Fueling the Growth Agenda

2017 CFO of the Future Summit

Dr. Antonio M. Oftelie

Leadership for a Networked World

Technology and Entrepreneurship Center at Harvard

Harvard John A. Paulson School of Engineering and Applied Sciences



"For it is a secret, both in nature and state, that it is safer to change many things than one."

~ Francis Bacon, Essays, Civil and Moral, vol. III

CFO of the Future

What are the right questions to ask?

GE

"If you went to bed last night as an industrial company, you're going to wake up this morning as a software and analytics company."

"All of our products are becoming data centers." – Jeffrey Immelt

GE estimates the Industrial Internet could be a \$225 billion market by 2020, topping the \$206 billion seen in the enterprise cloud computing market by then and the \$170 billion in the consumer Internet of Things.



Johnson & Johnson

"We have a partnership with Google where we create robotic surgery. It already exists today – the robot can more precisely conduct elements of the surgery with less variability. What we're doing with Google is using their algorithm technology to understand how to design these procedures by having the robot accumulate data over time on the process."

– Dominic Caruso, J&J



CISCO

"My job is to understand where the business is going strategically. I have to consider board management and then articulating it to our investors. Finance has to lead. We're the translation of great ideas into how you make-up the company. Our job is to push the envelope, to force that acceleration. We're working with the business to drive that. The biggest impact finance has to play is helping the business make a transformation." – Kelly Kramer, CISCO Source: Research interview for CFO of the Future Summit

Stanley Black & Decker

"There will be a disruptive technology in the world that will change the market. I don't know what it will be, but it will change....There are things underway that could radically disrupt our world.... Those are the things we're working on to disrupt our own industry and existing products. If we don't do it, someone else will." – Don Allen, Stanley Black & Decker



