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BOTH RADICAL AND INCREMENTAL DIGITALLY ENABLED CHANGE WORK WELL

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Two years ago, when MIT CISR asked companies whether they were on a digitally enabled journey to become "Future Ready," nearly all—93 percent of companies—said they were.[1] In 2019, working with Harvey Nash, we studied results from more than four thousand companies to assess which of two approaches to business change using digital technologies—incremental improvement or radical transformation—was associated with better financial performance.[2] We found that the top performers taking each approach achieved significant benefits from their change efforts, strongly outperforming their peers in revenue growth and net margin. Counterintuitively, there was no difference between the two approaches in regards to the risk of financial underperformance. In this briefing, we look at the differences between the incremental improvement and radical transformation approaches to business change and what it takes in dollars and digital savvy to succeed.

BUSINESS CHANGE APPROACHES AND THEIR COST

In their approach to becoming Future Ready, 56 percent of the companies in our research were pursuing incremental improvement and 44 percent radical transformation. The approaches differ in their scope and speed. The companies taking an incremental approach were using digital technologies to steadily enhance existing products, services, and customer engagement, and were gradually introducing new offerings. The companies taking the radical approach were focused on developing digitally enabled products and services and experimenting with new revenue models. The chosen approach varied widely by industry (see Table 1); for example, 68 percent of companies in Advertising/PR were taking a radical approach versus 30 percent of companies in Manufacturing/Automotive. The differences across industries likely reflected the disparate views of senior executives and boards on the degree of threat from digital disruption to their current business models.

When looking at the top performers on a combination of growth and margin,[3] the goals of the management board (CEO and direct reports) drove a company to take one or the other approach. Management boards of companies taking an incremental approach looked to digital technologies to deliver stable and consistent performance and improved business processes, while boards of companies taking a radical approach were looking to digital technologies to drive revenue growth and develop innovative products and services and/or integrate those from other organizations.

These very different goals resulted in significantly different levels of spending on technology as a percent of revenues (see Table 1). Companies taking a radical approach spent 2.8 percentage points more on technology than their industry average, while companies following an incremental approach spent 1.8 percentage points less than their industry average. And in some industries the differences were much higher—for example, technology companies following a radical approach spent 26.8 percent of revenues on digital technologies, while technology companies following an incremental approach spent 16.6 percent.

ATTRIBUTES OF DIGITAL SAVVY

Improving the performance of the company by means of digital technologies requires an enterprise-wide digital savviness: a combination of mindset, clever use of data and technologies, and new ways of working that improves customer service and efficiency. We define digital savvy as *an understanding, tested by experience, of how digital technologies will impact how*

1 P. Weill and S. L. Woerner, "Future Ready? Pick Your Pathway for Digital Business Transformation," MIT Sloan CISR Research Briefing, Vol. XVII, No. 9, September 2017.

2 Harvey Nash/KPMG CIO Survey 2019 including some MIT CISR questions (N=4047); MIT CISR obtained publically reported financial data for 288 of the responding companies. The correlation between perceived and published financial performance relative to industry was significant (p<0.01 level). We used the actual performance variable for the firm performance analysis and the perceived performance variable for all other analyses. All differences reported were statistically significant.

3 A "top performer" (top-performing company)/"bottom performer" (bottom-performing company) was a company in the top/bottom quartile on a combination of perceived profitability and revenue growth, compared to industry.

companies will succeed in the next decade. We evaluated the digital savviness of companies on the following attributes to arrive at an overall percentage of Digital Savvy for each company:

- **Collaboration** that delivers business change
- A **long-term mindset** on technology implementation and platforms
- A **portfolio of digital technologies** that advances business strategy
- Effective **leverage of cloud technologies**
- **Maximized data use** throughout the enterprise
- **Customer trust** built through superior service and customer knowledge

The average company following an incremental/radical approach had a Digital Savvy score of 52 percent/59 percent, while top performers scored 57 percent/66 percent (see Table 2)—it took 16 percent higher digital savviness to be a top performer on the radical approach than the incremental approach.

While many companies are buying into radical transformation, an incremental approach to improving performance does much better on margin and nearly as well on revenue growth.

Achieving that much more digital savviness takes a multiyear effort; while typically led by the CIO and the IT unit, this must become an enterprise-wide pursuit. Even top-performing companies can have potential to significantly increase their digital savvy: our analysis shows that whether following an incremental or radical approach, the higher the financial performance a company has, the higher the company's digital savvy.

INCREMENTAL CHANGE—A SAFE BET

Both the incremental improvement and radical transformation approaches have yielded great results for top performers. Among top performers on combined growth and margin (relative to industry), the results are impressive: companies following an incremental approach did much better on margin, while companies following a radical approach did better on revenue growth (see Table 3). In our exploration two years ago into digital enabled business change, companies estimated they were 37 percent complete on their journey to Future Ready. Assuming these top-performing companies are now into their third or fourth year of change, the financial results are very encouraging for either the incremental or radical approach. But the key takeaway is that while many companies are buying into radical transformation, an incremental approach to improving performance does much better on margin and nearly as well on revenue growth.

