



Innovation or exnovation: how can banks survive?

Presented by: Vincent Caldeira
Temenos Innovation Jam
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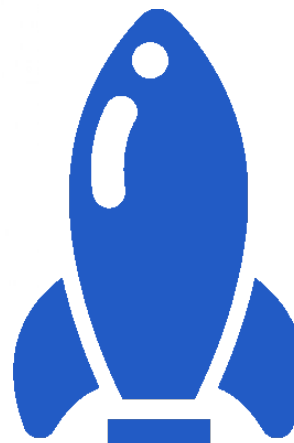
“

Before man reaches the moon, your mail will be delivered within hours from New York to Australia by guided missiles.

We stand on the threshold of rocket mail

”

Arthur Summerfield
US Postmaster General, 1959



DEFINITIONS

Innovation

Application of a novel idea to **implement** a product, service or process that adds **value to the organization** and its customers.

*Clayton Christensen in the Innovator's Dilemma distinguishes **disruptive innovation** (vs. sustaining innovation), a process by which a product or service takes root initially in simple applications at the bottom of a market and then relentlessly moves up market, eventually displacing established competitors. He explains disruptive innovation through 5 principles.*

Exnovation

Consistent replication of processes and practices that have been **tested and confirmed** within the innovative circles of an organization to its other parts, not allowing further innovation by those practicing them.

Companies that have followed exnovation as a strategy to improve organizational performance include General Electric, Ford Motor Company and American Airlines.

Principle 1

Companies depend on
CUSTOMERS and INVESTORS
for RESOURCES

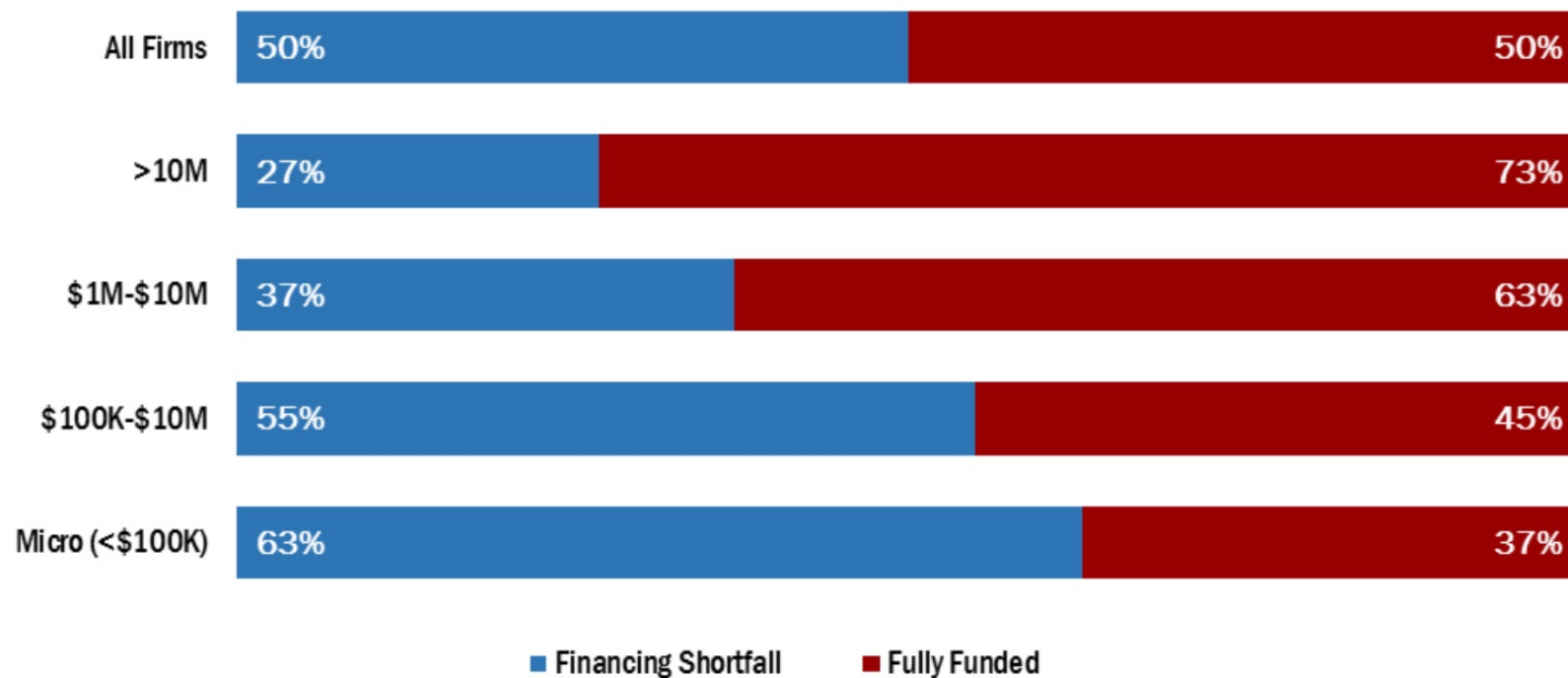
*Bank's resource allocation is typically
towards sustaining innovations for
higher-margin businesses.*



