Harnessing innovation to lead the bionic lending revolution



Finding an identity that thrives in bionic environments of digital prowess, human ingenuity, and strategic purpose



The **environment** around lending has **experienced aggressive** and

substantial change and lenders have a significant opportunity



Lending is changing. Consumer preferences are changing. Technology is moving faster than ever.

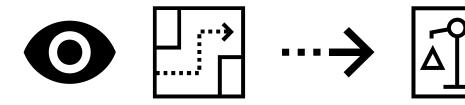








Some see threats, we see opportunity!





• Learn and follow in the footsteps of very successful companies that experienced similar disruption in other industries



• **Get proactive!** The right framework is essential...



With early signs of **fundamental change** on the horizon, transformation requires a new and **revolutionary** way of thinking





Lessons in transformation from other industries and technologies



Early signs of substantial and aggressive changes in lending



A new way to think about transformation: **PwC's Bionic Lending Concept**



Framework to thrive in bionic environments: Strategize, Modernize, Optimize

Why is this important?

We are beginning to see early signs of aggressive change and disruption across consumer lending asset classes and lenders must adapt to compete

Hyper-focused specialty lending

Lender-fintech partnerships Vertical integration Blockchain ΑΙ Networking Machine Learning Self-driving cars New engagement models Subscription models Innovation Customized Strategy **Ecosystems Consumer-focused** Alternative Data iBuyers Shared Equity Member networks Lifestyle communities **Realtor disruption** Smart homes Industry convergence Advanced analytics Product **Income Share Agreements** innovation

...and our industry is not immune to the power of innovation around us by forces internal and external. There will be winners and losers



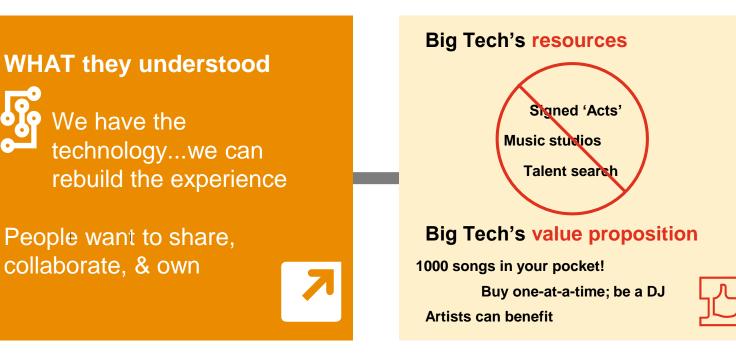
A lesson in transformation from the music industry...

WHAT was the problem?

Customer tastes were evolving

But the industry wasn't

There had to be a better way.



...and our industry is not immune to the power of innovation around us by forces internal and external. There will be winners and losers



A lesson in transformation from the music industry...

Many early disruptors (think Napster) failed but big tech learned and evolved in order to dominate



HOW did big tech take over the music industry?

They did not 'reinvent music' they focused on their internal strengths & leveraged existing capabilities (phones & music) to deliver a better experience.

The Result?

What was once isolated, product-driven, and time-consuming...



Has become collaborative, experience-based, and on-demand.



Future leaders in consumer finance should seek the light of inspiration from across industries

The traditional interaction model has evolved in every facet of consumers' day-to-day lives.

Think how easy it is to to:

- Book a flight
- Hail a ride
- Get one-stop-shopping
- Buy a cup of coffee
- Order a pizza



Air travel



Ridesharing



Shopping



Buying Coffee

Home Management

Ordering Pizza

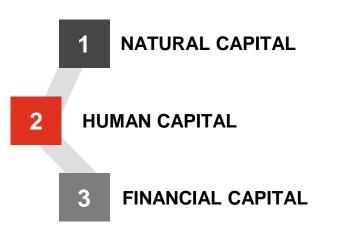
Consumers have gravitated to companies that deliver the best experience – regardless of who traditionally provided the service. We anticipate the same dynamics will dramatically change the consumer finance industry.

What does it mean to be bionic?