The financial risk of underperforming—the percentage of all companies that perform better than the average company following each strategy—is virtually the same for both approaches. For the average company pursuing an incremental approach, the risk of underperforming was 49 percent; for the average company following a radical approach, the risk was 51 percent. However, the sources of risk are quite different. For companies following a radical approach, the risks of underperformance are around new revenue models and changing the culture and skills. In contrast, the risks of underperformance for companies pursuing an incremental approach are about digital disruption happening more quickly than expected, leaving the company behind.

MECHANISMS PER CHANGE APPROACH

Let's look at what it takes lead the changes. Using a measure of CIO effectiveness,[4] we found no difference in CIO effectiveness across top-performing companies following an incremental or radical approach. But there was a difference in the key mechanisms senior executives used to implement change. For companies using a radical approach, effective use of data was the key differentiator, coupled with a significant decentralization of the IT/digital budget, and with more technology-related spending and initiatives outside of that budget. For companies following the incremental approach, there was more spending within the IT/digital budget (likely associated with a stronger architecture) and significantly more focus on talent retention (keeping people motivated to stick with the incremental approach), plus scaling of experiments and using robotics for automation.

THE BEST APPROACH FOR YOUR COMPANY

Contrary to much popular opinion that most digitally enabled business change is radical, companies are fairly evenly split between taking incremental and radical approaches to becoming Future Ready, and the very impressive results achieved by top performers are similar for each approach. But companies should typically only pursue a radical transformation approach if their threat of digital disruption is high and they are willing to both spend significantly more on technology and drive culture change.

Following either approach, an effective CIO is pivotal to a successful outcome. As higher digital savvy is associated with higher performance, a top task of all CIOs is to build digital savviness enterprise wide.

4 We created a measure of CIO effectiveness by assessing a company's ability to implement end-to-end solutions, be strategic, ensure that IT staff have key skills, use cross-functional teams, and help implement new ways of working.

Table 1: Incremental Improvement Approach Versus Radical Transformation Approach

	Incremental Improvement Approach		Radical Transformation Approach	
Industry	Percentage of Companies	Technology Spend: Percentage of Revenues	Percentage of Companies	Technology Spend: Percentage of Revenues
Advertising/PR	32%	9.3%	68%	13.1%
Broadcast/Media	43%	10.9%	57%	13.7%
Telecommunications	43%	16.0%	57%	15.8%
Technology	44%	16.6%	56%	26.8%
Insurance	48%	6.5%	52%	7.9%
Pharmaceuticals	49%	9.5%	51%	10.5%
Banking	51%	18.0%	49%	21.0%
Business/Professional Services	52%	10.1%	48%	13.9%
Leisure	54%	5.8%	46%	10.4%
Retail/Consumer Goods	56%	5.0%	44%	4.5%
Transport/Logistics	57%	5.6%	43%	8.5%
Oil and Gas	58%	3.8%	42%	9.3%
Healthcare	60%	7.2%	40%	10.0%
Power and Utilities	63%	7.1%	37%	17.1%
Investment Management	64%	9.6%	36%	11.2%
Construction/Engineering	66%	6.2%	34%	6.5%
Manufacturing/Automotive	70%	4.3%	30%	6.2%
AVERAGE*	**56%**	**8.5%**	**44%**	**14.5%**

*Average includes three industries excluded from the table.

Table 2: Differences in Digital Savviness

	Incremental Improvement			Radical Transformation		
	Bottom Performers	Average	Top Performers	Bottom Performers	Average	Top Performers
Digital Savvy	42%	52%	57%	50%	59%	66%

Table 3: Differences in Performance

	Average Company		Top Performer	
	(in percentage points above/below industry average)			
	Incremental Improvement	Radical Transformation	Incremental Improvement	Radical Transformation
Net Margin	+1.4	-1.4	+19	+9
Revenue Growth	+0.4	-0.4	+15	+17

Source, Tables 1 and 2: Harvey Nash/KPMG CIO Survey 2019 including some MIT CISR questions (N=4047). Technology spend=combined technology and IT spending for the enterprise. Table 2: Top/Bottom Performers=Top/bottom quartile companies on a combination of 2018-published profitability and revenue growth, compared to industry.

Digital Savviness: Digital Savvy is an understanding, tested by experience, of how digital technologies will impact how companies will succeed in the next decade. We evaluated the digital savviness of companies on the following attributes to arrive at an overall percentage of Digital Savvy for each company: effective collaboration, long-term mindset, strategic digital technology adoption, leverage of cloud technologies, maximized data use, and customer trust. All measures were transformed to a 0%–100% scale. Digital Savvy was significantly different across companies following incremental improvement and radical transformation approaches.

Source, Table 3: Harvey Nash/KPMG 2019 CIO Survey including some MIT CISR questions (N=4047). Published financial results from 288 companies used for this analysis.

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