Banking App Transformation

Contents

Executive Summary

DBS PayLah! app need to improve on its user experience and functionality to complete with other Fintech apps that are transforming themselves into super app

- Singapore Banks had been providing digital banking services since 2000.
- The Singapore banks achieve **higher ROE**, **higher client engagement** and **lower cost ratio** for their **digital banking** business versus traditional banking business.
- Singapore will be issuing 5 full digital banking licences. It is essential for DBS to enhanced its digital banking products to compete.
- Paylah! is DBS bank digital wallet which started out as a payment app
- The **user experience** and **perceived product value** for Paylah! **is lower** when compared to other lifestyle apps such as Entertainer, Fave and Grab. [1]
- The key **weakness** of PayLah! are , **limited use** outside of payment services, lack of merchant partnership, **disorganised homepage** and **does not empower** user with **enough information** for decision making.
- Our team **recommended changes** to **three** main segments , **Lifestyle , Geo-Locality and Data Analytics**
- The **project development** will cost **$98K a month** and is estimated to generate revenue of **$650K a month.**
- The team has built a **prototyp**e with four new functions, **Budget friendly, SmartER wallet, Transport at your fingertips and Geo-locality**

[1] https://uxdesign.cc/my-country-wants-to-go-cashless-so-i-redesigned-a-digital-wallet-dbs-paylah-140fed1a81cb

Industry Overview

Singapore is highly-banked and reasonably served by digitized local banks; digital banks will likely compete in niche segments of the mass retail and small-medium enterprise space where traditional banks have difficulties serving.
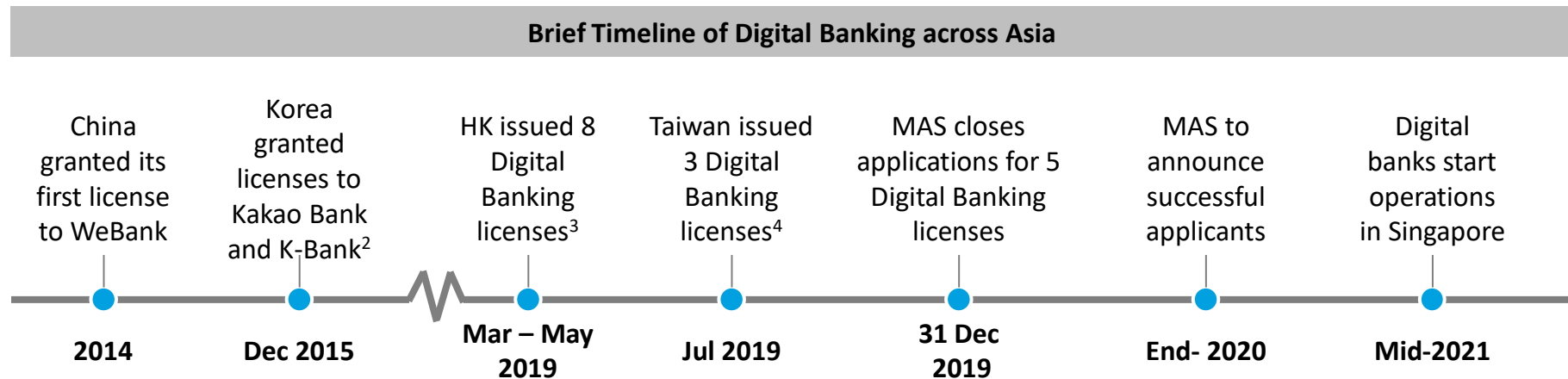
- **Digital banking** offers similar banking services as a traditional bank but without physical infrastructure, hence should have lower operating costs.
- **Demand.** Singapore is highly-banked with 98% of population having bank accounts. Digital banking products to focus on underserved segments and provide clear value propositions through innovative business models.
- **Potential customers** could be younger generation without credit history, individuals with smaller loan demands, gig workers with unstable wages, technology-oriented SMEs with complex business models or extremely young enterprises. Singapore digital banking license could be leveraged to serve the massive unbanked population of 196 million people in Southeast Asia.
- **Developments.** In terms of digital banking licenses given to non-banks, Singapore is a laggard compared to other parts of developed Asia and Europe. Hong Kong recently issued 8 digital banking licenses, and there are several digital banks across the region. However, Singapore local lenders were allowed to pursue digital banking since 2000.
- **Competition.** The 3 local lenders, DBS, OCBC and UOB has 54% market share in Singapore (by assets). They have digital penetration rate of approximately 48% - 89% depending on metric used.
- **Performance.** DBS's digital banking reported 32% RoE compared to 23% RoE for traditional banking, with a cost-income ratio of 34% for digital banking and 54% for traditional banking. OCBC reported 2x more revenue from its digital retail customers and 3x more revenue from its digital business customers, with 1.6x more bank products used on average compared to its non-digital customers.