At the highest level, bionic refers to the optimal mix of humans and machines working together to achieve rapid, exponential success

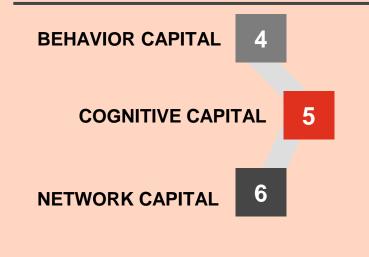
The bionic enterprise There are probably 100 companies around the world that are known for rapid, exponential success (e.g., Amazon, Apple, Google). We think of them as **bionic enterprises**:

Success has long been driven by management of three long-standing forms of capital:





The secret to success in today's new industrial revolution lies in **three new forms of capital**:





How can a lender become a bionic lending enterprise? Find an identity that thrives in bionic environments using this framework and approach:



STRATEGIZE

Define your enterprisewide vision

MODERNIZE

Embrace modern tactics and technology to support your vision

OPTIMIZE

Adopt an intelligent automation approach to support scalable, sustainable change

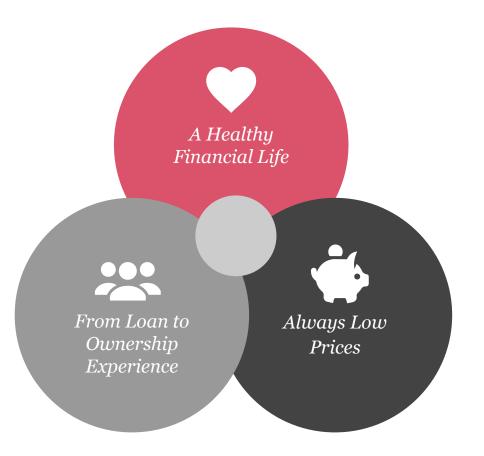
|{ }| STRATEGIZE Change your mindset focus on users and ecosystems, not products

In order to be a bionic lender, you must take a step back and define an enterprise-wide strategy and vision

• Your Vision

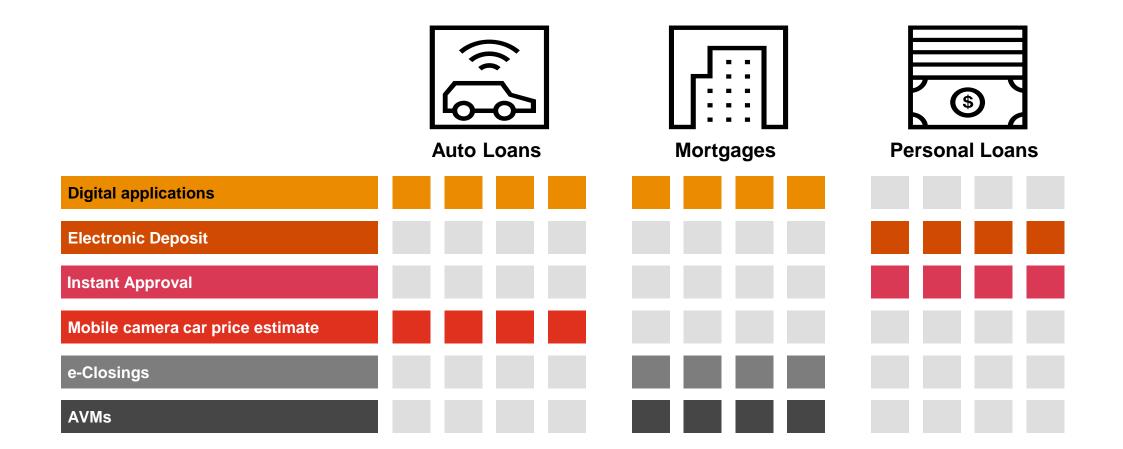
- → Define what being best means
- → Understand that you cannot be the best for every customer segment
- \rightarrow Choose a lending ecosystem
- → Define your desired competitive advantages
- → Develop a cohesive, enterprise-wide strategy and vision that will thrive in bionic environments

Lenders are examining key ecosystems that we believe are key engines for marketplace growth



STRATEGIZE

Historically, both bank and non-bank lenders have followed a product-based strategy... and invested in innovation to accommodate this approach