In US, SMBs are struggling to get financing for small dollar loans from banks due to high transaction costs and increasing cost of capital

Figure 23: Microbusinesses Have the Greatest Unmet Need

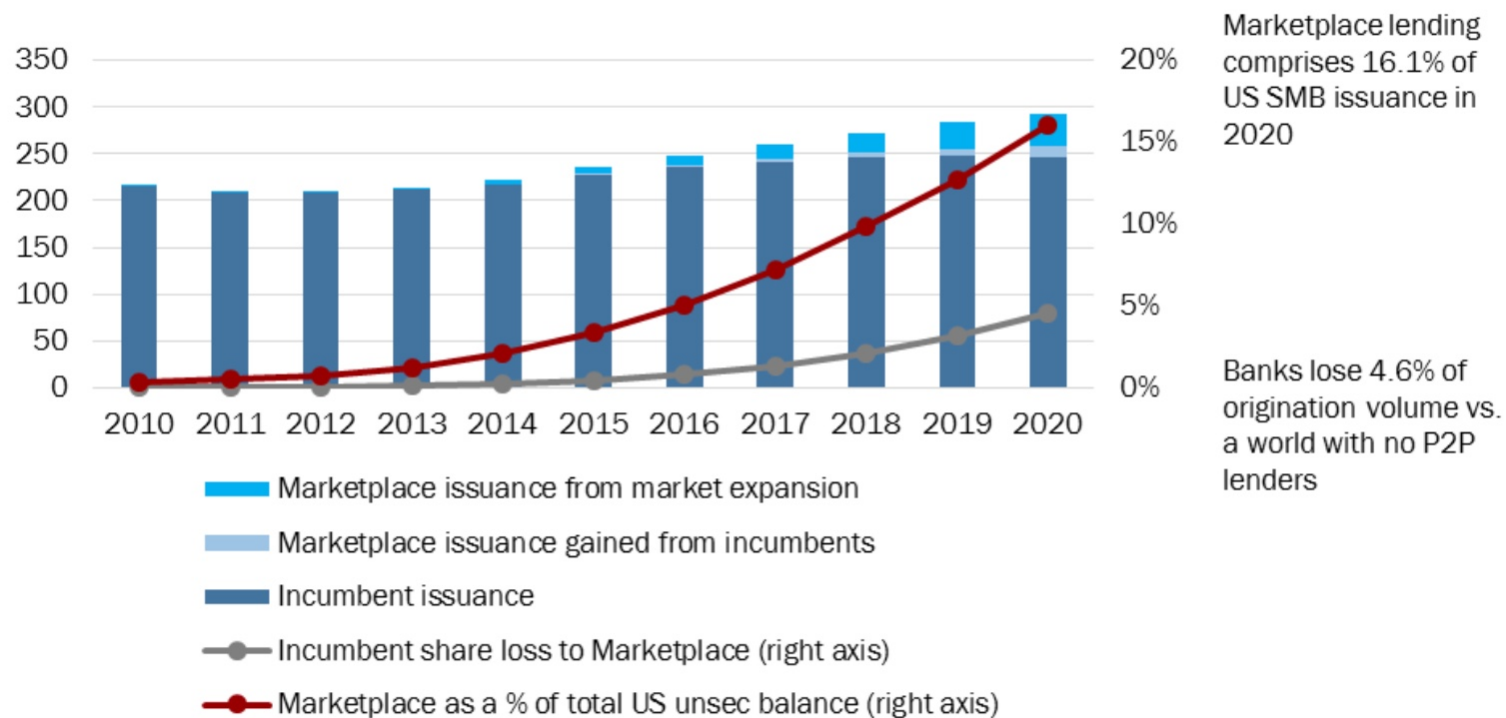
Percent of Loan Applicants Receiving Full Funding Versus Those Funded Partially or Not at All



Source: "2015 Small Business Credit Survey," Federal Reserve, March 2016.

