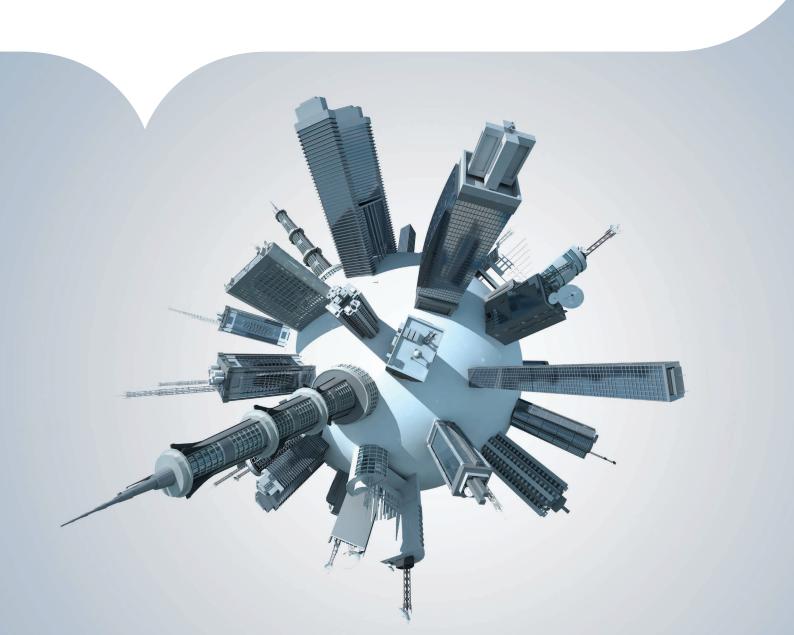




### Digital Dynasties: The Rise of Innovation Empires Worldwide

Update on Original Research "The Innovation Game: Why and How Businesses are Investing in Innovation Centers"



### Silicon Valley No Longer the Capital of Corporate Innovation

Fast forward a 100 years from Henry Ford's assembly line innovations, which sent shockwaves through the manufacturing industry, and you will find Ford in the midst of another fundamental transformation: from automobile company to provider of mobility services.

A significant factor in this transformation is the company's Silicon Valley innovation center. The center has very quickly become an audition stage for technology startups that are looking to showcase how their interface technologies can enhance the driver experience for Ford customers. A Ford executive explains how this inflow of ideas provides a great forum for jointly exploring new possibilities, saying: "We get hundreds coming to our doors in a year in our Silicon Valley office alone [...] Sometimes we think that the ideas are a little off the wall and they might not be ready for a vehicle yet, but it's still really interesting to see what people are looking at1." Ford opened this facility in 2012, expanded it in January 2015, and now houses nearly 100 employees who focus on accelerating innovation in mobility, connectivity, autonomous vehicles, customer experience and big data<sup>2</sup>. The center has launched fourteen mobility hackathons since 2014 and is partnering with Nest and other local initiatives to reimagine urban transportation.

This ability to build fruitful relationships with a wide spectrum of technology startups is one of the key reasons that large and traditional companies set up innovation centers. The rising importance of innovation centers is a development that we (Capgemini Consulting and Brian Solis of Altimeter Group, a Prophet company), studied as part of the industry's first analysis of the global trend in July 2015. Almost one year later, the time is right to update our research to examine the centers that have opened since then and identify new developments.

Silicon Valley still remains the hub of the world's most dominant innovation "empire" – a location of a thriving innovation ecosystem where innovation centers cluster. However, as the innovation center phenomenon has continued to spread globally, a number of new 'empires' have emerged where innovation centers are flourishing.

From July 2015 (when our previous research was published) to February 2016, 56 new innovation centers have opened in 20 countries and 11 more centers are planned to open soon (see Figure 1).