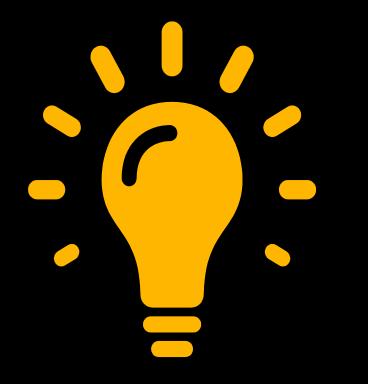
Most investments have been aimed at one or two products at a time

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In the bionic revolution, however, the focus is now on using innovation to deliver an intuitive, end-to-end user ecosystem and experience that keeps the customer in your orbit

		Most Lenders Focus Here			
Planning and saving	Finding a Product	Shopping for a lender	Getting a Ioan	Building a relationship	
Customer Objectives	Customer Objectives	Customer Objectives	Customer Objectives	Customer Objectives	
Determine what product they can afford Set a goal and budget	Find the right product for them	Determine the best loan product	Apply simply and easily	Paying the loan and managing the account	
	Be able to make a competitive	for them Easily understand the terms and price of the offer	Ease of documentation	Owning and maintaining their product	
	offer right away		Receive a quick approval	Get access to additional funds as needed	
	Stage 1: Shopping and Research		Stage 2: Application	Stage 3: Ongoing Relationship	

PwC | Bionic Innovation



"You've got to start with the customer experience and work back toward the technology - not the other way around."

- Steve Jobs

Leaders follow a user-centric design approach to innovation where the desired end-to-end experience drives technology decisions



STRATEGIZE

First experience, then solution – but your new mindset must not stop there. The impact of innovative change is pervasive and requires a holistic approach to enable the unique experiences and accelerated business performance intended

Innovation can have significant impacts along the following dimensions of an organization



Disruption

Transforming business through innovative models that don't exist in the market today.



Engagement

Enabling digital interactions between you and your customers in a more engaging, seamless way.



Digitizing processes to improve employee productivity, supplier interaction, and customer satisfaction.



Ensuring secure information in a digital age to inspire trust by your customers.



MODERNIZE Embrace modern innovation tactics that focus on delivery

MODERNIZE

Becoming bionic means breaking out of your current cycle and employing a strategy that focuses on delivery

Let's set up agile teams and give them autonomy to move the needle for us!



How do we budget projects? And our CEO wants to know when we launch! We need to know what we're building and when it's finished ahead of time Creating a culture that focuses on the true ROI from innovation activities is key to your transformation objectives...



Embed KPIs in design

Include both quantitative and human-centered



Choose wisely

 Build a portfolio of projects with varying scores on the impact vs. risk vs. effort scale



scope

Pure (Startup) Agile - Execute on a vision

Agile does not work in its pure form in a

...and requires a new mindset of planning

budgets, deadlines, and managing project

Waterfall PM - Stick to the Plan

corporate structure

• Startups are built to **execute on a vision** and **deliver** in a **sprint by sprint** fashion



Fail fast

Be 'unemotional' about innovation projects and **take a 'portfolio approach'**



Corporate Agile - Quickly seize an opportunity

 Corporate agile needs to combine the sprint-by-sprint agility with planning

Shifting organizational culture is critical

Adopting a hybrid mindset is required

Then, embrace the modern technology to support your vision - it's already here Recent years have seen major technological developments that enable digital lending use cases to drive efficiency and customer empowerment

Becoming bionic will require investments in the underlying technology components of your system architecture to become data-oriented

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> 2018 Data-Driven Operating Systems



End-to-end digital experience Automated, personalized, fully digital end-to-end experience on any device

