



# Leveraging Innovation to **Grow** and **Transform**

BuildSG LEAD Summit - 27 Apr 2022

**Sim S. Lim**

Group Executive,  
Consumer Banking &  
Wealth Management  
and Chairman, BCA

# B3W

Best Bank for a Better World

# Live More ...Bank Less

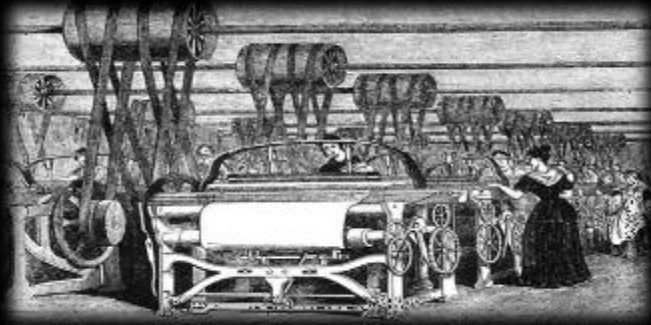




# Pace of technological change is accelerating

86 years

1<sup>st</sup> Industrial Revolution (1784)



2<sup>nd</sup> Industrial Revolution (1870)



99 years

3<sup>rd</sup> Industrial Revolution (1969)



4<sup>th</sup> Industrial Revolution  
(2016–Present)



47 years

# Technologies that are disrupting our world

AI



BIG DATA



CLOUD



MOBILE



CONNECTIVITY





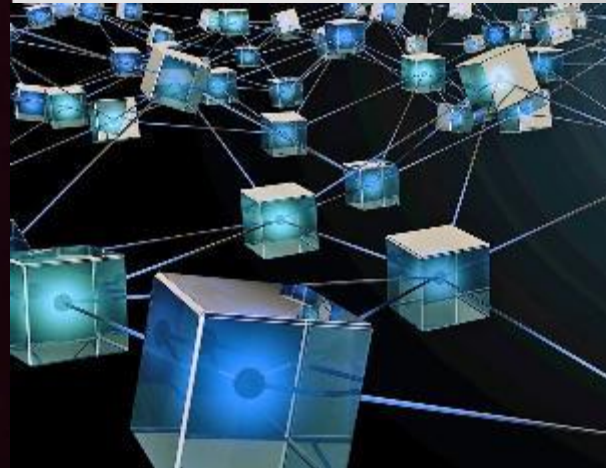
# New technologies create both opportunities and risks



Data & AI



Blockchain



AR / VR

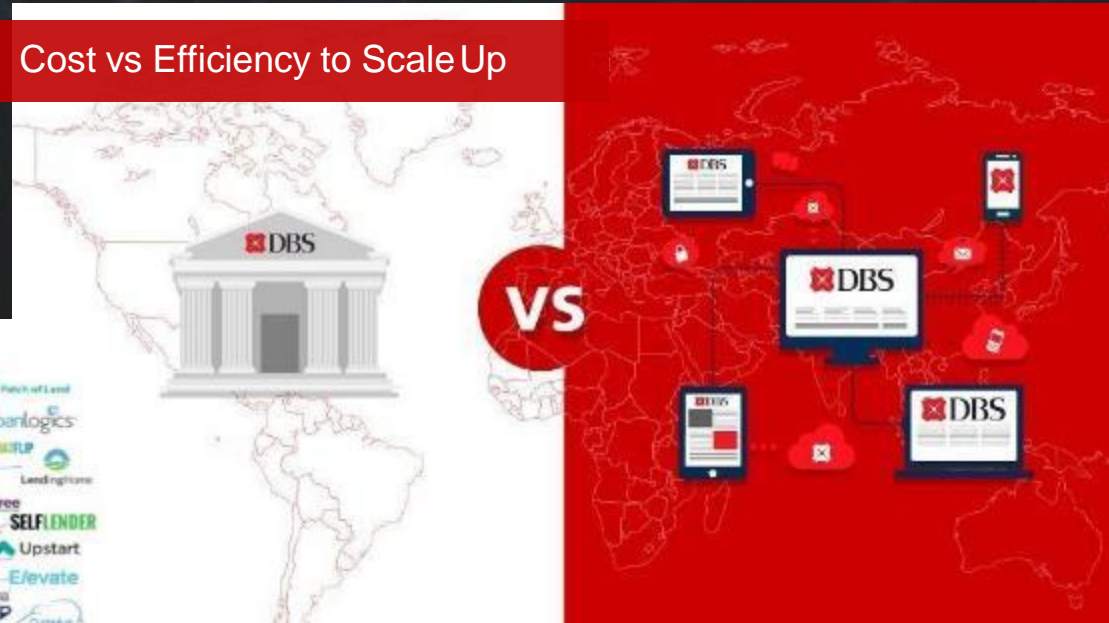


# The world is changing around us

## Globalisation of Platform Giants



## Cost vs Efficiency to Scale Up



## Start-ups Unbundling Banking





# Driving the transformation: Making Banking Joyful



Being the D in







**FROM**

# BECOME DIGITAL TO THE CORE

**TO**

LEGACY

MICROSERVICES,  
CLOUD, APIs

WATERFALL

AGILE

MANUAL

AUTOMATED,  
DEVOPS

PROJECTS

PLATFORMS

OPERATIONS

DESIGN-FOR-NO-OPS

ANALOGUE

PAPERLESS



*Digital*  
~~Development~~  
Bank of  
Singapore



*Make DBS 'Invisible'*



# Embed ourselves in the customer journey...

## Make DBS 'invisible'



# Re-inventing and Re-imagining Banking with Digital Solutions

Facial verification for customer onboarding



DBS PayLah!



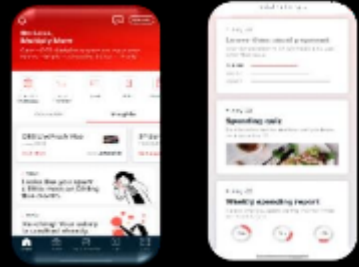
DBS Digital Exchange



Digital retirement planning



Facial verification for SMEs



DBS digibank app



DBS IDEALfor corporate banking



DBS NAV Planner



Ecosystems and Marketplace



**Developing Ecosystems: Go where the customers are**

**Participate**



Strategic Investment into Carousell

**Orchestrate**



Build PayLah into the lifestyle app of SG



Property, Car & Electricity Marketplaces

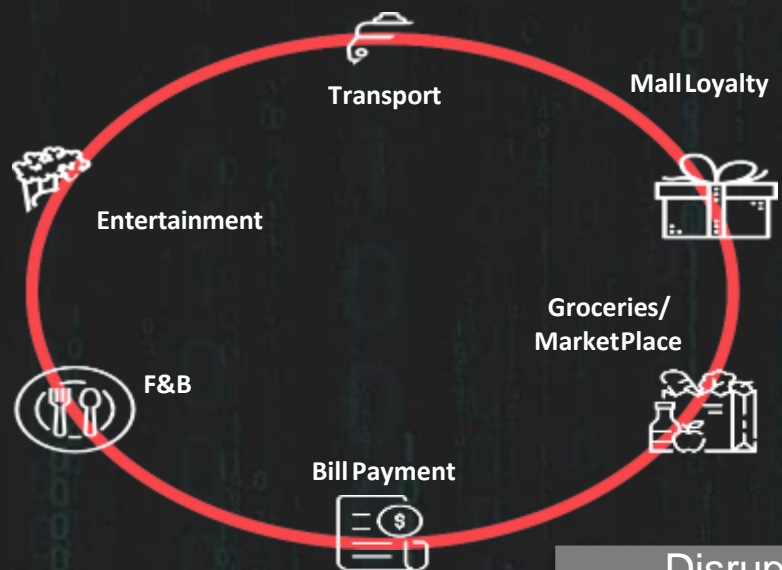
**Create**



School Ecosystem (POSB Smart Buddy)

Everyday Episodic

**PayLah! – Your Everyday Lifestyle App!**




**Current Partners**





Strengthen our people and culture



 A black and white photograph of Peter Drucker, an elderly man with white hair and glasses, wearing a suit and tie. The image is slightly blurred, focusing on the text overlay.

