Looking at the future of finance
One out of three CEOs believe that their sector will see a major disruption in the coming three years as a result of technological innovation.

Areas of greatest investment in technology expected in three years

- 61% Data analytics
- 58% Cognitive technologies
- 55% Internet of Things

Top five strategic priorities in next three years

- 25% Greater speed to market
- 22% Digitization of the business
- 21% Becoming more data-driven
- 21% Building public trust
- 20% Implementing disruptive technology

Digital and sensory concerns

57% say their organizations do not have the sensory capabilities and innovative processes to respond to rapid disruption

61% are concerned about integrating cognitive processes and artificial intelligence

45% say they are not leveraging digital as a means to connect to their customers effectively

Source: US CEO Outlook 2017 survey. Disrupt and grow offers insights into the greatest concerns of CEO’s and how they plan to mobilize for the fourth industrial revolution. Findings based on a study of the three-year outlook of nearly 400 US CEOs, with annual revenues greater than US $500 million; 32% have greater than US $10 billion in revenues.
Cross-sector business disruptors

Finance must disrupt itself to stay in front of change.

- Customer centricity
- Emerging technology
- Big data
- Convergence of industry models
- New business models
- Changing workforce demographics
- Shifting geopolitical & regulatory environment
- "Growth or die"
What needs to change with finance?

Business model disruptors are changing the demands of finance.

- Increase support of innovation
- Proactively lead enterprise performance
- Employ 70% less labor
- Enable business agility
- Increase speed of insight
- Act as role model of collaboration
- Improve forecasting accuracy
- Develop new skills and talent
The art of the possible for finance

Finance as we know it today will be radically different in 10 years.

- New capital allocation approaches
- Cornerstone of strategy, finance, and analytics
- Robots eliminate shared services
- Cloud everywhere and the dominant platform
- Amazon’s “Alexa” provides instant information
- Process leadership is a profession
- Artificial intelligence processes big data
- Finance professional as strategist
The CFO response

Leading finance organizations have developed an agenda to deal with disruption.

Agenda in response to operating model disruption:

**Extreme automation**
Integrating and combining:
- Cloud technologies/apps
- Robotics
- Artificial intelligence
- Blockchain
- Mobile

**Insights & analysis**
New insights through:
- Descriptive and diagnostic analytics
- Predictive and prescriptive analytics
- Integrated business plans
- Decision support
- Business partnering

**Organizational simplification**
Changing way of work:
- Less people
- Less hierarchy
- Fewer locations

**Skills & talent**
Changing requirements:
- Both strategy and finance skills
- Process and control leaders
- Relationship and collaboration

Agenda in response to business model disruption:

**Innovation enablement**
Increasing role in innovation
- Fundamental economics behind disruption
- Approaching disruption at the organizational level
- Maintaining an innovation portfolio
- Disciplined innovation process and structure
Enable innovation - Think like a venture capitalist

When thinking about how to strategically allocate capital, the most progressive CFOs adopt a mindset of a venture capitalist, especially when it comes to investment in innovation.

The “VC lens” to investment

- How does business model disruption affect the fundamental economics that govern the industry?
- Where does company fall on the stage of disruption?
- What external signals in the market should the company be looking at?
- How should the company approach innovation investments?

Failure breeds success. Monitor risk closely without smothering ideas. Be open to crazy ideas. Act before you have to. Apply structure and rigor to CapEx planning. Agility & optionality is what you need. Foresight + bold moves = winners. Seek innovation outside the core. Cash is still king!

Is our company going to last if we don’t act?
Extreme automation

The finance technology ecosystem will continue to evolve and be integrated.

**Data management**
Data management will no longer be an aggregation of performance data; finance will lead data strategy utilizing new data sources (internal and external) to drive deeper prescriptive insights.

**Blockchain**
Blockchain will accelerate transaction recognition and provide enhanced security, lesser storage requirements, and shorter delivery cycle times; integration with cognitive technologies will result in extreme automation.

**Cloud ERP, EPM and BI**
Cloud technologies will give finance the ability to select best-in-class application solutions, real-time data accessibility, and business partnering capabilities.

**Robotics**
Robotic Process Automation (RPA) will drive “extreme automation” within rules-based finance processes resulting in greater capacity for value-added activities.