Industry Digital vs. Traditional

A digital bank offers similar banking services as a traditional bank except that it operates online with no physical infrastructure presence.[1]

- Digital banking is not a new phenomenon in Singapore as MAS allowed local lenders to pursue such business models since 2000.

- Other parts of Asia, such as China, Korea, Hong Kong and Taiwan have already issued digital banking licenses to non-banks.

- Digital banks could potentially operate more efficiently with a lower cost structure resulting in greater financial inclusion, quicker service and increased personalization.

Brief Timeline of Digital Banking across Asia

China granted its first license to WeBank	Korea granted licenses to Kakao Bank and K-Bank[2]	HK issued 8 Digital Banking licenses[3]	Taiwan issued 3 Digital Banking licenses[4]	MAS closes applications for 5 Digital Banking licenses	MAS to announce successful applicants	Digital banks start operations in Singapore
2014	**Dec 2015**	**Mar – May 2019**	**Jul 2019**	**31 Dec 2019**	**End- 2020**	**Mid-2021**

[1] https://www.todayonline.com/singapore/explainer-whats-big-deal-about-digital-banks
[2] https://gomedici.com/kakao-bank-k-bank-win-approval-for-internet-only-banks
[3] https://fintechnews.hk/8951/virtual-banking/hkma-virtual-bank-license-sc-digital-livi-zhongan-za/
[4] https://asia.nikkei.com/Business/Banking-Finance/Taiwan-joins-Asia-digital-banking-push-with-3-new-online-licences

Industry Digital Banks

Most digital banks have emerged only recently.

Top Funded Neobanks Globally* [2]

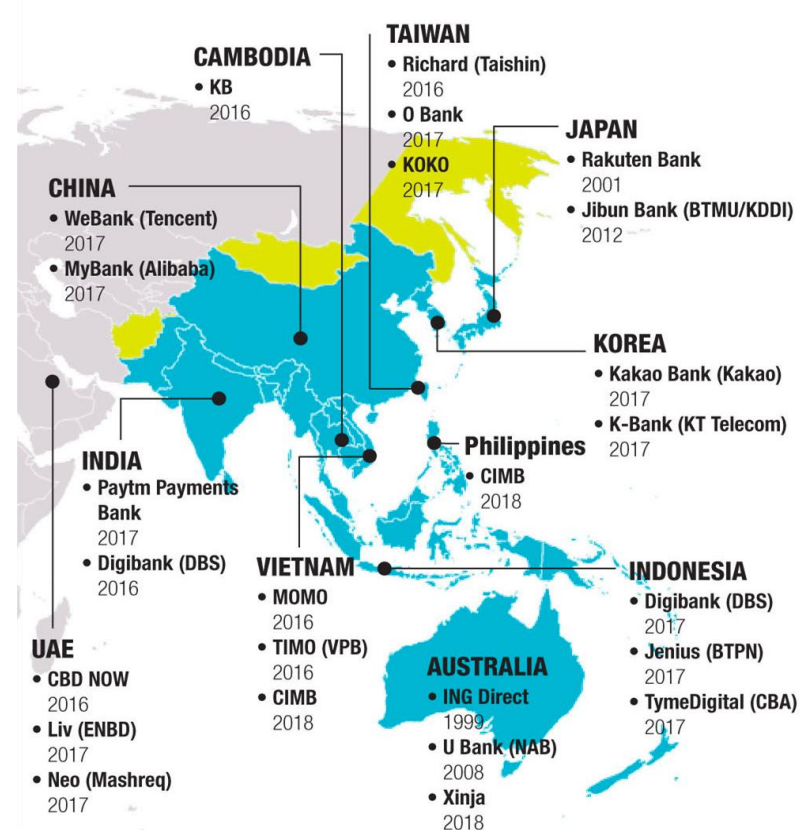| Name	Domain	Founding Year	Total Funding	Latest Round	Country
OakNorth	oaknorth.com	2015	$1Bn	Undisclosed	UK
N26	n26.com	2013	$515Mn	Series D	Germany
Atom bank	atombank.co.uk	2014	$470Mn	Series D	UK
nu bank	nubank.com.br	2013	$420Mn	Series F	Brazil
Revolut	revolut.com	2015	$361Mn	Series C	UK
chime	chimecard.com	2012	$300Mn	Series D	US
monzo	monzo.com	2015	$277Mn	Series E	UK
STARLING BANK	starlingbank.co.uk	2014	$180Mn	Series C	UK
VARO	varomoney.com	2015	$142Mn	Series C	US
solarisBank	solarisbank.de	2016	$98Mn	Series B	Germany
masthaven	masthaven.co.uk	2014	$77.8Mn	Undisclosed	UK
monese	monese.com	2013	$75.8Mn	Series B	UK
TANDEM	tandem.co.uk	2013	$75.7Mn	Series C	UK
Chetwood Financial Limited	chetwood.co/	2016	$70Mn	Undisclosed	UK

*China not included.