“Culture eats strategy for breakfast”

– Peter Drucker

# Transformational leadership – how we continue to learn and grow



Psychological  
Safety



Growth  
Mindset



Courageous  
Conversations



Feedback





Collaboration



If we want to break through the glass ceiling, we have to be bolder...

- Its all about **LEADERSHIP**
- Take **customer focus & collaboration** to the next level
- We go **beyond DIGITIZATION**



# Build a 40,000 person start-up



Agile





Be a Learning Organisation



Customer Obsessed



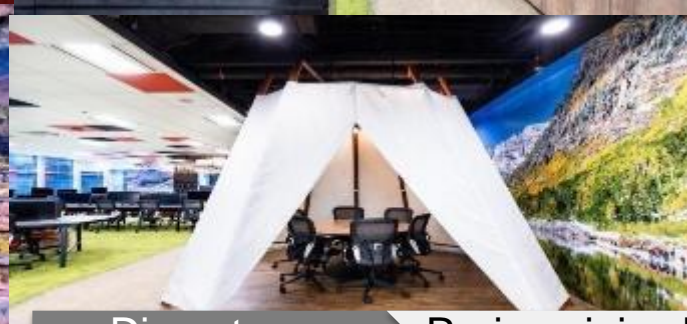
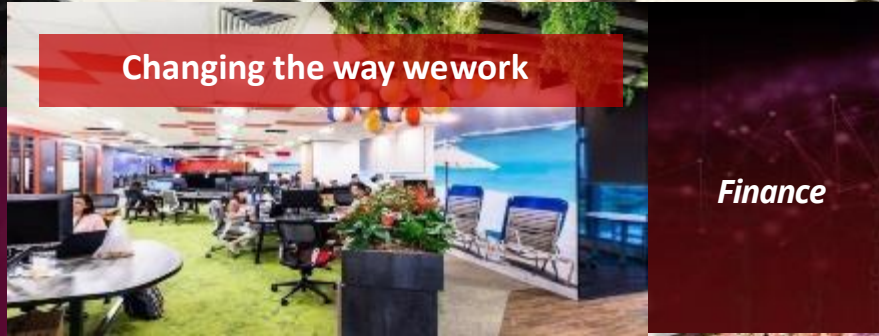
Data-Driven



Experiment & Take Risks



# AGILE and collaborative way of working



# **B**E A LEARNING ORGANISATION

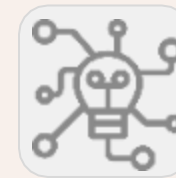
that is skilled in **ACQUIRING, CREATING & TRANSFERRING** knowledge  
and at **modifying its behaviour** to reflect new knowledge and insights



**SUPPORTIVE  
LEARNING  
ENVIRONMENT**



**LEADERSHIP  
REINFORCES  
LEARNING**



**CONCRETE  
LEARNING  
PROCESS**



# CUSTOMER OBSESSED

Embed in the customer & employee journey

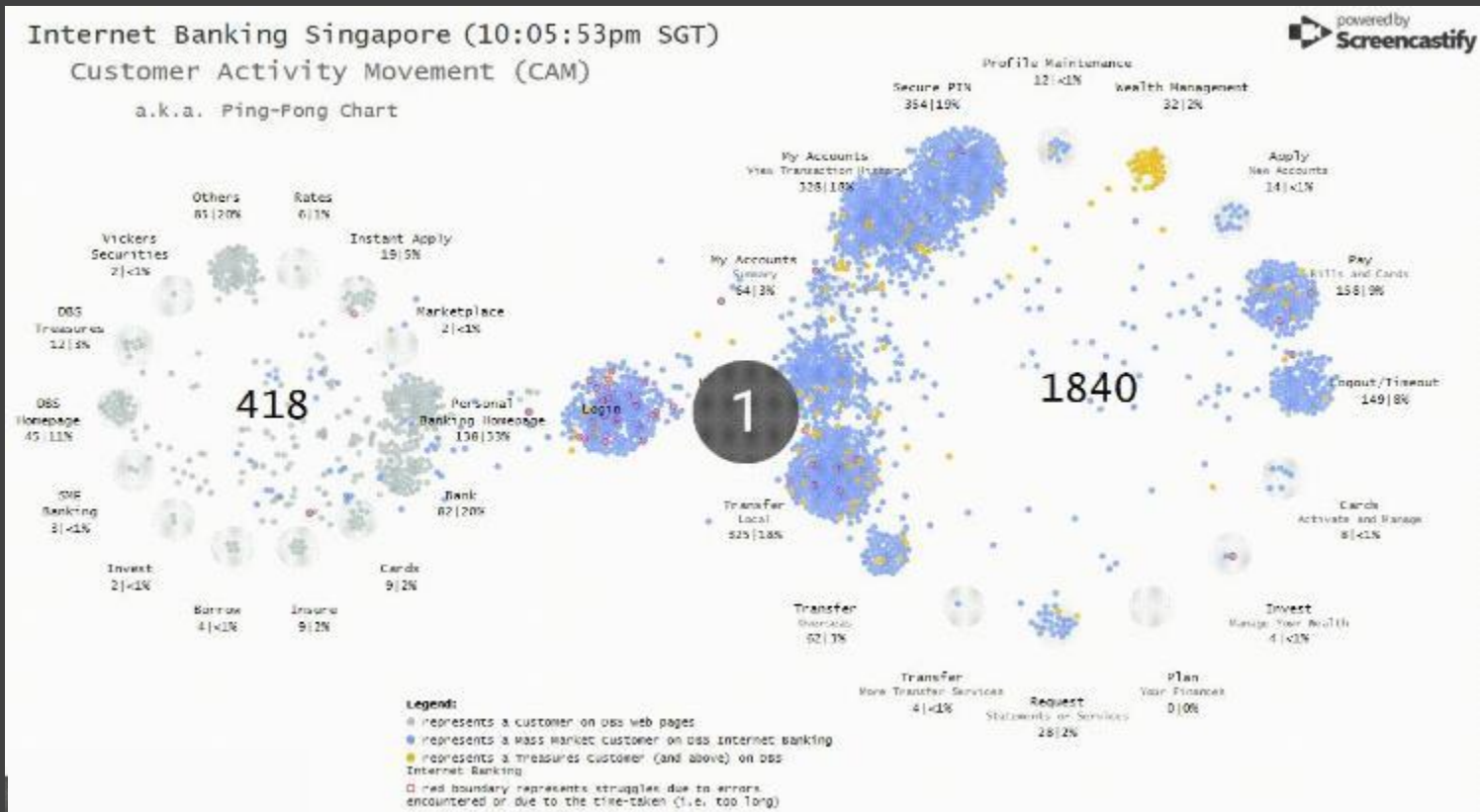
## CONTROL TOWER

## OPERATING STATION

## BUSINESS VALUE

- ✓ Customer profitability
- ✓ Customer satisfaction
  
- ✓ Campaign optimization
- ✓ Golden path adherence
  
- ✓ Workforce automation
- ✓ Pre-emptive issue resolution
  
- ✓ Real time insights
- ✓ Competitive advantage

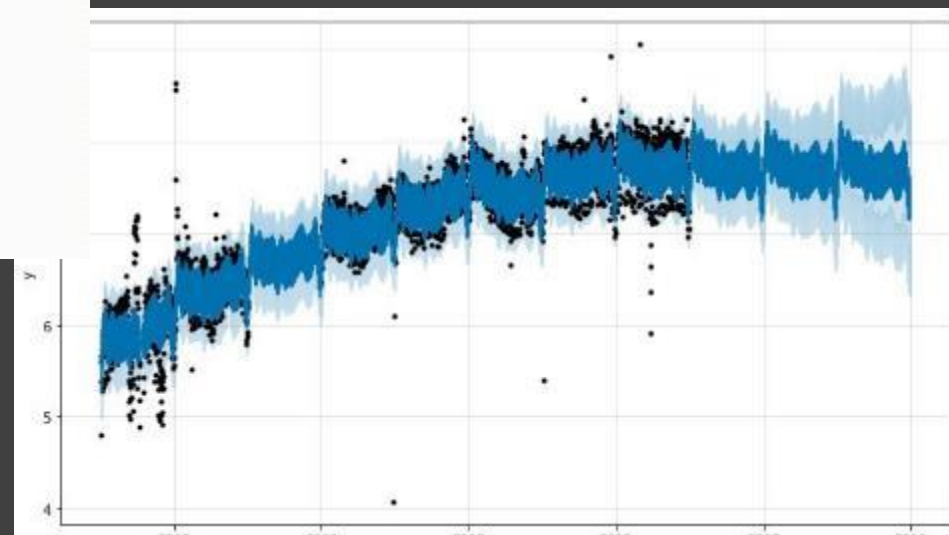
# Customer Obsessed : Observing out Customers' Journey leveraging AI