**Machine learning**
Adaptive technologies will radically change the work that finance does through the use of smart algorithms that can be leveraged to accomplish activities and tasks.

**Cognitive**
Cognitive technologies will advance automation past execution, through the ability to reason and infer trends and patterns from both structured and unstructured data.

**Natural language processing**
NLP will provide finance with unconstrained, real-time information accessibility, beyond just the numbers.

**Mobile**
Finance will be delivered real-time, custom insights via new mobile interfaces thereby driving accelerated decision making capabilities, allowing finance to positively influence business outcomes.
How is extreme automation being applied?

Finance technology disruption is already in motion. What are you doing?

- Blockchain replaces EDI, automates and authenticates counterparty transactions
- Digital labor integrates with cloud ERPs and other technology solutions to automate remaining manual activities
- Dynamic forecasting and analytical processes, cloud-enabled, with AI capabilities
- On-demand value delivery enabled through mobile and digital technologies
Insights and Analysis... What does this mean for finance and how should you respond?

In the face of rapid business disruption and change, Finance must equip itself with the right tools, skills and capabilities in order to provide leading insights and analytics, and answers to critical questions.

**Master the right capabilities**
- Advanced Analytics and Scenario Modeling
- KPIs, Metrics, and Dashboards
- Integrated Business Planning

**Be the Enterprise Data Steward**
- Master Data Management and Governance
- Enterprise Data Strategy
- Financial / Operational Data

**Develop Business Partnership approach and acumen**
- Partnership and cross-functional collaboration
- Organization and Service Delivery Model
- Talent and Skills

**Employ Extreme Automation and enabling technologies**
- Cloud and Mobile
- Robotics and Digital Labor
- A.I. and Cognitive Capabilities
As traditional, historical analysis becomes fully automated, analytics capabilities will shift from “descriptive” to “prescriptive.”

**Descriptive**

*What happened?*
- **Example:** Revenue by dimension, geography, product, service, customer
- **Emerging technology:** In-memory computing
- **What will change:** Speed of transaction

**Diagnostic**

*Why did it happen?*
- **Example:** Explanations for variances
- **Emerging technology:** Self-service and root cause analysis
- **What will change:** Speed of analysis

**Predictive**

*What will happen?*
- **Example:** Future estimates of revenue and profitability based on demand drivers
- **Emerging technology:** Machine learning, unstructured data processing
- **What will change:** Predictive analytics

**Prescriptive**

*What should we do about it?*
- **Example:** Strategic scenario analysis of revenue and profitability
- **Emerging technology:** AI/Cognitive big data analytics
- **What will change:** Hypothesis generation; advanced customer and market analysis
Industrial manufacturing
Collecting wear-and-tear data in real time to determine component failure rates and develop predictive servicing and maintenance schedules

Consumer markets
Enhanced forecasting ability through predictive modeling of consumer behavior and trends

Energy, oil, and gas
“Smart” machines that optimize performance by leveraging performance analytics, allowing customers to generate higher yields and productivity

Companies across all industries are already leveraging leading insights and analytics capabilities to drive better decision making and enhance operational execution.
Organizational simplification - What is changing?

Extreme automation will dramatically change the size, structure, and delivery model for finance.

Where work gets done: Geography no longer matters
- Virtual delivery centers / “no shore”
- Local need highly reduced or eliminated
- Globally controlled

How work gets done: Changing outsourcing model
- Customizable BPaaS solutions
- One-office (back, middle, front) combined
- Language neutralization / Self-service tools

What work is done: Higher-value services
- Sophisticated data modeling and virtual visualization
- Innovation and new capital allocation approaches
- Robotics and AI management – End-to-end process leadership

Who does the work: Reshaped support structure
- Transactional layer is marginalized
- Innovation COEs
- Emphasis on partnerships, collaboration, and reducing silos
- High skillset employees / digital skillset
Key roles in the future finance organization

The Future finance organization engages with and leverages digital technologies and data ubiquity to better serve the enterprise, while maintaining the traditional functions of control and increased process efficiency. These new capabilities and accompanying skillsets will create new roles across the organization.

- **Business Solutions Architect**
  - Has high RQ (Robotic Quotient), experience managing digital workforce and overall knowledge of the systems landscape; able to identify required F&A process changes and implement new business solutions incorporating relevant technologies.