Over the last year, we witnessed the rapid rise of Asia as a destination for innovation centers (see Figure 2). Compared to our previous research, Asia has seen a 29% rise in the number of innovation centers being launched:

- **Singapore:** The city state is fast emerging as a Fintech hub in Asia. UBS launched an innovation center in Singapore, focusing on creating innovative customer propositions around digital wealth management<sup>3</sup>.
- India: The country has seen a signifiant increase in the number of innovation centers, often centred on Bengaluru, which some have dubbed the "Silicon Valley of India". It is estimated that \$9 Billion was invested in startups in India in 2015<sup>4</sup>. In this fertile environment, Airbus and Visa have set up innovation centers in India.
- Australia: The country is a new entrant onto the list, with Huawei Technologies choosing to locate a center there. In addition, local companies Telstra and Insurance Australia Group also set up innovation centers in Sydney and Melbourne.

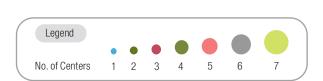
New innovation centers opened or announced to be opened across 20 countries between July 2015 and February 2016

This paper is an update of our research on innovation centers — "The Innovation Game: Why and How Businesses are Investing in Innovation Centers". We highlight the latest developments since the publication of our previous report. Please refer to our <u>original report</u> for a detailed presentation of our recommendations.

**Western Europe North and South America** London (4) Gloucestershire (1) Toronto (1) Kitchener (1) Merseyside (1) Ferndale (1) Everett (1) Berlin (1) Naas (1) Belfast (1) Boston (2) Darmstadt (1) Atlanta (3) Silicon Valley (5) Irvine (1) Pasadena (1) Paris (2) Medellin (1) **Australia** Sydney (2) Sao Paulo (1) Melbourne (2) **Asia** Beijing (2) Herzliya (1) Yakum (1) Dubai (1) Abu Dhabi (1)

Figure 1: Innovation Centers Launched Between July 2015 and February 2016

29%
Rise in the number of innovation centers in Asia compared to our previous research



Bangalore (4)

Mumbai (1)

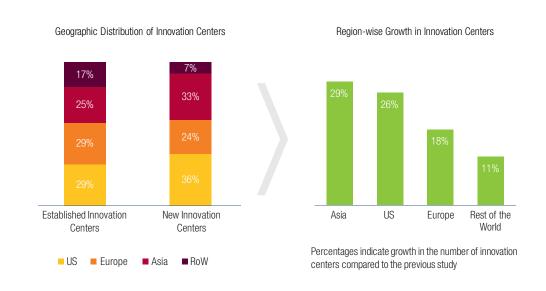
Singapore (3)

Nashik (1)

\*Maps not to scale

Source: Capgemini Consulting and Altimeter Analysis

Figure 2: Innovation Centers are Growing the Fastest in Asia and the US



Source: Capgemini Consulting and Altimeter analysis

### **India: The New Innovation Destination of Choice**

India has been rising in the ranks of favorite destinations to open innovation centers. Our previous research identified eight innovation centers in India in July 2015. India has since seen eight more innovation centers open their doors. Bangalore has been the most favored city with four new innovation centers. Bangalore is home to several billion-dollar Indian startups such as: Flipkart, InMobi and Mu Sigma, and attracts world-class technology talent and investments. Among the new innovation centers opened here are: Airbus' BizLab, which indends to bring together startups and Airbus' internal entrepreneurs; and Visa, whose new technology center in Bangalore will house 1000 developers accelerating development of next generation payment solutions. Global firms are showing interest in other Indian cities as well. For instance, TriMas Corporation – a diversified global manufacturer of engineered and applied products – opened an innovation center in Delhi to focus on driving innovation across its range of packaging solutions, while Puratos, a leading global food ingredient company, launched an innovation center in Mumbai.

Source: Travel Daily Media, "Airbus opens innovation centre in Bengaluru", November 2015; BusinessWire, "Visa Opens Technology Center in Bangalore; Accelerates Digital Commerce Globally", August 2015; TriMas Corp, "TriMas' Rieke Establishes Global Innovation Center in India", December 2015; IIFL, "Puratos India launches a Food Innovation Center in Mumbai", July 2015

Silicon Valley with five new innovation centers, and Western Europe with 12, continue to be hotbeds of innovation. At the same time, innovation centers are now truly global, as reflected by Figure 1.