Anomaly Detection Algorithm  
(Moving from ARIMA to Facebook Prophet)



Up to 2x improvement in precision / recall  
quicker issue resolution





# DATA-DRIVEN



## Build Culture/ Capability

Build skills and culture across the company, including executives, data scientists, stewards and champions, to drive value creation



## Enable Data

Make it frictionless to get access to quality data whilst maintaining control



## Build Fit for Purpose Data Platform

Build a scalable, secure, cost-effective architecture and toolset and populate it with data driven use cases



Analytics Centre of Excellence: OpenSource usage attracting top dataengineers



~ 150 data driven customer journeys



~10K Staff including 250 top executives trained on Data



Cleaned up data and put in Metadata driven data discoverability



Role based pre-approved data access



Responsible use of data framework developed



Built a unified and scalable data platform



~100 data scientists using analytics sandbox



Data Factory accelerating value-based Ingestion



**Map drivers and outcomes**

**Accelerate implementation of control towers**

**Establish new management rituals**

Disrupters

Re-imagining Banking

Outcome

# EXPERIMENT & TAKE RISKS

**1,000**  
EXPERIMENTS



**15,000**  
STAFF ENGAGED IN  
INNOVATION  
PROGRAMMES

|                      |                            |
|----------------------|----------------------------|
| <b>IMAGINARIUMS</b>  | <b>STARTUPXCHANGE</b>      |
| <b>APIHACKATHONS</b> | <b>INNOVATION BACKYARD</b> |

## The Marketing Experimentation Story

Demonstrating what we stand for by telling DBS stories



**> 2 Mio**  
VIEWS



**> 23 Mio**  
ENGAGEMENTS  
with content, contextual  
& community marketing



How does the Consumer Bank and  
Private Bank embrace this new  
technology ?

# What are we doing ?

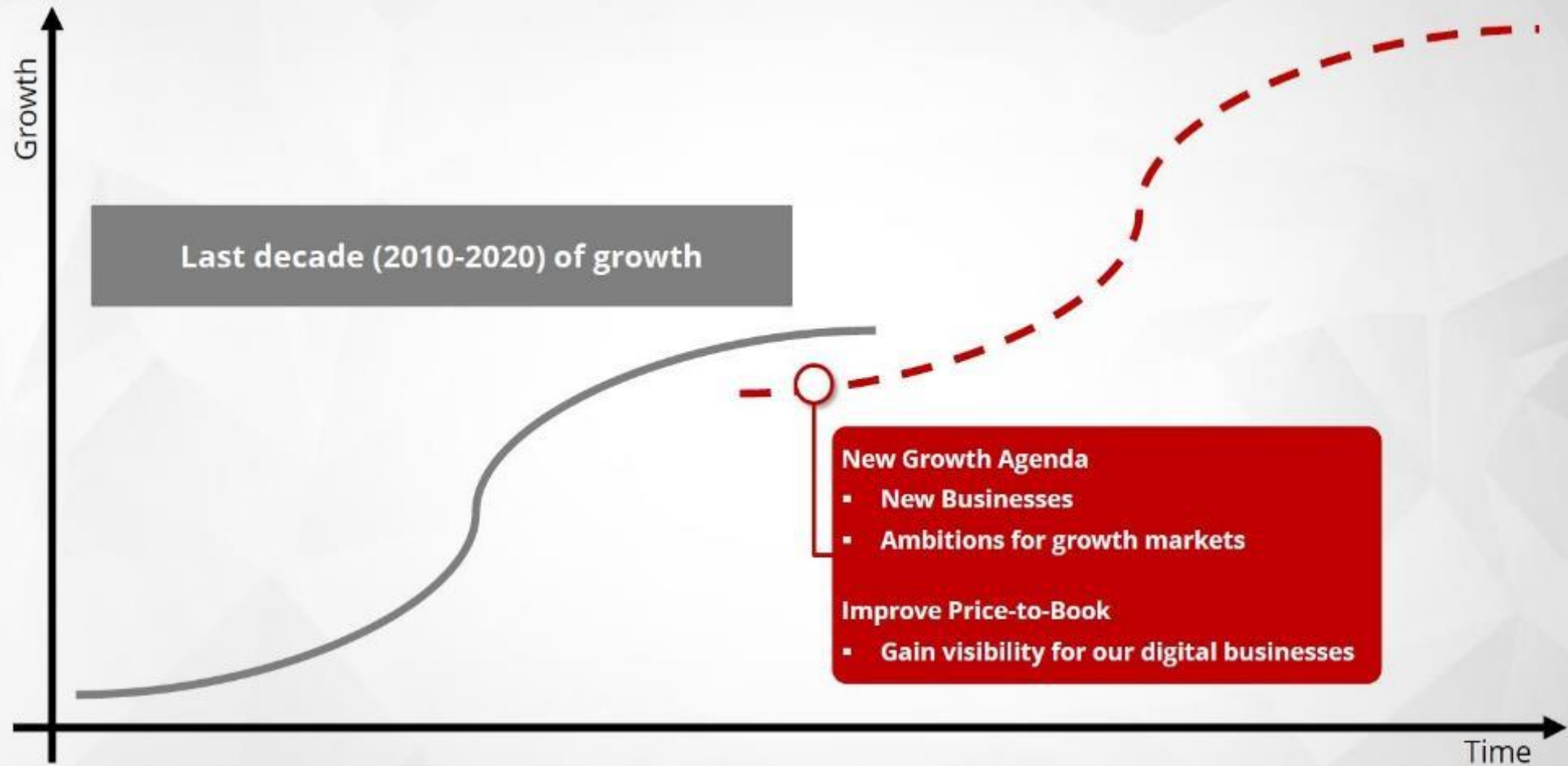
vs

# How are we doing it ?

**JUMPING **  
**THE -CURVE**



We need to get onto a new S-curve: Revenue & Shareholder valuation growth



# CBG Vision – Create wealth, Enrich lives, Enable success



## 1 Augmented Banking

Enhance the customer's relationship with the bank by delivering an enriched experience both in terms of new services and existing services with new ways of interaction

[ Digital Banking ]

## Open Banking 2

Combine services from other suppliers with those of the bank to offer enhanced value to the customer over individual offerings

[ Ecosystems ]