Neobanks in Asia [1]

CAMBODIA
- KB
  2016

TAIWAN
- Richard (Taishin)
  2016
- O Bank
  2017
- KOKO
  2017

JAPAN
- Rakuten Bank
  2001
- Jibun Bank (BTMU/KDDI)
  2012

CHINA
- WeBank (Tencent)
  2017
- MyBank (Alibaba)
  2017

KOREA
- Kakao Bank (Kakao)
  2017
- K-Bank (KT Telecom)
  2017

INDIA
- Paytm Payments Bank
  2017
- Digibank (DBS)
  2016

Philippines
- CIMB
  2018

UAE
- CBD NOW
  2016
- Liv (ENBD)
  2017
- Neo (Mashreq)
  2017

VIETNAM
- MOMO
  2016
- TIMO (VPB)
  2016
- CIMB
  2018

AUSTRALIA
- ING Direct
  1999
- U Bank (NAB)
  2008
- Xinja
  2018

INDONESIA
- Digibank (DBS)
  2017
- Jenius (BTPN)
  2017
- TymeDigital (CBA)
  2017

[1] http://www.theasianbanker.com/updates-and-articles/digital-only-banks-face-issues-of-licensing-scale-and-profitability-as-it-aims-to-challenge-traditional-banks
[2] https://gomedici.com/neobanks-service-offerings-funding-analysis

Neobanks are financial technology firms that offer internet-only financial services and lack physical branches. **Neobanks** appeal to tech-savvy consumers who don't mind doing most of their money management through a mobile app. **Neobanks** don't integrate new technology solely for the sake of being cutting-edge.
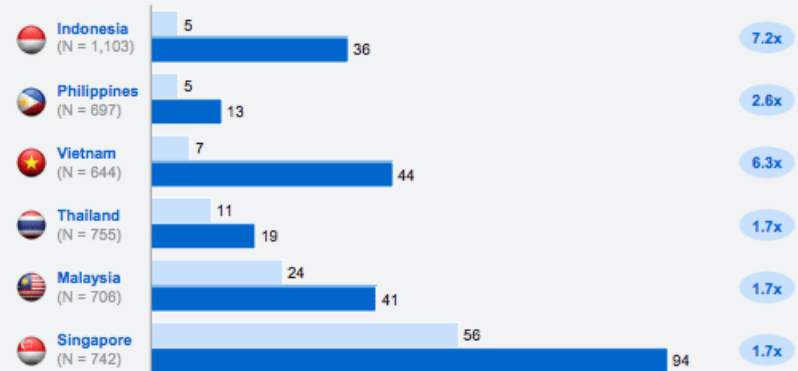
Industry Demand (digital penetration)

Singapore is highly-banked with no obvious gaps; unknown underserved market segments may emerge as digital banks build up their capabilities. [1]

- Digital banks will likely compete in **niche segments** of the mass retail and small-medium enterprise ("SME") space where traditional banking have difficulties serving. [2]

- MAS requires digital banking applicants to focus on **underserved segments** and provide clear value propositions through innovative business models, which might include:

  o **Younger generation** without credit history,
  o Individuals with **smaller loan demands,**
  o **Gig workers** with unstable wages,
  o Technology-oriented **SMEs** with complex business models,
  o Extremely **young enterprises. [3]**

Exhibit 3. There has been rapid growth of digital-banking penetration across Southeast Asia

Digital banking penetration[1] for transactions and services
% of respondents using internet banking via PC or smartphone

	2011	2014	Change
Indonesia (N = 1,103)	5	36	7.2x
Philippines (N = 697)	5	13	2.6x
Vietnam (N = 644)	7	44	6.3x
Thailand (N = 755)	11	19	1.7x
Malaysia (N = 706)	24	41	1.7x
Singapore (N = 742)	56	94	1.7x

1 Digital banking penetration refers to respondents who say yes to either using Internet banking via PC or via smartphone.