< 2000 Monolith



Web only Desktop apps, browser as presentation layer



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Web 2.0

Rising data volumes &

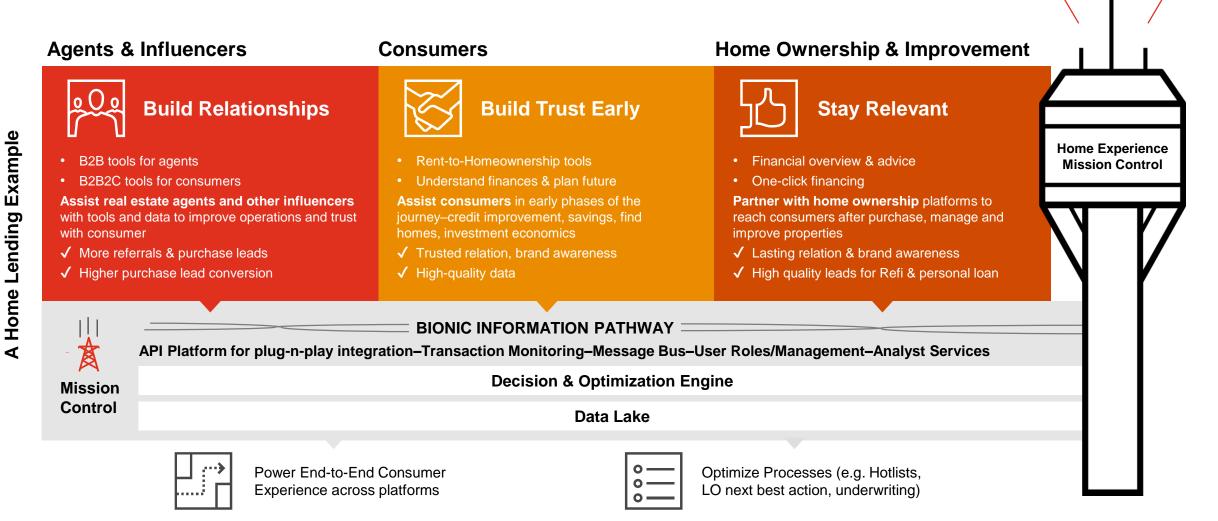
mobile devices, SaaS

Microservices

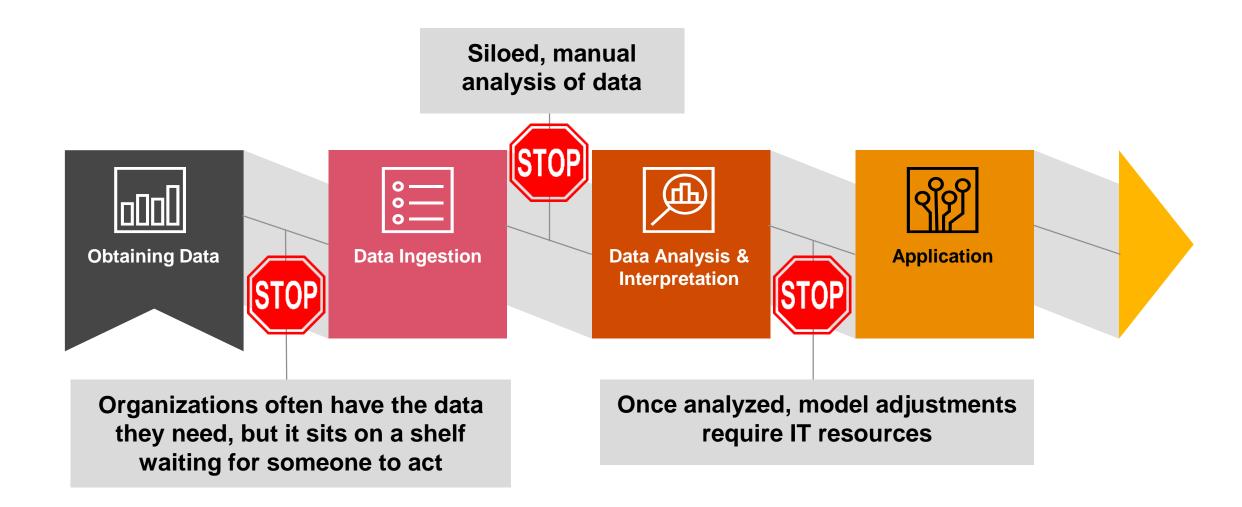


2015

Mobile first "Always connectedness," personalization, process automation One such home lending use case positions lenders as mission control using innovative solutions at critical points in the process to keep the customer in your orbit