The further globalization of innovation centers is a natural byproduct of the proliferation of tech talent, capabilities, entrepreneurialism and the distribution of venture capital across the world (see Figure 3).

Figure 3: Venture Capital Investment, 2015



Venture Capital Investment (U.S.\$, Millions)



Martin Prosperity Institute

35% Share of top 10 tech hubs in total number of innovation centers

Source: Citylab, "The Rise of Global Startup Cities", January 2016

The spread of innovation across the world can be seen in the fact that the top 10 locations for innovation centers today, although slightly different from the top 10 locations identified in July 2015, only represent 35% of the total number of innovation centers (see

Figure 4). As technology talent emerges in different countries across the world, more companies are looking beyond the established hubs, while also looking to meet the need for innovation that is localized and relevant for specific markets.

Figure 4: Top 10 Locations for Innovation Centers, Worldwide

48%
Growth in financial services innovation centers between July 2015 and February 2016, the highest across all industries



Source: Capgemini Consulting and Altimeter Analysis

# Financial Services Leads Other Industries in Opening New Innovation Centers

In our previous research, we found that manufacturing companies were the most aggressive in opening innovation centers. Now, we have seen a spate of new innovation centers from financial services companies (see Figure 5) as the industry competes against Fintech startups and also faces the rise of Apple Pay, Google Wallet, Paypal et al. Our latest research shows that 42% of leading financial services organizations now have innovation centers compared to 28% in H1 2015. Between July 2015 and February 2016, financial services experienced the greatest growth in innovation centers (48%), overtaking manufacturing (which grew by 7%) and

Consumer Products (which grew by 20%). Further, Fintech emerged as the second-most important focus area for new innovation centers, with 13% of new centers focusing on this domain. This is a significant rise for Fintech, which was not previously among the top six focus areas for innovation centers.

For example, investment in venture capital-backed Fintech companies jumped more than 100% in 2015<sup>5</sup>. As the sector is transformed by new technologies, financial services companies including BNP Paribas, Deutsche Bank, JP Morgan, and HSBC have opened new centers:

#### **Deutsche Bank**

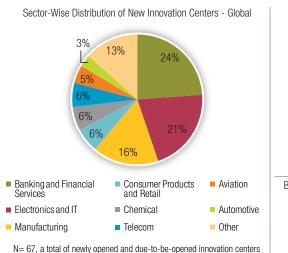
"The Silicon Valley lab will help Deutsche Bank offer clients new and improved products and services, strengthen efficiency and deepen its relationships with the Valley's innovation and investor communities<sup>6</sup>."

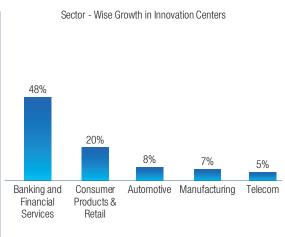
### **HSBC (Singapore Innovation Center)**

"The HSBC innovation lab will not only provide extensive exposure to the latest financial technology trends to our partners and clients for earlier strategic response but position HSBC as a digital banking thought-leader in the Asia Pacific<sup>7</sup>."

Figure 5: Financial Services and Electronics & IT Sectors Lead Others in Opening New Innovation Centers