	Bank Account (%)	Credit card ownership (%)	Debit card ownership (%)	Mobile money account (%)	Cash on delivery for internet purchase (%)
Indonesia	48.86	2.44	30.81	3.12	65.30*
Malaysia	85.34	21.31	73.76	10.88	51.07
Philippines	34.50	1.94	21.01	4.52	47.00*
Singapore	97.93	48.90	91.85	9.55	9.93
Thailand	81.59	9.80	59.85	8.26	48.49
Vietnam	30.80	4.12	26.74	3.50	90.17

Note: population are of age 15+
Source: World Bank (2017), *aCommerce (2017)

[1] https://atc.asia/articles/190801/SC_CashDigitalisationASEAN.pdf
[2] https://www.spglobal.com/en/research-insights/articles/the-future-of-banking-virtual-banks-chase-the-dream-in-asia-pacific
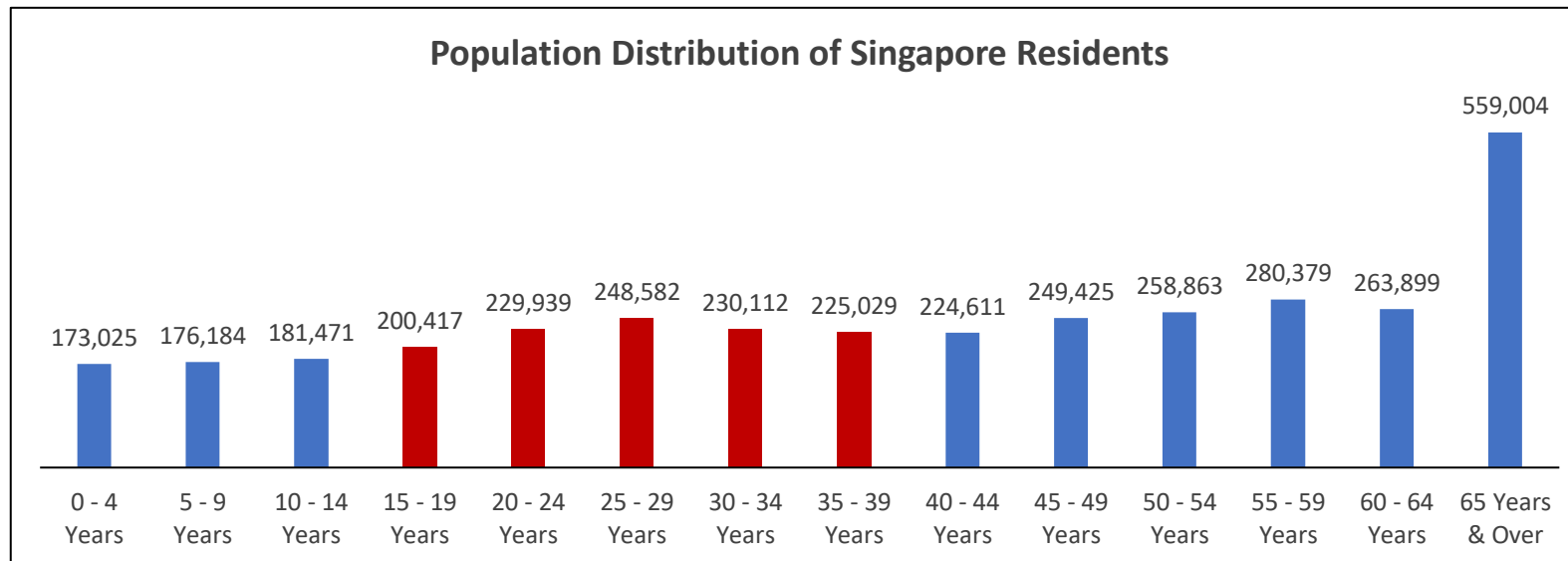[3] https://www.businesstimes.com.sg/hub/sff-x-switch-2019/a-new-approach-to-digital-banks
[4] https://fintechnews.sg/2311/mobilepayments/mobile-banking-surges-asia-dbs-poised-become-regional-leader/

Industry Demand (Customers)

Digital banking is expected to meet unmet financial needs of Singapore's millennials (age 23 – 38) and youths (age 15 – 22), consisting about 1.13 m of the population (20% of total population).[1]

- Estimated over **80%** of retail banking customers in Singapore use **online platforms** to interact with banks and over 67% of millennials actively use mobile platforms to connect with banks.[2]

Population Distribution of Singapore Residents

Age Group	Population
0 - 4 Years	173,025
5 - 9 Years	176,184
10 - 14 Years	181,471
15 - 19 Years	200,417
20 - 24 Years	229,939
25 - 29 Years	248,582
30 - 34 Years	230,112
35 - 39 Years	225,029
40 - 44 Years	224,611
45 - 49 Years	249,425
50 - 54 Years	258,863
55 - 59 Years	280,379
60 - 64 Years	263,899
65 Years & Over	559,004