To enable the mission control concept, start by cutting through the traditional, bifurcated method of ingesting, analyzing, and applying data

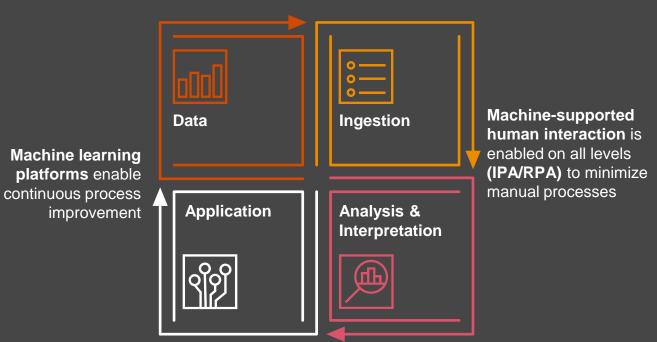


Instead, create a **bionic information pathway**

that will serve as the innovative engine where data ingestion, analysis, and application are *automated* and the insights you need to think beyond the loan are *real-time* and *relevant*.

BIONIC INFORMATION PATHWAY

Flexible process & workflow automation eliminate the time between receipt and input



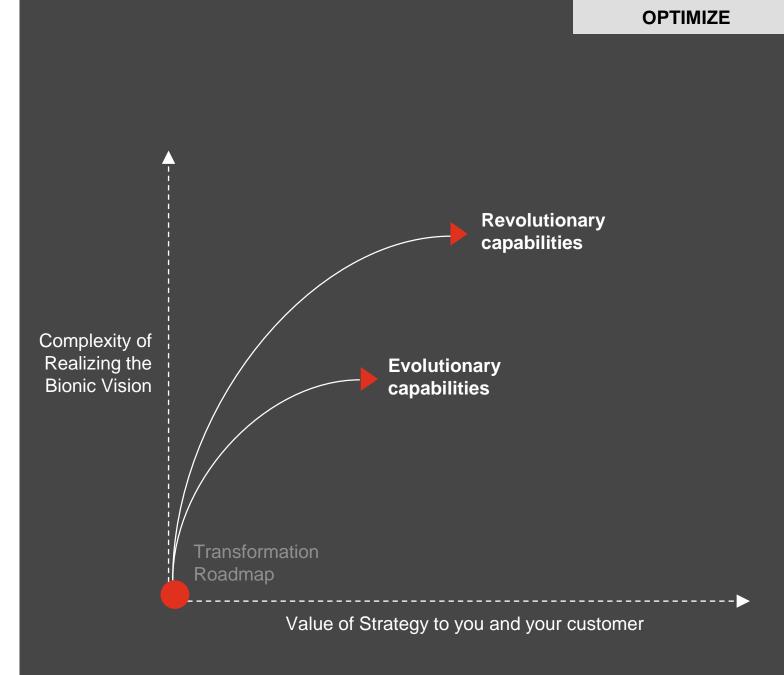
Data-driven OS enables allows for **real-time and relevant outputs**



OPTIMIZE Adopt an intelligent automation approach to support scalable, sustainable change

"It is the connection of **insights to operational change** and improvement that make bionic organizations intuitive, agile, and uniquely positioned to dominate entire segments and markets." Organizations are maturing past the usage of single tools for process transformation into leveraging multiple computing technologies.

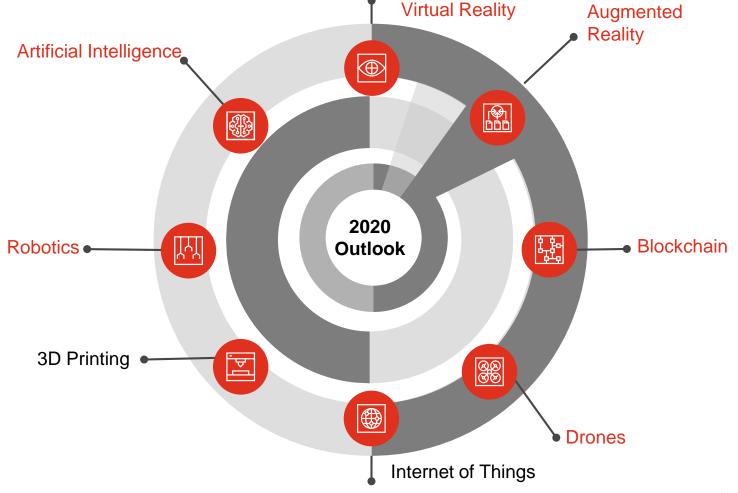
An intelligent automation approach **balances** near-term quick wins *(evolutionary)* with a longer-term capability building *(revolutionary)* that supports future strategy and competitiveness.