## 4 Automation Banking

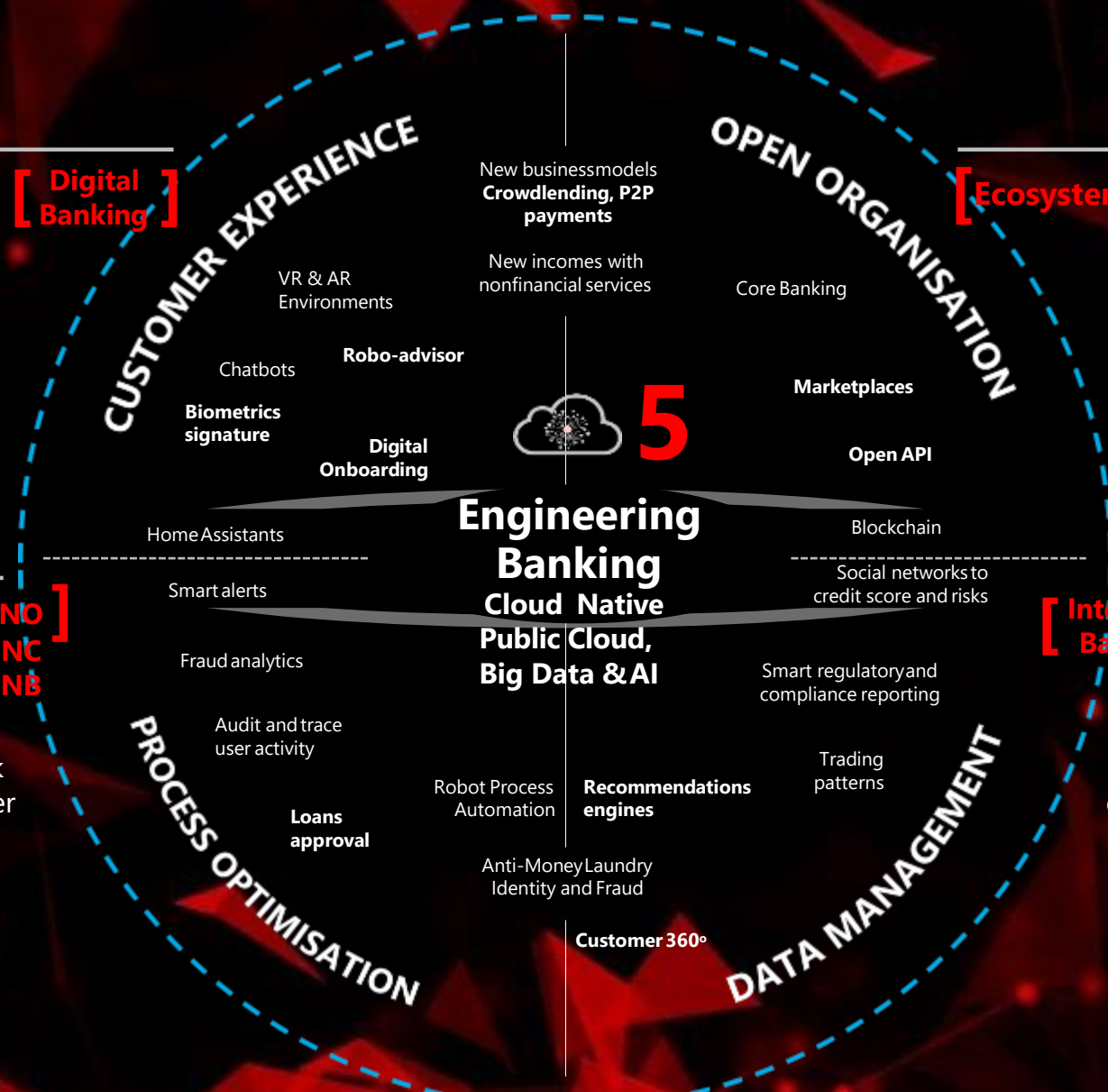
Pair intelligent Automation with the bank's organizational resources to align the way employees work and the work they do with the new customer journey

[ DFNO ]  
[ DFNC ]  
[ DFNB ]

## Cognitive Banking 3

N = 1  
Hyper-personalization  
Integrate and analyse relevant data to present the customer with unique tailored hypotheses, proposals, and recommendations

[ Intelligent Banking ]





# Linking Strategy to Vision

- 1 Become an ***Open Organization***, by transforming our Business and Engagement model from episodic advice to become an integrated solution assembler
  - *Integrated Financial Planning tools*
  - *Leveraging social platform for Digital Wealth acquisition*
  - *Contextual engagement*
  - *Contextual Pricing*
- 2 ***Augment Banking experience***, by transcending customer experience through enablement of true omnichannel and adoption of latest technologies and processes
  - *Futuristic branches*
  - *Enable 5G*
  - *AR / VR*
- 3 ***Implement Cognitive Banking***, by creating One Brain, hyper personalizing customer engagement, curating content and solutions for customers
  - *Revenue generating use cases*
  - *Reduce toil*
  - *Improve productivity*
- 4 ***Hyper-personalize solutions*** by embedding ourselves in the platform economy, to offer cognitive financing and unsecured lending solutions to a growing base of digital buyers and sellers
  - *Open APIs*
  - *AI / ML for underwriting*
  - *NLP / Chatbot*
- 5 ***Engineering Banking*** by implementing *next generation iBanking*, making our architecture future ready, optimize our cost structure and remain industry leading on the Digital front
  - *Accelerate Cloud*
  - *5G Ready*
  - *New UI and capabilities*

# Augmented Banking

## Definition

Augmented Banking [Digital Banking] is automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels.

## Customers

- Wealth Customers
- Retail Customers
- Relationship Managers

## Objectives

Augmented Banking objective is to deliver exceptional experiences that improve adoption, trust, loyalty and provide safest, contextual, personalized, cool, green digital banking solutions

## Touchpoints

- Internet Banking
- Mobile Banking / Applications
- Public Web
- Conversational Banking

## Outcome Measurements\*

- Success measured through maximized adoption, increased ATE & improved CE (feedback and struggle) and Reliability and Availability metrics

## Key Initiatives

- Next Generation MB/IB
- Design for trust/BE Better
- Intelligent Bank
- Digital Onboarding
- Security upgrades
- Client Connect / Sailor / Vista / GBA
- UL/CC /Paylah / Naga
- Gpay & Eco regional capabilities
- Payments/remit/1MS

## Governance

### In platform governance:

- Weekly High Intensity meetings
- Monthly Resiliency meetings
- Monthly Country meetings
- PSC Meetings for Initiatives

### Cross platform governance:

- Reps other platform's PSC
- Quarterly updates to CBGhead

## Platforms involved

- Digital
- Investment / Insurance
- Consumer Finance
- Payments
- Deposits/Loans /Ecosystem
- C2MA
- Engineering Banking