Online lenders are filling this gap with platforms offering digital application process and automated credit scoring

Figure 31: Small Business Marketplace Lending is Continuing to Grow
U.S. Total Small Business Loan Issuance, Billions of Dollars



Source: *Global Marketplace Lending: Disruptive Innovation in Financials*, Morgan Stanley, May 2015.

Principle 2

Small markets don't solve the growth needs of larger companies

Small organizations can most easily respond to the opportunities for growth in small markets.

Those can be target markets for commercialization of new services.



Robo-Advisors offer automated, low cost, semi-tailored investment portfolios to retail end customer

Exhibit 1 Robo-Advisors Potentially Fill Niche Between Discount Brokerages, Traditional Wealth Managers



Principle 3

Markets that don't exist
can't be analyzed

It is not possible to investigate market trends, or gather statistical evidence on new services.



After Internet and e-Commerce, is it the rise of the Blockchain ?

SURVEY:

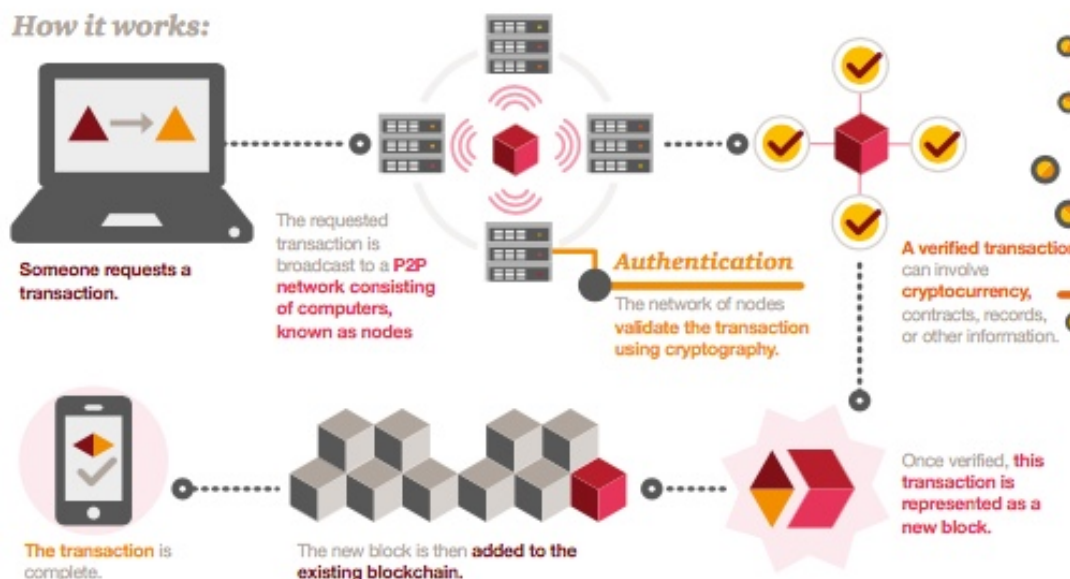
56% of Bank CEOs recognize its importance but...

57% say they are unsure about or unlikely to respond to this trend

Source: PwC Global FinTech Survey 2016

Blockchain participants can exchange digital assets without the need for a central party

How it works:



Cryptocurrency

Cryptocurrency is a medium of exchange, such as the US dollar, created and stored electronically in the blockchain, using encryption techniques to control the creation of monetary units and to verify the transfer of funds.

- Has no intrinsic value in that it is not redeemable for another commodity, such as gold.
- Has no physical form and is not currently backed by any government or legal entity.
- Its supply is not determined by a central bank and the network is completely decentralised.

Unknowns	Benefits
Complex technology	Increased transparency
Regulatory implications	Accurate tracking
Implementation challenges	Permanent ledger
Competing platforms	Cost reduction

Potential applications

Automotive

Consumers can use the blockchain to manage fractional ownership in autonomous cars.

Financial services

Faster, cheaper settlements could shave billions of dollars from transaction costs while improving transparency.