13% Share of all new innovation centers that focus on Fintech





Source: Capgemini Consulting and Altimeter analysis

### **BNY Mellon's New Innovation Center in London**

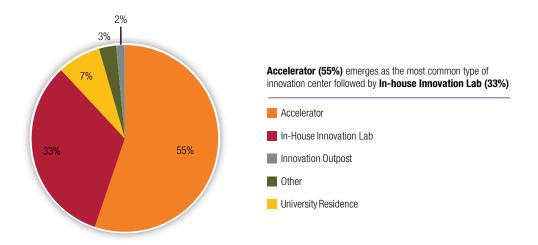
BNY Mellon, established in 1784, is one of the oldest banking institutions in the world, managing \$1.6 trillion in assets in 35 countries. In November 2015, BNY Mellon launched its first innovation center in the EMEA region in London with an aim to bring together startups, developers, industry experts and researchers to reimagine the future of finance. The bank believes that London offers a powerful combination of Wall Street's financial heritage and Silicon Valley's disruptive character. Mark Gibbons, Chief Information Officer – EMEA, BNY Mellon, elaborates why the bank chose London as its innovation hub in the region, "Tech hubs are popping up all over the city including Canary Wharf, Shoreditch, Soho, even Brixton in south London. London's Tech City is now the third largest technology hub in the world, and it's right on our doorstep. As is Level 39, Europe's largest technology accelerator space, which is just one flight of stairs from our office in Canary Wharf."

Source: Company website; BNY Mellon, "BNY Mellon's new EMEA Innovation Centre opens today", November 2015; BNY Mellon, "Mark Gibbons: Why we chose London as our EMEA Innovation hub", November 2015

### Most New Innovation Centers Operate as Startup Accelerators

Over the last year, accelerators represent a dominant model for innovation centers, accounting for more than one in two centers in our latest research (see Figure 6).

**Figure 6: Categories of New Innovation Centers** 



N= 67, a total of newly opened and due-to-be-opened innovation centers

#### **Accelerator**

Cultivates relationships with startups and provides them opportunities to work actively with the company on technology development

#### University Residence

A center set up at a university campus to drive innovation through university researchers

#### In-House Innovation Lab

The innovation engine for their companies, these centers are typically large in size, and perform all innovation activities from inception to prototyping using an in-house approach

### **Innovation Outpost**

Small teams based in technology hubs, typically Silicon Valley, with an idea to be involved in the tech community, without committing significant investment

Source: Capgemini Consulting and Altimeter analysis

Accelerators literally plug companies into startup ecosystems, allowing them to cultivate relationships with startups and provide them with opportunities to work on targeted technology development. Following accelerators, in-house innovation is the second-most favored model, with 33% of new innovation centers adopting it. In-house innovation labs are typically large in size, and perform all innovation activities from inception to prototyping.

Very few innovation centers now favor "university residence" and "innovation outpost" models, which were adopted by only 7% and 2% of new

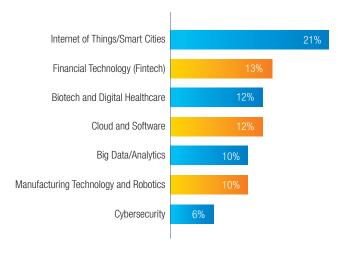
innovation centers respectively. This is a likely indicator of maturity; organizations are moving from experimental approaches to more structured models that require significant investments, engagement and management. For instance, Nestlé is a good example of a company that started with an outpost and is now expanding its innovation efforts to move more staff and capital into a more structured center in Silicon Valley. Announcing this development, Patrice Bula, Nestlé Executive Vice President and Global Head of Marketing, said, "Two years ago we successfully established a Silicon Valley Innovation Outpost and we look to build and expand on that effort."

# Big Data No Longer Big Focus: The Internet of Things Shoots to the Top of the List

In an era of digital Darwinism, where disruptive technology is now a product of everyday innovation, companies are seeking to connect with the latest shiny objects and trends while also gaining access to "what's next." The list of tech will always change. In just the last year alone, we saw big data take a big drop in terms of priority. Now, the Internet of Things, Fintech and Digital Healthcare emerge as the top three focus areas for new innovation centers, ahead of Big Data/ Analytics (see Figure 7).

In fact, only 10% of new innovation centers cite Big Data or Analytics as a focus area compared to 51% in our previous research. This could reflect the fact that Big Data now appears to have moved rapidly from experimentation and pilots to deployment, as recent surveys testify. A 2016 survey, for example, found that 62% of Fortune 1000 companies have at least one instance of big data in production<sup>9</sup>.