## JTBD

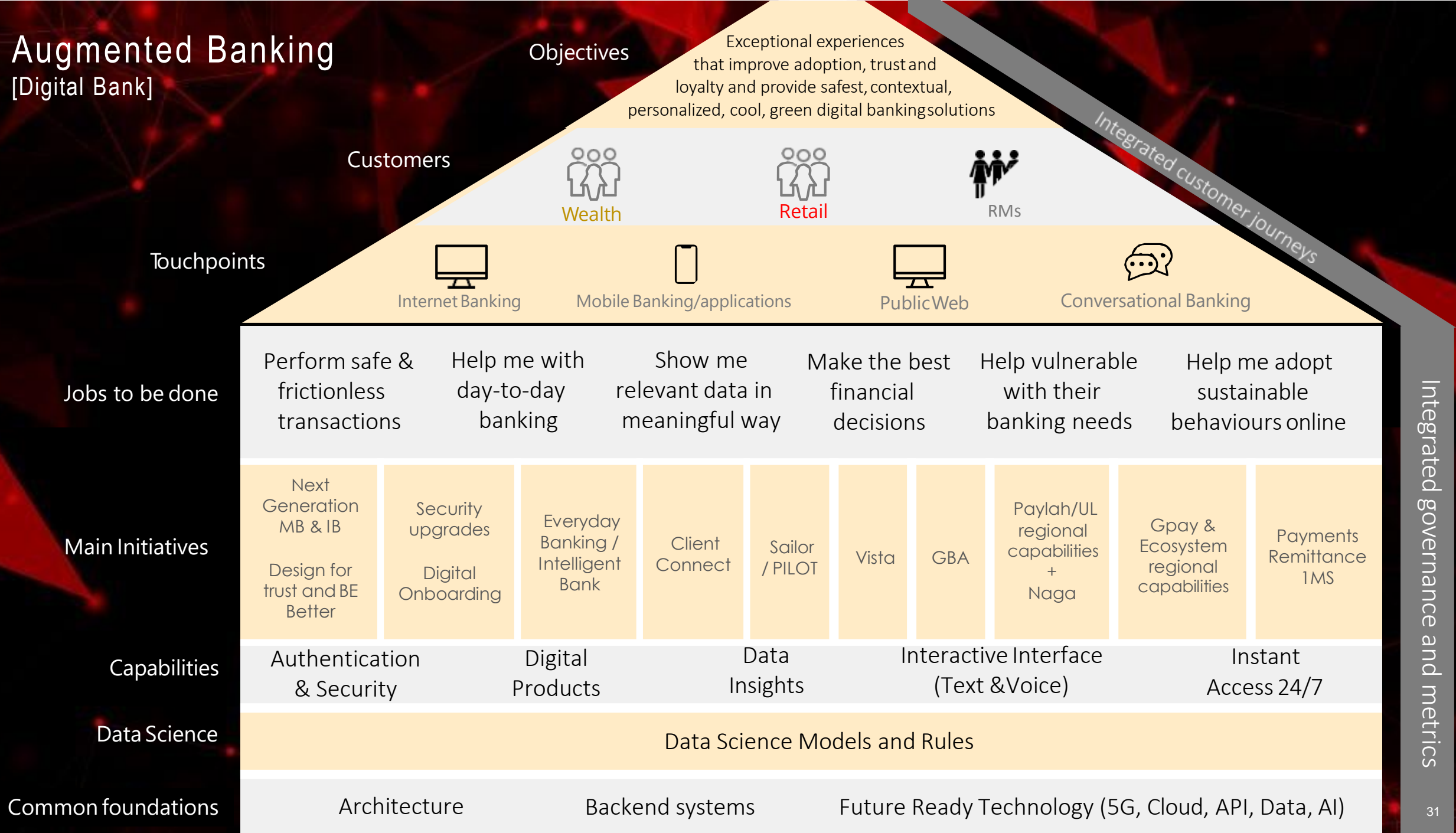
- Perform safe & frictionless transactions
- Help me with day-to-day banking
- Show me relevant data in meaningful way
- Make the best financial decisions
- Help vulnerable with their banking needs
- Help me adopt sustainable behaviours online

## Countries

- All 6 CBD countries



# Augmented Banking [Digital Bank]



Integrated governance and metrics

# Open Banking

## Definition

- Open Banking combines services from other suppliers with those of the bank to offer enhanced value to the customer over individual offerings

## Customers

- Retail Customers
- Wealth Customers

## Objectives

- Open Banking objective is to integrate banking services with external partners to acquire new-to-bank/product customers, enrich credit underwriting data and improve product proposition via an Open Banking and API driven approach

## Touchpoints

- Internet Banking
- Mobile Banking/ Applications
- Marketplaces
- Open Banking API's
- Phygital network
- Partner digital platforms (enabled via APIs)
- Partner distribution network

## Outcome Measurements

- Strong volume/account growth year on year; focus on building Assets via partners
- Deliver meaningful financial impact; focus on growing Revenue and/or Cost saves via partnerships
- Balanced contribution across markets; focus on Re-using Capabilities across country / platforms

## Key Initiatives

- Eco regional capabilities (e.g. Gpay, HPP etc)
- Build Lending + Digi capabilities with partners
- Monetize Marketplaces
- Cards - Auto Instant
- Redemption, Onboarding and Point Conversion
- Re-use APIs (e.g. onboarding, rewards, scoring) across markets

## Governance

- **Monthly:** Group Eco Council, Country Eco Council
- **Bi-monthly / Quarterly:** CBG Regional Eco Council, Joint reviews with CBG Product Head
- **Adhoc:** Joint workshops with country / regional product teams

## Platforms involved

- Digital
- Investment / Insurance
- Consumer Finance
- Ecosystem
- C2MA
- Engineering Banking

## JTBD

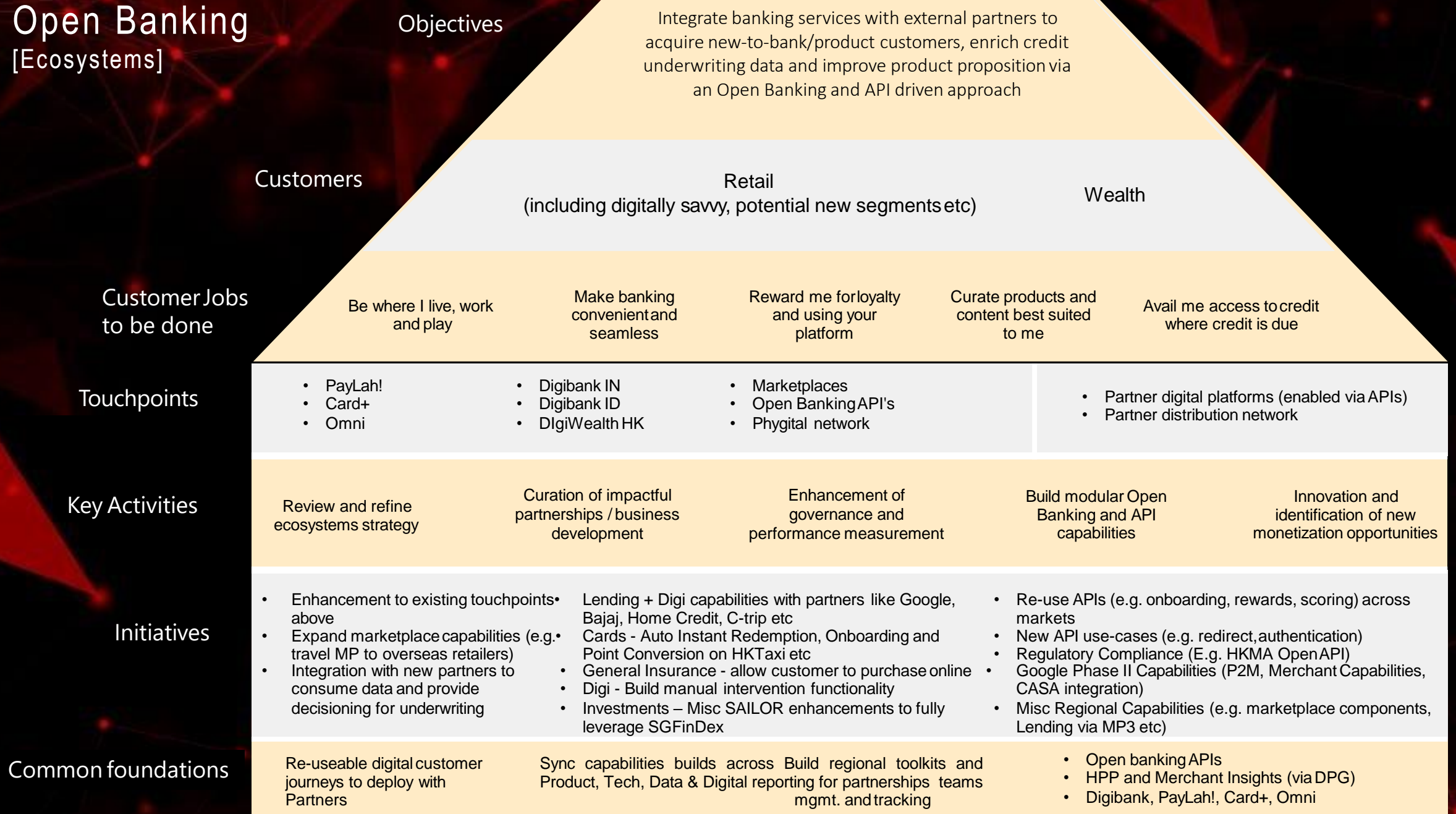
- Be where I live, work and play
- Make banking convenient and seamless
- Reward me for loyalty and using your platform
- Curate products and content best suited to me
- Avail me access to credit where credit is due