Voting

Using a blockchain code, constituents could cast votes via smartphone, tablet or computer, resulting in immediately verifiable results.

Healthcare

Patients' encrypted health information can be shared with multiple providers without the risk of privacy breaches.

Sources: "Money is no object: Understanding the evolving cryptocurrency market," PwC, 2015/"A Strategist's Guide to Blockchain," strategy+business, January, 2016/"How Blockchain Technology Is Disrupting Everything," TechDay, 2016

Does the building of a permissioned Blockchain defeat this purpose?

Principle 4

An organization's capabilities define its disabilities

Banks have processes and legacy systems that cannot easily change to support a different low-margin business or product. Technology in particular has been developed to support organizational silos, often in a channel-centric way (branch, ATM, web, phone, mobile).



Simple spent 2 years rebuilding systems to move customer accounts to new owner BBVA



unrepeatable raddish February 1, 2017



simple no longer allows green card holders, after banking with them for 2 years, they simply told me they were closing my account, no explanation. I asked many times. Ive lived in the US 16 years, legal, married to a us citizen, have an ssn, a green card etc. Im from England not the middle east, so they cant give me the damn trump excuse. Though thats a load of crap too for anyone legally in the US. Its pure discrimination. Read the civil rights act, 1964. Especially when they promised nothing would change when they transferred to compass as a bank partner. avoid these liars!! Because what really pissed me off is Ive been trying to push business their way elling



copy-it-right @gordon1470

Dec 24, 2016

Replying to @jwisser @simple

this is an absolute nightmare. I just want to pay my power bill and now I'm saddled with all this garbage



Jonas Wisser

@jwisser



's transition has been a disaster from moment one. I knew they were gonna tank when they got bought.

3:13 AM - Dec 24, 2016



See Jonas Wisser's other Tweets



Will

@willboy



I'm sorry. Just feel so betrayed. @simple was my partner. The way they viewed banking helped my finances so much! Now it's just a bank.

8:44 AM - Feb 21, 2017 · New Orleans, LA



1 See Will's other Tweets



Principle 5

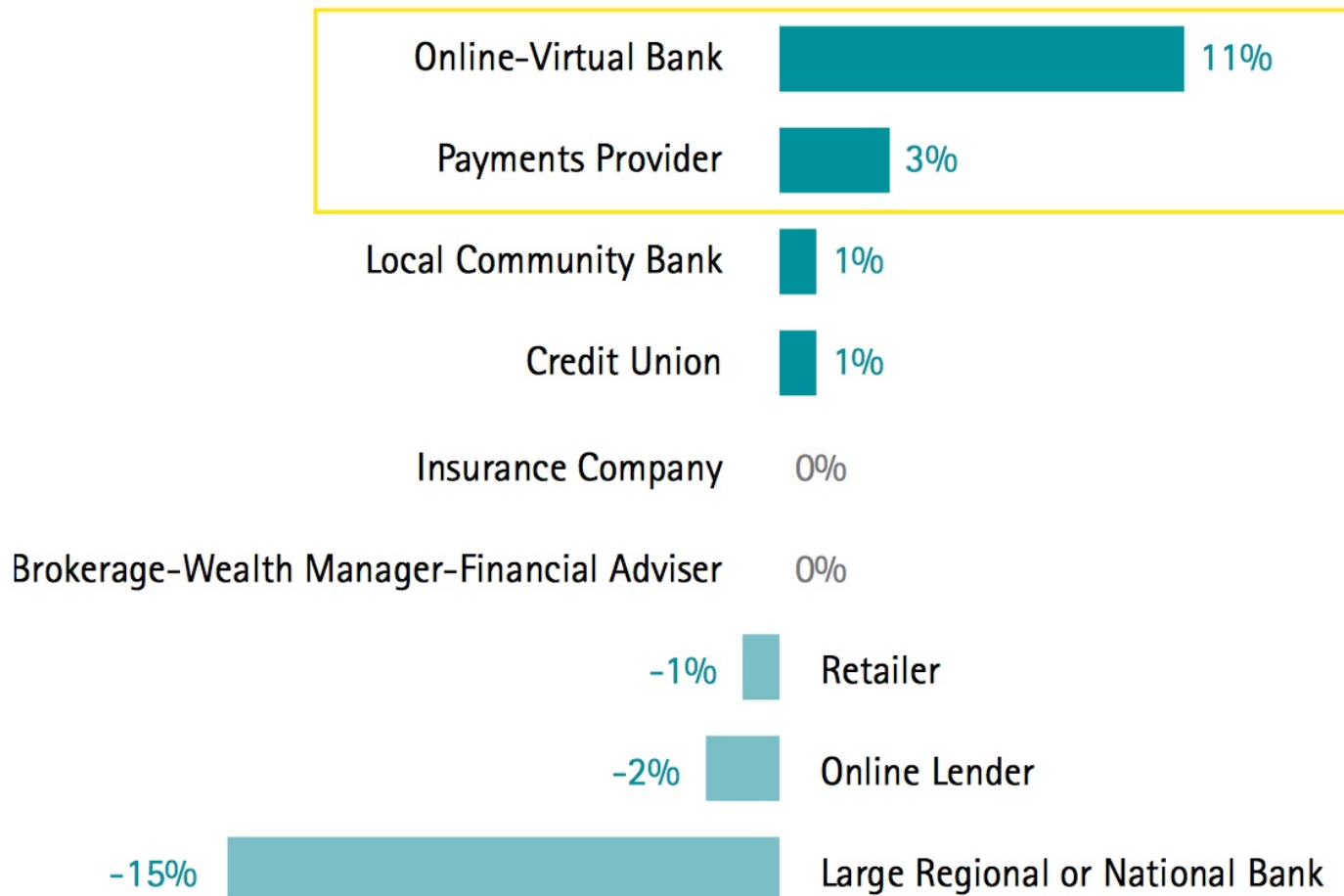
Technology supply may not equal market demand