[1] Singstat
[2] https://www.dbs.com.sg/treasures/aics/pdfController.page?pdfpath=/content/article/pdf/AIO/052018/180515_insights_singapore_digital_transformation.pdf
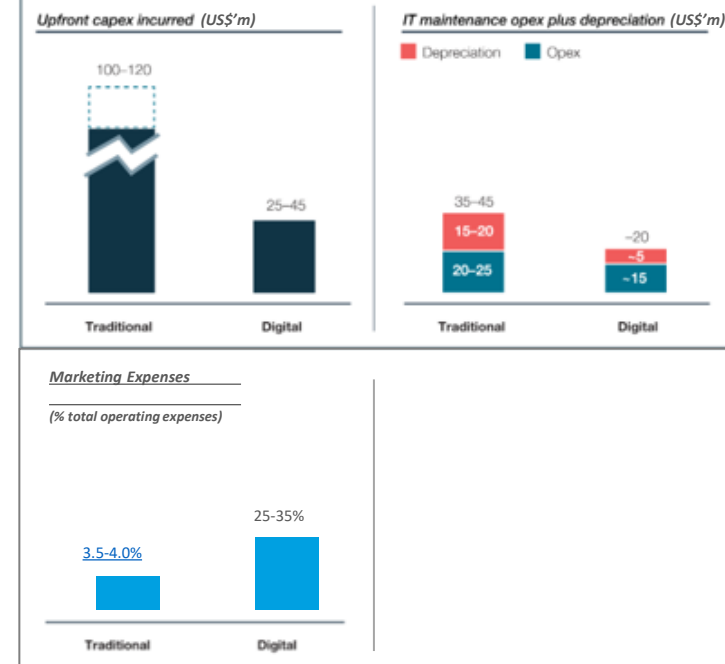
Industry Digital Banks (success factors)

Key success factors for building a digital-banking business:

- The digital bank can have a substantially lower capex and opex per customer.

- By simplified product offerings, streamlined process, lack of physical branches, and no expensive legacy systems.

KEY SUCCESS FACTORS	COSTS
1. **Focus on where the real value is**. Revenue contribution by product differs depending in region. 2. **Customer experience.** Understand customer pain points, offer prototype products that customers actually value; test hypothesis. 3. **Organize for creativity, flexibility, and speed.** Have cross collaboration teams, garage-like working environment, and a central control tower team. 4. **Ecosystem of partnerships.** 5. **Two-speed IT operating model.** Have a rapid, flexible customer-centric front end plus a stable, secure, transaction-focused back-end. 6. **Creative Marketing.** Develop creative ways to reach out to the customers.	

Industry Digital Banks (value propositions)

Digital banks have to compete on four fronts: (1) Customers, (2) Products, (3) Partnerships and (4) Technology.[1]

- **Customers.** Digital banks can access and engage a broader customer base through greater availability of customer data and provide **cheaper access** to digitally savvy customers. Digital banks will utilize latest technologies to better target and service **precise** customer segments.

- **Products.** Digital banks should aim to offer a seamless experience through an ecosystem of partners on a single platform and **remove pain points**. While range of products of traditional banks is comprehensive, they are also homogeneous.[2]

- **Partnerships. Quick acquisition** of customers to create critical mass is vital to build new digital banks at substantially lower capex compared to established banks. These partnerships could be with organizations that have large number of digital customers, such as lifestyle players or e-commerce marketplaces.