## Countries

- All 6 CBD countries



# Open Banking [Ecosystems]



# Cognitive Banking

## Definition

- Cognitive Banking delivers hyper-personalization integrate and analyse relevant data to present the customer / staff with unique tailored hypotheses, proposals, and recommendations

## Customers

- Wealth Customers
- Retail Customers

## Objectives

- Cognitive Banking objective is deliver exceptional experiences that improve stickiness, loyalty and relationships and drive action, decisions, and sales

## Touchpoints

- Internet Banking
- Mobile Banking/ Applications
- Relationship
- Managers / Wealth Planning Managers
- Contact Center

## Outcome Measurements

- Financial (higher revenue, lower cost, improved market share) and Non-Financial (# of transactions / acquisitions, etc) business drivers

## Key Initiatives

- Client Connect
- Customer Science
- Everyday Banking
- UNO
- NAV Planner
- Travel Mode
- Marketplaces

## Governance

- The Regional Intelligent Banking team and the Country use case forum supports the governance of the quadrant to ensure there are no overlaps/wastage and prioritize investments in coordinated journeys

## Platforms involved

- Digital
- Investment/ Insurance
- C2MA
- BSSB
- Engineering Banking

## JTBD

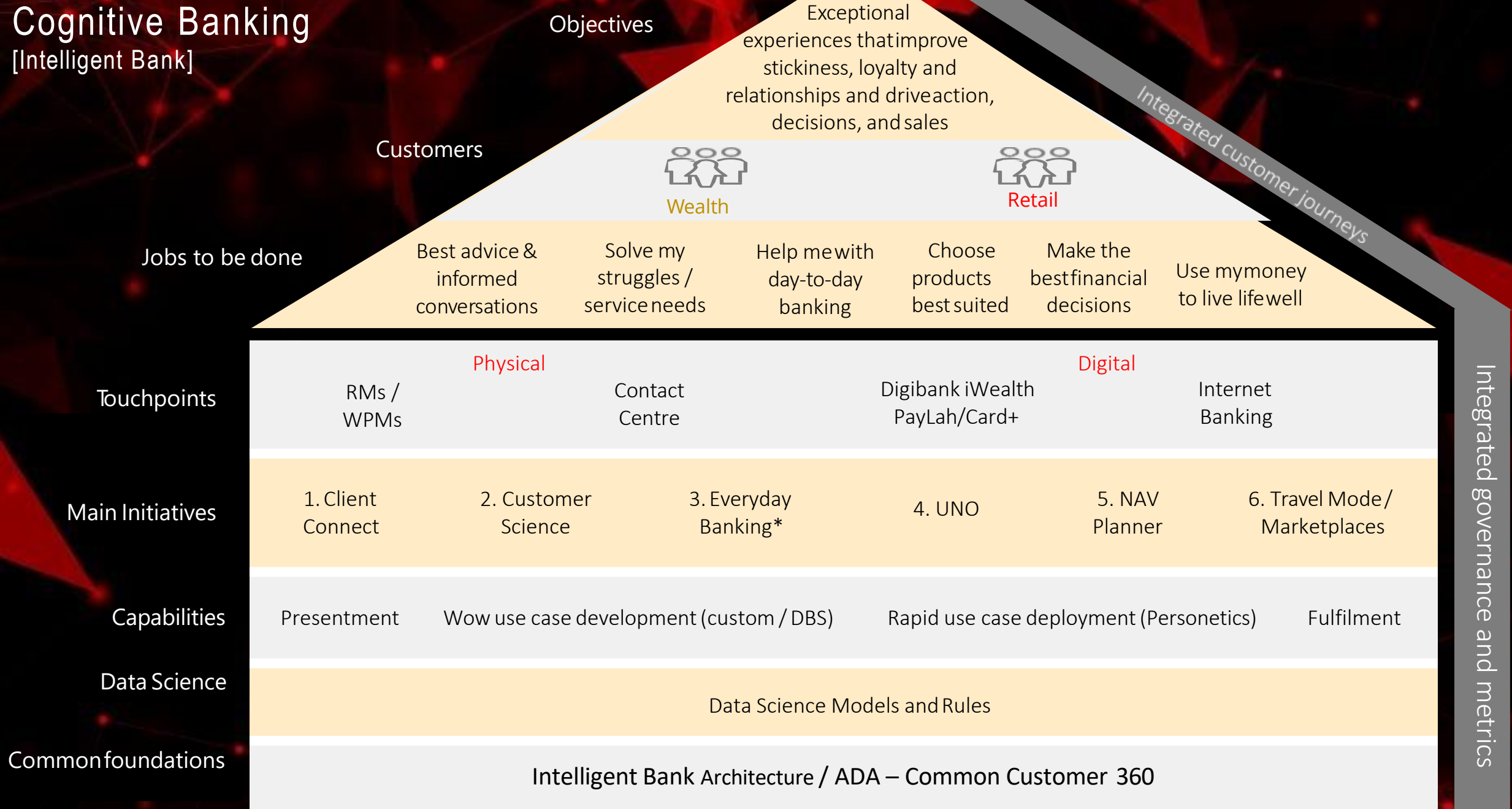
- Best advice & informed conversations
- Solve my struggles / service needs
- Help me with day-to-day banking
- Choose products best suited to me
- Make the best financial decisions
- Use my money to live life well

## Countries

- All 6 CBD countries



# Cognitive Banking [Intelligent Bank]



Objectives

Exceptional experiences that improve stickiness, loyalty and relationships and drive action, decisions, and sales

Customers



Wealth



Retail

Jobs to be done

Best advice & informed conversations

Solve my struggles / service needs

Help me with day-to-day banking

Choose products best suited

Make the best financial decisions

Use my money to live life well

Integrated customer journeys

Touchpoints

RM's / WPMs

Physical

Contact Centre

Digibank iWealth PayLah/Card+

Digital

Internet Banking

Main Initiatives

1. Client Connect

2. Customer Science

3. Everyday Banking\*

4. UNO

5. NAV Planner

6. Travel Mode / Marketplaces

Capabilities

Presentment

Wow use case development (custom / DBS)

Rapid use case deployment (Personetics)

Fulfilment

Data Science

Data Science Models and Rules

Common foundations

Intelligent Bank Architecture / ADA – Common Customer 360

Integrated governance and metrics

# Automation Banking

## Definition

- Automation Banking leverage on intelligent automation to radically transform the way our employees work, and deliver a frictionless experience for our customers, through DFNO, DFNC, DFNB

## Customers

- Wealth Customers
- Retail Customers

## Objectives

- Drive process optimisation E2E, delivering frictionless experience
- Pre-emptive and proactive servicing, instrument better customer journeys
- Radically transform the way employees work, horizontal ownership (3 or 4-in-1), emerging as a future ready workforce

## Touchpoints

- Internet Banking
- Mobile Banking / Applications
- Chatbot
- Customer Centre
- Branches (RMs/WPMs)
- Mail / Fax / Email
- Govt Agencies (HDB etc)
- Internal Stakeholders (RMG Credit)

## Outcome Measurements

- Broad measurements, details to be defined:
- SWP / SCM deliverables
  - Increase Customer / Employee Satisfaction
  - Manual Effort / Calls Reduction
  - Reduce paper, physical cash, statements etc
  - Other Metrics to be included (TBD)

## Key Initiatives

- TOM CUL / WMO/ Mortgages
- OPPR 3.0
- Ops Country EPP
- RM Client Connect / Griffin
- Branch Connect
- Digi SG RED Top Call Drivers
- DVC Last Mile
- Smart Decisioning
- Digi Paylah
- Network Rationalisation (SSB/Branch)