Innovation often exceeds the rate of possible absorption by customers. Banks that focus on existing high margin businesses tend to overlook the needs of the general market, and create a vacuum for lower-end, lower-cost technologies to enter at the foot of the market, servicing the basic needs of customers.



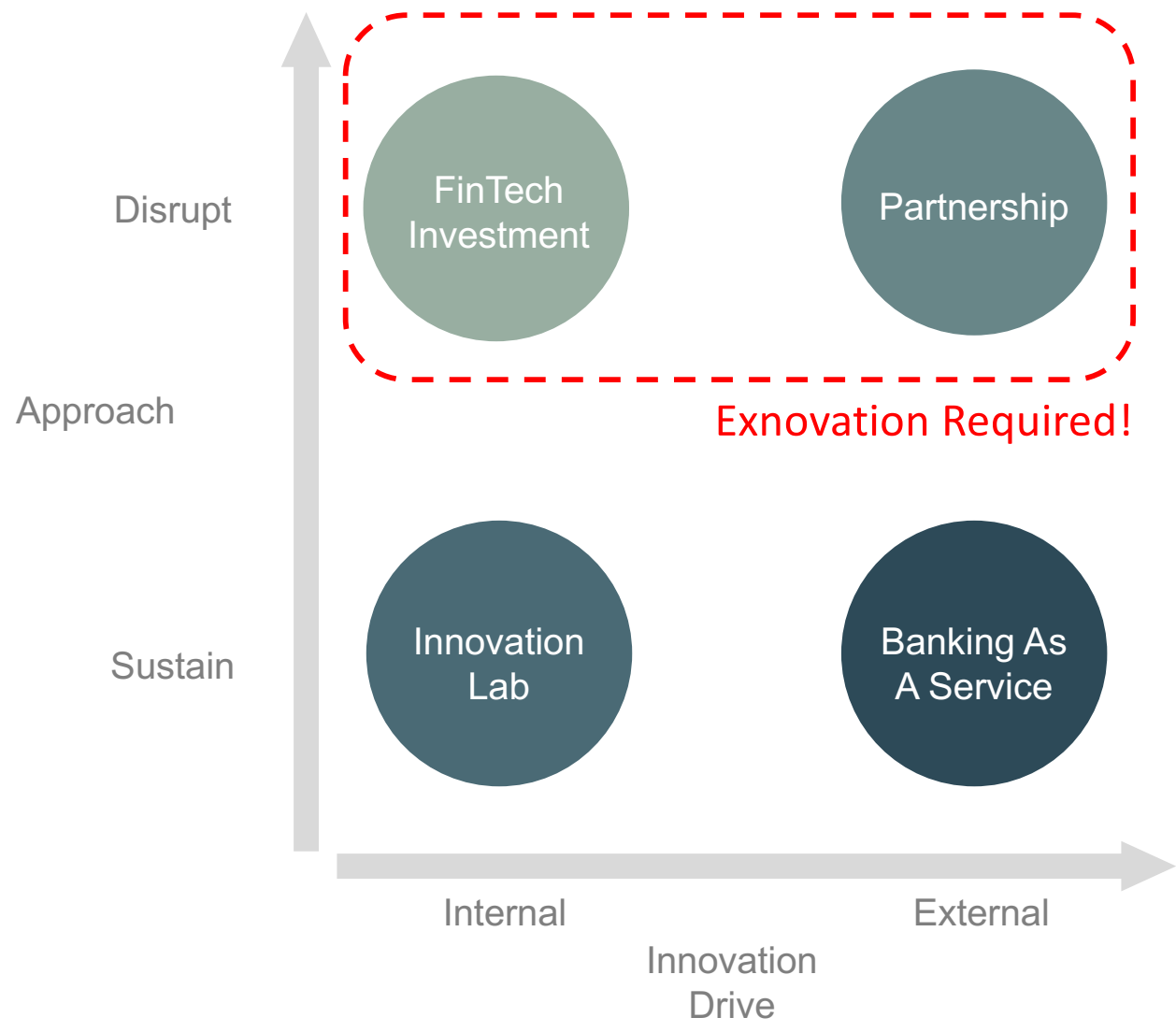
Virtual banks target customers whose need is simple and seamless transactions with lower fees