Intelligent automation is not a single tool, but a smart way to integrate emerging technologies into a solution that transforms the way you work

PwC has identified several of these 8 emerging technologies as those that will have an impact on lending.

- In the future we expect to see:
 - Blockchain-based virtual branches
 - Decentralized transaction management
 - Virtual and augmented reality home tours
 - Site inspections and monitoring using drones
 - A hyper-efficient and intelligent lending process driven by the engines of artificial intelligence



Don't just automate processes, transform the business

These examples illustrate how emerging technology can create opportunities to increase both efficiency and experience -- two critical components in becoming a bionic lender



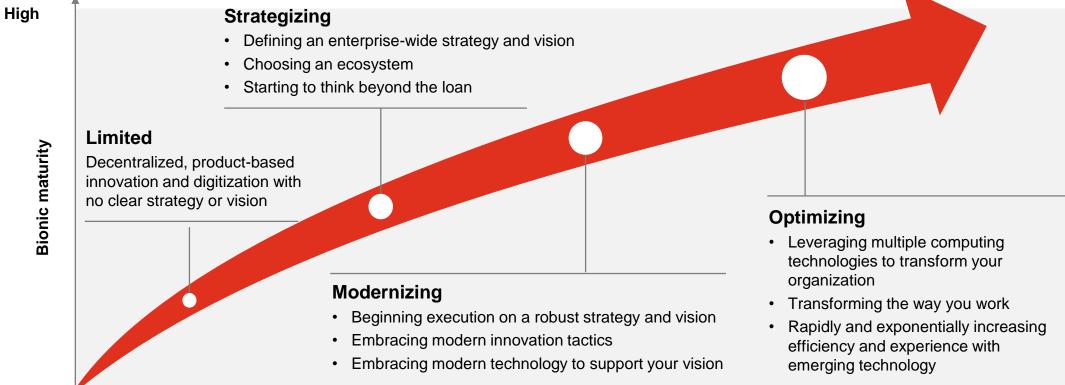


A PwC assessment of a non-bank lender's operations identified potential savings of 30% of the overall cost to originate through digital investments for operations -- \$60,000,000 in savings for this lender.

Where is your organization on your **digital journey**?

Where is your organization on your digital journey?