## Governance

- Setup Automation Banking PSC to review implemented initiatives and automation metrics outcome performances

## Platforms involved

- Digital
- Investment / Insurance
- Core Banking
- Consumer Finance
- Customer Servicing
- C2MA
- Chatbot
- Ops Platform
- SSB/Branch

## JTBD

- Employees:
  - Serve customers easily and timely with fast escalations
  - Automated and integrated process helps me work faster
  - Complete my tasks instantly with no hands-off
  - Maintain line of sight of transactions flows digitally
- Customers
  - Transact digitally with ease and convenience
  - Solve my struggles / service needs
  - Fulfil my request instantly



# Automation Banking [DFNO/DFNC/DFNB]

## Core Themes

Design for No Ops  
(DFNO)

Design for No Calls  
(DFNC)

Design for No Branch\*  
(DFNB)

### Direction

Automation Banking leverage on intelligent automation to radically transform the way our employees work, and deliver a frictionless experience for our customers, through DFNO, DFNC, DFNB

### Customers



Wealth



Retail

### Jobs to be done

#### Employees

Early warnings and Smart Alerts  
Structured, authenticated and validated request  
No emails, mail-in or fax to help me work faster

#### Customers

Digital first provides ease and convenience  
Solve my struggles / service needs  
Fulfil my request instantly

### Touchpoints



#### Physical

Customer Branches Centre (RMs, WPMs)  
Mail-ins, Fax, Emails  
Govt Agencies, other depts



#### Digital

Digibank iWealth PayLah/Card+  
Internet Banking  
VTM  
Chatbot

Integrated Governance & Metrics

### Initiatives

| DFNO                               |             |                        | DFNC                          |                   |  |  | DFNB*            |                      |                 |  |
|------------------------------------|-------------|------------------------|-------------------------------|-------------------|--|--|------------------|----------------------|-----------------|--|
| Customer/Employee Digital Adoption |             |                        |                               |                   |  |  |                  |                      |                 |  |
| 1. TOM CUL, WMO, Mortgage          | 2. OPPR 3.0 | 3. Ops EPP/ Last Miles | 4. RM Client Connect/ Griffin | 5. Branch Connect | 6. Program Vista – Viola Phase 3 Vickers | 7. Digi SG RED Digibank Top Call Drivers | 8. DVC Last Mile | 9. Smart Decisioning | 10. Digi Paylah | 11. Network rationalisation SSB/Branch |

Improve STP

Reduce % Manual Effort

### Capabilities



Intelligent Business Process Manager (IBPM) i.e Auto Case Creation, Workflow, API/RPA  
Flow Designer (GC)  
Smart Decisioning  
Smart Alerts  
Automated Recon

Digital Origination

CSAT/ESAT

### Data science



Data Science Models  
Rules Engine

Reduce papers (i.e Physical Cash, Statements)

### Common foundation



Backend Processing Systems  
ADA – Common Customer 360  
Control Tower

SCM

# Engineering Banking

## Definition

- Engineering will provide the best technology platform to enable the 4 quadrant (Cloud Native, Public Cloud, Big Data & AI, etc.)

## Customers

- Wealth Customers
- Retail Customers
- Employees

## Objectives

- Deliver best in class technology that provides superior client experience

## Touchpoints

- Internet Banking
- Mobile Banking/ Applications
- Guided Conversation
- RMs/WPMs
- Contact Center

## Outcome Measurements

- Technology Productivity and Cost saves

## Key Initiatives

- Global API (Kony/SOI Offload)
- DigiNextGen & Transformer
- Project Naga & Equities Transformation
- Experimentation
- Griffin
- DDOM & Intelligent Banking

## Governance

- Define how the quadrant will be governed

## Platforms involved

- Digital
- Investment/ Insurance
- Consumer Finance
- Ecosystem
- C2MA
- BSSB
- Core Banking

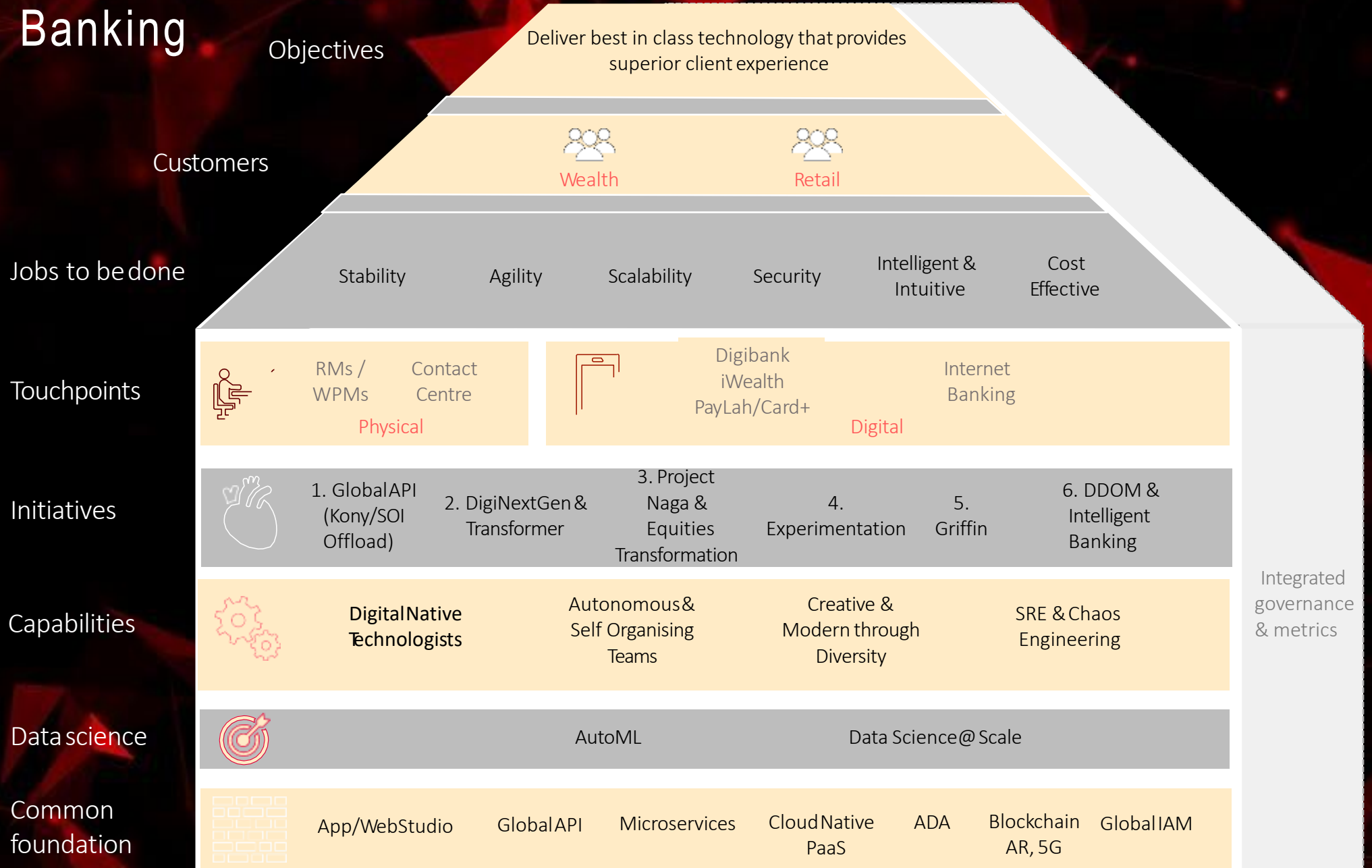
## JTBD

- Stability
- Agility
- Scalability
- Security
- Intelligent & Intuitive
- Cost Effective

