automation and optimization, Content contextualization, compliance automation
Employee Experience
Happy Employee, Happy Customers

Cox Communications

“We’re investing in innovations that enable our workforce to spend less time troubleshooting technology issues, and more productive “up-time” on value-producing activities.”

• Human Emulator Lab simulates the user experience for user personas after the technology change, giving the IT team the opportunity to optimize user experience before deployment.

• Continuous real time insights into the employee experience with device and user sentiment analysis identifies issues and generates a solution more quickly.

Helped recover 15,393 productive hours for employees
We Are Headed Towards New Digital Economies

- The auto passenger economy
- The microgrid economy
- Last mile economy
- Open banking economy
"You get the people right you get the technology right."

Barbara Cooper, Hall of Fame CIO and Executive Council Coach