- **Technology.** Traditional banks tend to carry the weight of legacy infrastructure and systems, including a significant portion of operations conducted through brick-and-mortar branches. By contrast, virtual banks are nimble and carry no legacy baggage. They tend to be fully digital from inception from front-end customer interface through to back-office operations.[3]
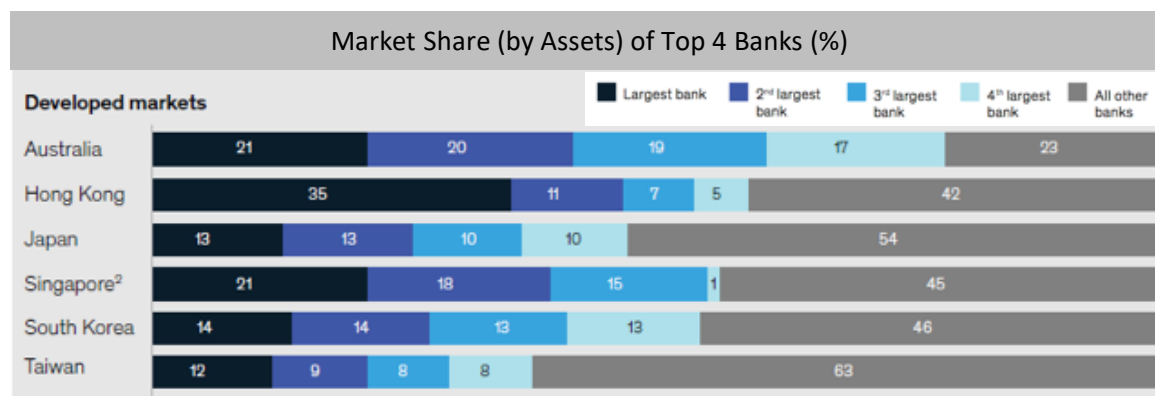
[1] https://www.pwc.com/sg/en/publications/assets/digital-banking-get-real-in-sg.pdf
[2] https://www.finews.asia/finance/29291-singapore-s-digital-banks-davids-vs-goliaths
[3] https://www.spglobal.com/en/research-insights/articles/the-future-of-banking-virtual-banks-chase-the-dream-in-asia-pacific

Industry Competition (Incumbents)

DBS, OCBC and UOB have 54% market share (by assets) in Singapore,[1] with high digital penetration rates in consumer and SME banking:

- DBS: 48%, OCBC: 49% - 62%, UOB: 59% - 89% (depending on metric used).

Market Share (by Assets) of Top 4 Banks (%)

Developed markets	Largest bank	2nd largest bank	3rd largest bank	4th largest bank	All other banks
Australia	21	20	19	17	23
Hong Kong	35	11	7	5	42
Japan	13	13	10	10	54
Singapore[2]	21	18	15	1	45
South Korea	14	14	13	13	46
Taiwan	12	9	8	8	63

OCBC Digital Customers (%)

Retail: 36% (2014), 49% (2018), 60% (2023 target)

Business: 36% (2014), 62% (2018), 70% (2023 target)

UOB Digital Customers (%)

Performance Indicators / Customers	2018	2017	2016
Online penetration rate for retail customers (%)	63	54	51
Online penetration rate for retail customers – Singapore only (%)	89	82	81
Mobile banking users as a percentage of active online banking users (retail customers) (%)	59	54	45
Online penetration rate for corporate/SME clients (%)	69	60	52
Number of contactless point-of-sale merchant terminals – Singapore only	16,712	10,432	5,723
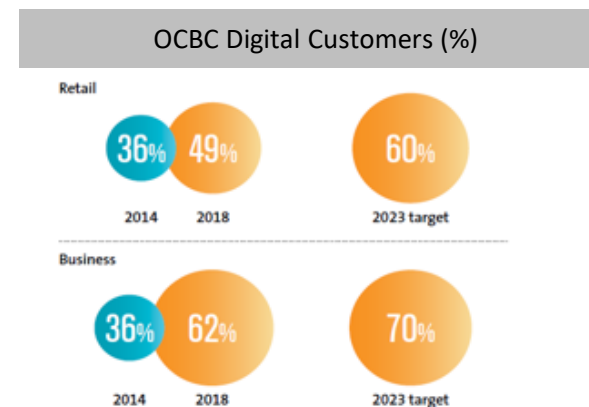
DBS Digital Customers

	Digital (SGD billion)		Share of total (%)	
	2018	2017	2018	2017
Customers (million)	2.9	2.5	48	42
Income	4.2	3.3	68	63
Costs	1.4	1.2	57	51
Profit before allowances	2.8	2.1	76	72