Q: In the past 12 months, have you switched to a new financial services provider or other company from your main bank?



Source: 2016 North America Digital Banking Survey, Accenture

4 MODELS FOR MANAGING INNOVATION





The Top 10 US Banks are investing in FinTech

		Key: New 2017 portfolio co. Acquired by investor										
Rank	Blockchain	Data Analytics	Insurance	Personal Finance	Wealth Management	Fin. Services Software	Lending	Payments & Settlement	Real Estate	Regulatory Technology	Supply Chain	
	1	 	 [PERSADO] 	 	 	 	 	 	 	 		
	2	 	 [PERSADO] 	 		 	 	 		 		
	3	 				 		 				
	4		 			 						
	4	 	 									
	6		 									
	7											
	8											
	8											
	8											

Source: CB Insights, February 2018

Partnership

China Technology Giants are building the new banks

MyBank

Promoted by: Alibaba,
Fosun

Launched on 25/6/2015

Loans for individuals and
start-ups, and TaoBao
sellers.

Operates on Alibaba
Cloud



WeBank

Promoted by: Tencent,
Baiyeyuan, Shenzhen Luye

Launched on 18/1/2015

Personal banking,
corporate banking,
international banking.

WeChat and QQ act as
storefront to customers



Baixin Bank

Promoted by: Baidu, CITIC
Bank

Launched on 18/11/2015

Financial products and
loans for individuals and
small enterprises

User Behavior Analysis for
personalization and risk



ENABLING FACTORS OF TECH EXNOVATION

ENABLING FACTORS

INFRA

Cloud Computing

- Manage infrastructure cost
- Increase elasticity of processing capacity
- Fasten development cycle through DevOps
- Revamp IT Operating Model

CONNECTIVITY

Open API

- Simplify legacy systems
- Prepare architecture to connect to anything, anywhere
- Pay more attention to security

DATA

Data Pipelines

- Identify and plug internal and external sources of data
- Build stream / event-based architecture
- Experiment with AI / ML

PEOPLE

New Talent

- Build access to new hybrid talent
- Prioritize learning and cultivate IT talent from within



**Vincent
Caldeira**

Following a 15-years career in Banking Technology, Vincent recently became the Chief Technology Officer of Bondlinc, a Singapore-based FinTech company, where he oversees the technology design and development of the company's Software-As-A-Service platform bond trading and execution platform with the aim of standardising, improving and automating traditional bond trading for financial institutions' end clients. In its one year of existence, Bondlinc platform has received multiple awards which include being named as one of Amazon Web Services Hot Startups globally in September 2017, receiving the Zamma Award at NTT Data's Open Innovation Contest 7.0 in Singapore Finals in January 2018, and the company was recently named Most Promising FinTech Startup by Asian Private Banker.

Thank you!