- **CFO**
  - Execute complex financial models and advises the business on the financial and business impacts of different scenarios (STEM / D&A background necessary).

- **Financial Data Modeler / Scientist**
  - Has a strong understanding of external markets to examine and leverage threats and opportunities into strategic direction for the business; has the ability to navigate ambiguity and influence a potential shift in the business model.

- **Business Planning Analyst**
  - Handles interactions between different business groups and communicates information effectively (Has extensive business knowledge and deep technical F&A expertise).

- **Financial & Regulatory Accountant**
  - Takes an “outside in” approach to develop insights from trend signals and identifies changes in customer and competitor behavior and possible business implications.

- **The “Bot”**
  - Different Finance processes will be automated, leveraging various levels of smart automation.

- **Innovation & Investment Strategist**
  - Focused on delivering core reporting and analytics to the business (Deep Finance and Accounting background (e.g. CPA, CFA)).
Most Finance Business Partners are operating as Administrators or Cost Managers. Lifting the performance of Finance Business Partners can help to drive value and overall business performance.

Typical Finance Business Partnering Organizations

Administrator
- Month end coordinator
- Transactional processing & accounting
- Standard and ad-hoc reporting

Cost Manager
- Budget vs. actual variance
- Cost/project accounting
- Short term planning

Performance Driver
- Understands the business
- Reviews and writes commentary
- Shareholder value analysis
- Root-cause analysis
- Budgeting & forecasting
- Driving decisions
- Strategic planning
- Capital management

Strategist
- Challenge the business model
- External perspective framing strategic response
- Enterprise portfolio perspective
- Identifying major business transactions

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New skills - Behavioral is as important as data and technical

In a rapidly changing environment, finance organizations must assess new work to be done, and how this translates to the skill sets of their workforce.

**Data utilization and technology**
- Data Modeling, Analytics, and Visualization
- Robotic Share (RQ)
- Strategic Trend Analysis
- Research Capabilities
- Design Thinking Background
- Programming Expertise

**Behavioral**
- Strategic Thinking
- Service Management
- Relationship Management
- Impactful Storytelling
- Feedback, Communication, Negotiation
- Program Management
- Navigation Skills
- Ambiguity and White Space

**Finance technical**
- Business Modeling
- Core Financial Driver Analysis
- Process Design and Navigation

Source: Man and Machine: The Future of Jobs, Forrester Podcast
Attracting, building, and retaining talent will look different in the future, so having a holistic approach for addressing the critical aspects of managing talent will be essential.

**BUILD**
- Foster relationships with key universities
- Source nontraditional backgrounds (e.g., STEM)
- Redesign talent acquisition strategy for digital natives
- Redefine employee value proposition to retain millennial generation

**BORROW**
- Invest in career path design, learning, and development
- Reskill workforce to deliver more business-centric services
- Redefine role definitions and core competencies
- Develop succession plan to address the retiring and incoming workforce

**SAVE**
- Develop rotational programs to retain and develop high-performers and future leaders
- Understand critical roles and single source dependency of institutional knowledge

**BUY**
- Incorporate a flexible workforce into the organizational structure
- Develop a multifaceted workplace ecosystem (e.g., onshore, nearshore, managed service, partnerships)

### Summary - What will Finance look like in the future?

**Business model disruptors are changing the demands of Finance**

<table>
<thead>
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<th>Finance will…</th>
<th>The art of the possible….</th>
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<td>Increase support of innovation</td>
<td>Spearhead innovation investment</td>
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<td>Proactively lead enterprise performance</td>
<td>Be a key partner in strategy and analytics</td>
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<td>Employ less labor</td>
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<td>Enable business agility</td>
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<td>Act as role model of collaboration</td>
<td>Drive process expertise and oversight</td>
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<td>Improve forecasting accuracy</td>
<td>Give Artificial Intelligence a seat in the boardroom</td>
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<tr>
<td>Develop new skills and talent</td>
<td>Fuel finance professionals as strategists first</td>
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</table>
It is no longer business as usual.

• What business disruptors are impacting us most?
• What business questions and decisions should we anticipate to address these disruptors?
• How much appetite do we have for extreme automation?
• What is our data and analytics strategy?
• How will our current delivery model and locations be impacted?
• What are the impacts on our current workforce and do we have the right skills and competencies moving forward?
• What is our talent management strategy?
• Where do we start?
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