[1]
https://www.mckinsey.com/~/media/mckinsey/industries/financial%20services/our%20insights/bracing%20for%20consolidation%20in%20asia%20pacific%20banking%20the%20quest%20for%20scale/asia-pacific-banking-review-2019-vf.ashx
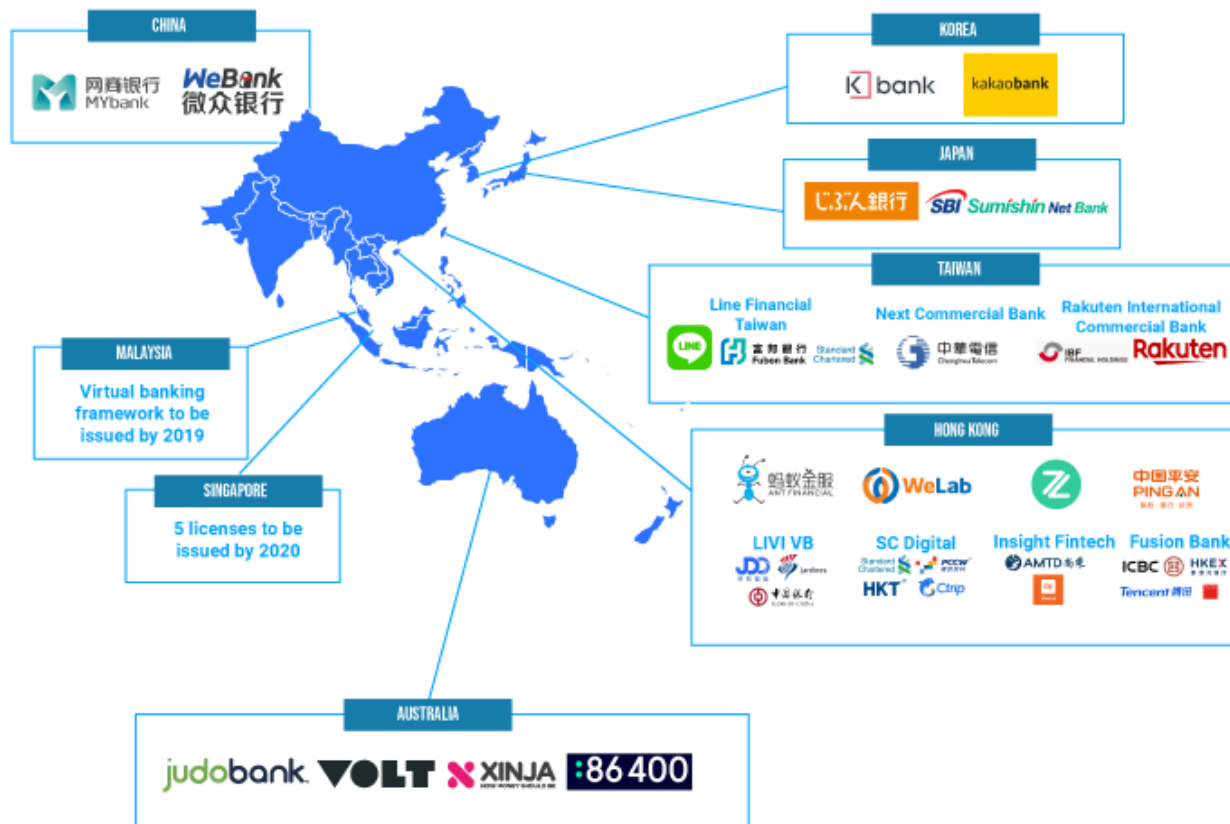[2] DBS Annual Report 2018
[3] OCBC Annual Report 2018
[4] UOB Annual Report 2018

Industry Competition (APAC)

Digital banking license in Singapore is likely to be a stepping stone for Southeast Asia where massive unbanked population of 196 million people live.[1]

- Malaysia will accept digital banking license application by 2020[2]
- Other than Singapore and Malaysia, other parts of Southeast Asia are at an earlier stage of digital banking development

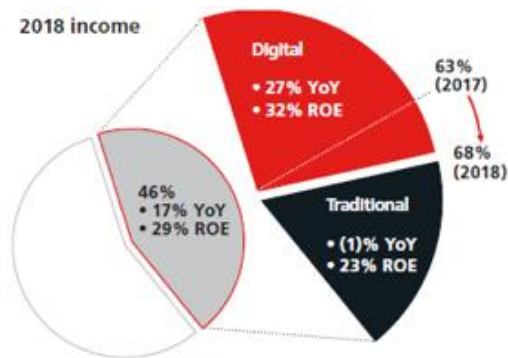[1] https://fintechnews.sg/34043/virtual-banking/virtual-banking-asia/
[2] https://fintechnews.my/21726/virtual-banking/budget-2020-malaysia-to-accept-virtual-banking-license-application-by-2020/

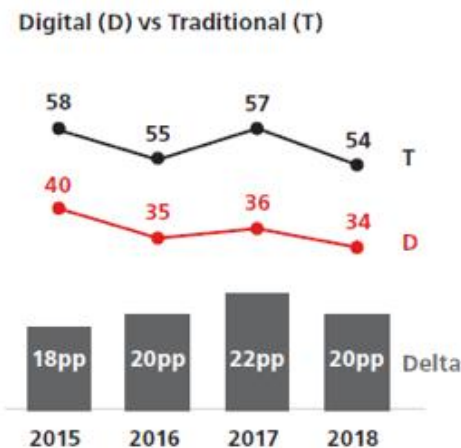# Industry Digital Banking (performance)

Operating costs for digital banking could be 67% lower than traditional banking, and digital customers could generate 2x the revenue as digital interactions are 16x more frequent than branch-based interactions. [1]