Figure 7: Focus Areas of New Innovation Centers



Note: The percentages may not add up to 100% since the innovation centers may have multiple focus areas: N= 67

Source: Capgemini Consulting and Altimeter analysis

### **Companies Seek Partners in Innovation**

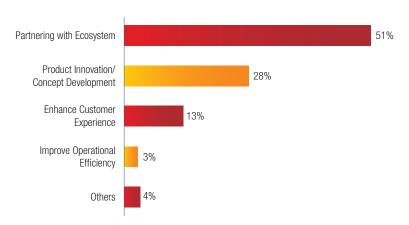
51%
Share of new innovation centers that have "Partnering with Ecosystem" as their key objective

If you can't beat them, acquire them...or partner with them. Organizations are starting to realize the value in partnering with relevant startups and ecosystem players, rather than simply gaining access to technology. "Partnering with ecosystem" emerged as the key objective of new innovation centers (see Figure 8). In our previous research, gaining access and exposure to latest technologies, was the main mission. This change in focus suggests a significant shift in how some organizations treat startups. They now see them as partners who bring value to the table. Also worth noting, a focus on innovation to

enhance the customer experience is giving innovation a true purpose of customer-centricity. This has made the top three objectives now in our two reports – our previous report had found that "deeper understanding of customer needs" was one of the main focus areas of innovation centers.

Worryingly, driving operational efficiency is the focus of only 3% of new innovation centers. This might be a result of the fact that only 16% of innovation centers in our latest research belong to manufacturing companies, where operational excellence is a major focus.

**Figure 8: Key Objectives of New Innovation Centers** 



Note: The percentages may not add up to 100% since the innovation centers may have multiple objectives: N= 67

Source: Capgemini Consulting and Altimeter analysis

# How can Innovation Centers Successfully Scale the Slippery Slope of Digital Innovation?

### **Extract of Original Recommendations**

It is extremely challenging to make a success of innovation centers. A seasoned innovation expert and senior executive at a leading global bank told us: "About 80 to 90 percent of innovation centers fail, and end up being a massive waste of resources." Such high failure rate results from a slippery slope of challenges that innovation centers must overcome to succeed in digital innovation. The challenges range from lack of leadership support and an unclear

focus to companies' inability to scale the innovation at an enterprise level. Leading companies avert these perils by factoring critical success factors into their journey. These factors broadly fall into three phases: laying down the foundation of vision and governance, harnessing talent and partnerships and delivering on the core promise of innovation (see Figure 9).

Deliver on the Core Innovation Promise

Prove Value with Ouick Wins and Focus by Culling Unfeasible Projects

Harness Talent and Partnerships

Create a Cross-Functional Team

Thrive in Both Structured and Unstructured Innovation

Lay Down the Foundation of Vision and Governance

Define the Right Purpose and Focus

Support

Extend Innovation

Across the Enterprise

Innovation

Across the Enterprise

Fincus by Culling Unfeasible Projects

Unstructured and Unstructured Environments

Engage with Diverse Partners Di

Figure 9: Critical Success Factors for Innovation Centers

Source: Capgemini Consulting and Altimeter, "The Innovation Game: Why and How Businesses are Investing in Innovation Centers", July 2015

### Conclusion: the inexorable rise of innovation centers worldwide

Studies of empires often focus on their "rise and fall". But for innovation centers, we are witnessing a phenomenon of "rise and rise some more" as large, established companies seek a proactive approach to competitiveness and also a strategic defense and offense around digital disruption. As the changing focus areas show, organizations are prepared to

transition to the next level of their innovation empirebuilding. The days of limited experimentation are disappearing quickly, and companies are reaching out far and wide to build genuine partnerships and turn creative ideas into tangible results. It's now becoming a matter of innovating large or risk falling behind.

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Altimeter, a Prophet Company, is a research and strategy consulting firm that helps companies understand and take advantage of digital disruption. In 2015, Prophet acquired Altimeter Group to bring forward-thinking digital research and strategy consulting together under one umbrella, as well as to help clients unlock the power of digital transformation. Altimeter, founded in 2008 by best-selling author Charlene Li, focuses on research in digital transformation, social business and governance, customer experience, Big Data, and content strategy.



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