Source: Research interview for CFO of the Future Summit

Digital Impact on Operating Environment

High Factor Intensity	Impact: Value Proposition Shift Firm Response: Radical Innovation	Impact: Value Proposition Obsolescence Firm Response: Ecosystem Adaptation
	Impact: Value Proposition Underperformance Firm Response: Incremental Innovation	Impact: Value Proposition Degradation Firm Response: Ecosystem Evolution
		~~~~
		Face vote ma W/ide

Firm-Specific

Pervasiveness

Ecosystem-Wide

Compass – Your Insights







Environmental Impact on CFO Role

Environmental Impact on CFO role over the past 5 Years



Environmental Impact on CFO Role

Environmental Impact on CFO role in 5 Years



Drivers of Environmental Change

Biggest Drivers of Change

Customer-facing digital technologies Product or service disruption **Back-office technologies** New competitors and market entrants Changing customer expectations Talent recruitment and management Geo-political uncertainty New production and supply capabilities Cyber security Activist investors



Responding to Technological and Environmental Change

This isn't necessarily a new challenge...

"For it is a secret, both in nature and state, that it is safer [but perhaps not easier] to change many things than one."

Francic Racon Eccave Civil and Moral vol III

Adaptive Capacity > Path Dependence

Adaptive Capacity:

The ability for an organization to strategically fit its structures, capabilities, and resources to the demands of an evolving environment.



Mr. Spencer and His Rifle



Union Maj. Gen. Stephan Hurlbut

Recognized the new organizational model and capacity that could be gained from the Spencer Rifle.

He promptly ordered Spencer Rifles but...



Ripley...Believe it or Not

Ripley, Chief of Ordnance for the Union Army only saw hugely disruptive changes in training, supply, organization, roles for front-line soldiers and chain of command.



"A great evil now specially prevalent in regards to arms for the military service is the vast array of new inventions...and none as good as the U.S. musket, producing confusion in the manufacture, the issue, and the use of ammunition, and very injurious to the efficiency of the troops. This evil can only be stopped by positively refusing to answer any requisitions for or propositions to sell new and untried arms, and steadily adhering to the rule of **uniformity** of arms for all troops of the same kind, such as cavalry, artillery, and infantry."

Gideon Welles, Secretary of the Navy

"Father Neptune" was Lincoln's first secretary of the Navy and purchased the Spencer for the Mississippi Marine Brigade - a unit that specialized in guerillalike attacks.



Colonel John Wilder

Led the "Lightning Brigade." He liked the Spencer so much that he obtained a loan from his hometown bank and had each man in his brigade cosign the loan.



Colonel George Custer

Michigan "Wolverines" Cavalry division used the Spencer during their Wolverine Dash in which his best soldiers would shoot the Spencer while riding on horseback into battle





Is there a secret sauce?

Firm Design & Capacity

- "How the Growth Outliers Do It," HBR, Feb 2012, Rita McGrath
- Studied more than 2300 companies of which ten increased their net income by at least 5% annually over ten years.

Key Insights

- Factors that did not explain growth:
 - Industry position
 - Age of firm
 - Geography or E/D econ
 - Ownership structure
- The ability to be both "stable" and "dynamic" determined success.

Dynamic Capabilities:

"[t]he firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments."

(Michael Teece, 2007)

What is the CFO Role Now?

"There's nothing a CFO should shed. You can't ignore compliance or financial reporting or things that are entrusted to the CFO. We're talking about adding additional capabilities, given the way the world is evolving. We're building on additional capabilities. These include: 1) Agility – speed and flexibility; 2) New business model experimentation – it is uncommon for a CFO to think about running a financial experiment - there's risk involved. Now we have to learn that when these new business models are developed we have to take risks and experiment and do some proofs of concept before we dive into the new business model... I think this experimentation is unusual for CFOs. We have to be willing to take a risk on business model changes." – Dominic Caruso, J&J

Where Should We Focus?



Can We REALLY Take This On?



An Alternative?



Or Maybe?



Can We Fuel the Growth Agenda?



Post-Summit Celebration

Post-Summit Celebration

Harvard souvenirs at the Coop Visiting the Cheers Bar Going to Fenway Park Visiting Boston's art museums Catching up on work Catching up on sleep Catching up with old and new friends Pub crawl in Cambridge Photo with the John Harvard statue Running in Boston Other

Thank You!

aoftelie@seas.harvard.edu

@AntonioOftelie

With a Little Help From Our Friends...

Our Panel:

Stephan Bein, Zurich Insurance Company

Olga Gonzalez, Walmart

Kristal Kaye, Husky Midstream LP

Dumi Martinez, SCA

Optimizing Current Business Value

What tools, information, or knowledge would help you optimize your current business value?

- Data analytics, benchmarking, and predictive modeling
- Digitization and automation of processes
- Change management and culture change
- Human capital
- Integration of business processes
- Enterprise-wide platforms

Generating New Business Value

What tools, information, or knowledge would help you generate new business value?

- Culture change
- Best practices and structures for in-house innovation
- Acquisitions, alliances, and partnerships
- Greater investment of time and resources into value creation and capture
- New technologies and processes
- Better alignment of compensation and incentives to creating new business value
- Best practices and models for risk/reward assessments

Creating Dynamic Capacity

What tools, information, or knowledge would help you create more dynamic capacity?

- Change management support and tools
- Continued integration of business processes
- Agile, effective technology and systems
- Strategies to break-through a "legacy mindset"
- Greater number of cross functional projects
- Additional time and funding
- Standardization and simplification of current activities

Digital Capabilities

What tools, information, or knowledge would help you generate more digital capabilities?

- Internal talent
- Sponsorship and funding
- Standardization, simplification, and leveraging of data
- Knowledge of use cases and digital innovations
- Benchmarking against peers
- Better back office systems (real-time, user friendly, etc.)
- Improved IT execution and speed to delivery
- Lessons learned on financial automation

Human Capital

What tools, information, or knowledge would help you develop more effective human capital?

- Leadership trainings and organizational assessments
- Benchmarking/external perspectives
- Innovative, agile, appreciative culture
- Performance management systems
- Succession planning
- Inclusive decision-making processes
- Collaboration technologies
- Aligning incentive structures
- Role clarity

Promising Innovations

What new business models, innovations, ideas, etc. do you think will help improve capacity and spur disruptive business models?

- Real-time data, analytics, and predictive modeling
- Automation, robotics, and artificial intelligence
- Digital transformation across the enterprise
- Changing regulations, tax reform, and political turmoil
- Intelligent risk-taking
- Responding to environmental concerns
- Cross-industry collaboration
- Technological advances
- Disruptive business models and e-commerce

Driving Questions

What questions related to strategy, leadership, technology, human capital, and preparing the next generation of CFOs would you most like to explore at the Summit?

- Balancing short-term vs. long-term aspirations and strategies
- Overcoming legacy systems, structures, and mindsets
- Best practices on data, analytics, and artificial intelligence
- Retaining and developing millenials
- Accelerating success with outsourcing, co-sourcing and georelocation
- Staying ahead of the technology curve
- Aligning the C-suite to investments in the finance organization

Additional Questions

Are there additional topics/issues that you would most like to explore at the Summit and/or would like others to help you think through?

- Building an agile, motived, diverse team
- Robotics and predictive modeling
- Perspectives on ERP systems and integrated reporting
- Successful CFOs that have emerged as CEOs
- Risk assessment and mitigation models
- Sustainability
- Managing the evolution of data/analytics and its impact on talent
- Working with external investors through a firm transformation