## Countries

- All 6 CBD countries

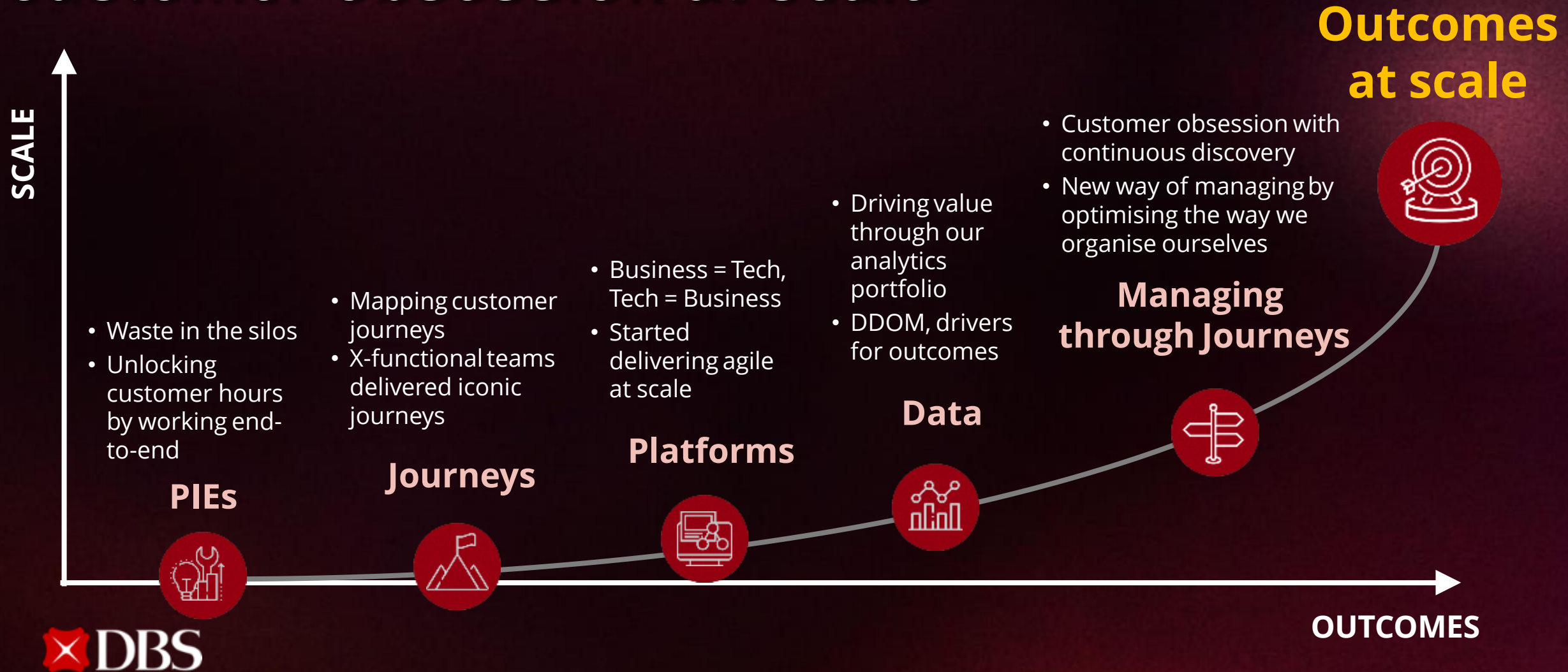
# Engineering Banking



\*Includes retail and wealth management



# Managing through Journeys to drive customer obsession at scale



# Building the Best Bank for a Better World



*DBS is about people – those who trust our products and services and others with their careers.  
The work we do requires resilient, driven talent with deep engineering expertise.*

*We believe in technology making a difference to the everyday lives of people in becoming the*

***Best Bank for a Better World***



**Bank of the Year  
2018**



**World's Best Bank  
2019, 2020**



**Most Innovative Bank (APAC)  
2020**



**World's Best Bank,  
World's Best Digital Bank  
2021**



**Top 10 companies of the decade  
For leading transformations**



# World's Best Banks 2020: DBS Honored As World's Best Bank

Global Finance presents its 27th annual listing of the best banks globally, regionally and in more than 150 countries. This year's winners are hoping their investment in new technology helps them weather the Covid-19 crisis.

OCTOBER 06, 2020 Author: GORDON PLATT



THE WORLD'S BEST BANK

## How DBS turned a crisis into an opportunity

It's a sign of a resilient bank when it not only survives a pandemic largely unscathed but sees it as an opportunity to gain ground. Chances are that, globally, DBS Bank Group not only kept the bank afloat but used the crisis to make two potentially transformative acquisitions, launch two new products and think afresh about what banking should look like.

Chris W. ...

... a widespread failure of DBS to meet the Singaporean ...



DBS and other winners of the World's Best Banks 2020 awards were selected based on performance over the past year and other criteria, including their reputation, management excellence and leadership in digital transformation and social responsiveness. In the early days of the virus, DBS stepped up by quickly rolling out an app that enables business customers to submit trade documents without visiting a branch. Liquidity remained ample as DBS benefited from flight-to-quality inflows, and the bank actively participated in the Singapore government's credit-relief programs.

subjective factors.

It isn't necessary to enter in order to win, but experience shows that the additional

leadership in digital transformation and social responsiveness. In the early days of the virus, DBS stepped up by quickly rolling out an app that enables business customers to submit trade documents without visiting a branch. Liquidity remained ample as DBS benefited from flight-to-quality inflows, and the bank actively

Frequently Covid prompted a combination of the good and the useful. A good example was Singapore's migrant worker population, a constituency hit hard by Covid, confined to cramped dormitories for months at a time.

In a practical sense, they had a banking problem: there are stores below these dorms where people shop, but they didn't have cash. DBS put ATMs in the dorms to help and also took the opportunity to convert migrant workers – who were particularly keen to send money home, having no chance to spend – to digital tools. This was a win-win: a humanitarian benefit, a colossal cost saving and also a way to avoid losing money on a segment of the population DBS has taken it as an ethical obligation to serve, stemming from DBS's government-prompted acquisition of Post Office Savings Bank and its customers back in 1998.





Live *fulfilled*

# BETHE BEST CHANGE DIFFERENCE

# Built Environment - Today vs Future

## • TODAY

### Strengths

- **High quality** urban planning & development
- Leading in **Green & DfMA**
- **Regional champions**

### Weaknesses

- **Small & fragmented** domestic market
- Limited exports & **low margins**
- Heavy reliance on **foreign workers**
- Challenges in attracting **young talents**

### Opportunities

- Rapid urbanisation and **growth** in Asia
- Growing demand for **sustainable** development
- **Digitalisation**

### Threats

- **Climate** change
- **Ageing** population & infrastructure
- **Regional / global disruption**

Credit: [blog.plangrid.com](http://blog.plangrid.com)

## • FUTURE

### Transforming the Built Environment

#### 1 Augmented Services

- Enhance clearance process through integrated (smart) inspection
- Automated model checker

### Transforming Regulations to Shape a Safe & Resilient Sector

#### 2 Open Services

- CORENET X – One-stop integrated Digital Shopfront
- Integrated / Aggregated FM

### Meeting Homeowners' Liveability Aspirations

#### 4 Automation

- Make DfMA the default mode of construction
- Leverage tech for productivity, e.g. Smart FM, Drones for façade inspection

#### 5 Engineering Infrastructure

- Harness tech & innovation
- Develop competitive & exportable capabilities
- Develop industry level supply resilience



# Key Transformation Areas



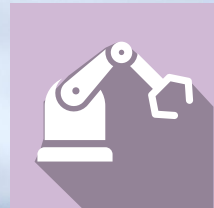
Integrated Digital Delivery



Design for Manufacturing & Assembly



Green Buildings



Innovation & Technology



Jobs & Skills



Enterprise Development & Internationalisation



Resilience



Technology-Facilitated Inspection



Transform Regulatory System

GO gov.sg

Let us know how we can further support you in the following areas



# Thank You



Credit: [blog.plangrid.com](http://blog.plangrid.com)