Illustrative digital maturity model

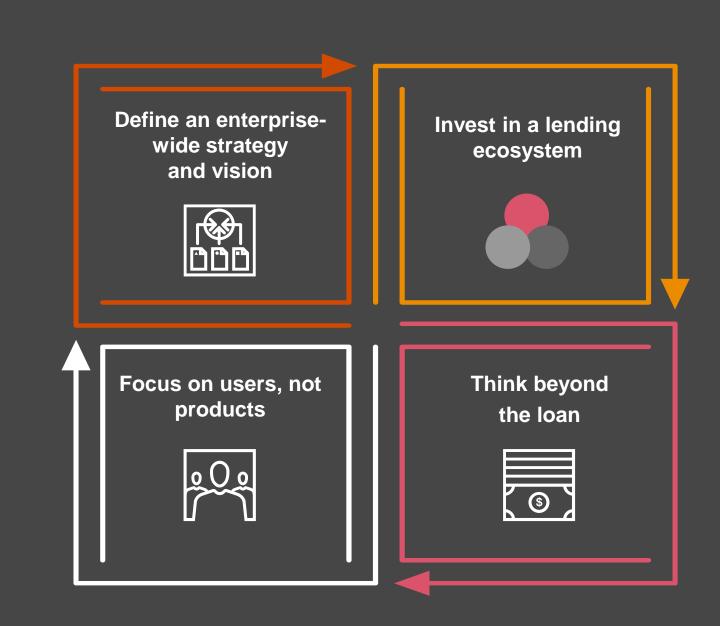


Organizational commitment/effort

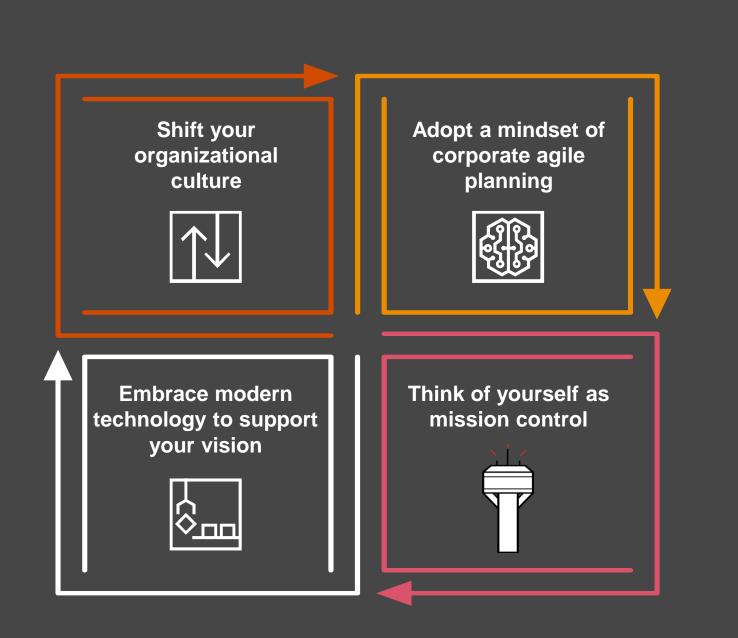
High

In summary...

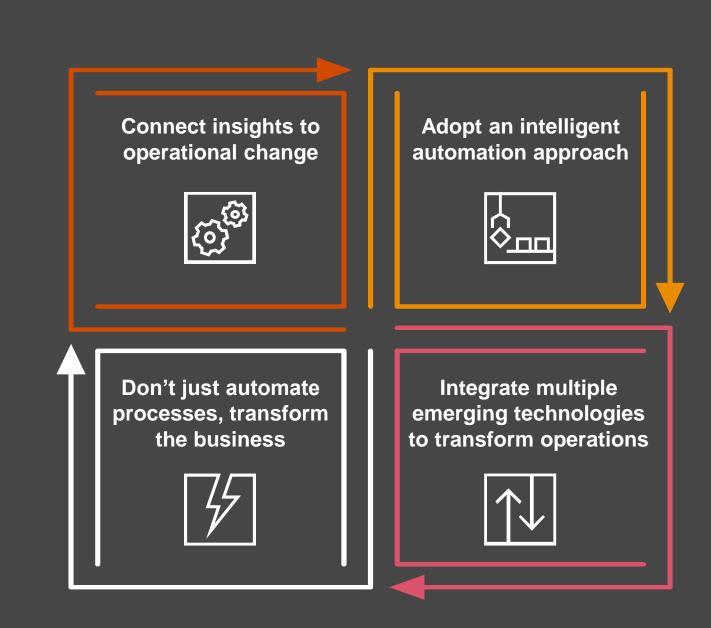
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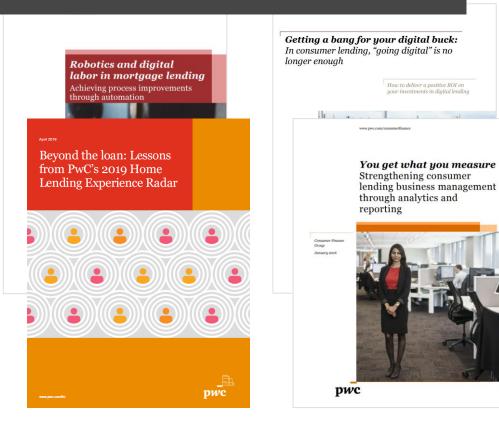
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