- DBS achieved **32% RoE** for its digital banking compared to 23% RoE for its traditional banking – mainly attributed with a lower cost-income ratio of 34% for digital banking and 54% for traditional banking. [2]

- OCBC reported 2x more revenue from its digital retail customers and 3x more revenue from its business customers, with 1.6x more bank products used on average compared to its non-digital customers. [3]

DBS FY2018 Digital vs. Non-Digital Return on Equity	DBS FY2018 Digital vs. Non-Digital Cost-income Ratio (%)	OCBC FY2018 Digital Customers vs. Non-Digital Customers

2018 income

Digital
- 27% YoY
- 32% ROE

63% (2017)

68% (2018)

46%
- 17% YoY
- 29% ROE

Traditional
- (1)% YoY
- 23% ROE

Digital (D) vs Traditional (T)

58   55   57   54   T

40   35   36   34   D

18pp   20pp   22pp   20pp   Delta

2015   2016   2017   2018

2x more revenue from retail customers

1.6x more bank products used

3x more revenue from business customers

[1] https://www.mckinsey.com/~/media/mckinsey/industries/financial%20services/our%20insights/bracing%20for%20consolidation%20in%20asia%20pacific%20banking%20the%20quest%20for%20scale/asia-pacific-banking-review-2019-vf.ashx
[2] DBS Annual Report 2018
[3] OCBC Annual Report 2018

Industry Singapore Digital Banks

MAS opened applications for 5 digital bank licenses comprising 2 full banks (DFB) and 3 wholesale (DWB) licenses.

- **Timeline.** The application closes on 31st December 2019 and MSA will award the digital banking licences in end 2020[1].
- **Condition (DFB).** The minimum paid-up capital will start from S$15 mio and progressively increase as the DFB meet MAS criteria for new business . The business restrictions will be removed once the DFB paid-up capital hit $1.5 bn and the DFB can operate as a full functioning bank.
- **Stages (DFB)** There are three stages in the journey of becoming a DFB. The aggregate deposit is capped at S$50 mio at the entry stage. During the progression stage, the cap on wholesale deposit is removed once the paid-up capital hit S$100 mio. There is no deposit cap at the final stage.
- **Conditions (DWB)** The minimum paid-up capital is S$100 mio and the DWB cannot extend unsecured credit facilities to retail individuals (non-accredited).
- **Governance** The majority of the board of directors have to be Singaporeans or Permanent Residents of Singapore.
- **Requirements.** The business model must incorporate the innovative use of technology to reach the under-served segments of the Singapore market. DFB must demonstrate that the business model is sustainable with a five-year plan showing a path towards profitability

Industry Singapore Digital Banks Stages

1st Stage: Entry	2nd Stage: Progression	3rd Stage: Digital Full Bank
Deposit cap • Aggregate deposit capped at **S$50 mio** [1] • Restricted group of depositors to business partners, staff or related partners • Individual's deposit capped at S$75k • Covered by deposit insurance scheme **Business restriction** • Can only offer simple credit and investment products [2] • Complex products such as structured notes are not allowed • Investment banking activities such as derivatives are not allowed.(except for risk management purposes) • Bank can only establish banking operation in maximum 2 oversea markets. **Minimum paid up capital** • **S$15m.** • Same capita ratio as local bank. • 16% Minimum liquid asset.	**Deposit cap** • Aggregate deposit increase progressively • **Wholesale deposit** cap **removed** once the capital reaches **S$100 mio** (in line with Paid-up Capital Requirements for Wholesale Banks) [3] • Individual's deposit capped at S$75k • Covered by deposit insurance scheme **Business restriction** • To decrease progressively as the bank meet MAS' criteria for new business • MAS will assess the value propositions of the new business • Investment banking activities such as derivatives are not allowed. **Minimum paid up capital** • To increase progressively in proportion to the bank risk profile • Same capita ratio as local bank • 16% Minimum liquid asset	**Deposit cap** • No Deposit Cap • Restricted group • Covered by deposit insurance scheme **Business restriction** • Same as a full functioning bank **Minimum paid up capital** • **S$1.5 bn** • Same capital ratio as local bank [4] • Same liquidity ratio as local bank [5] **Time period for Restricted DFB to convert to DFB** • No min time period • Restricted DFB must present viable plan to become DFB

[1] The cap on wholesales deposit can be removed if DFB has $100m paid-up capital at the onset
[2] https://sso.agc.gov.sg/SL/SFA2001-S380-2018
[3] https://www.mas.gov.sg/publications/consultations/2007/proposed-paid-up-capital-requirements-for-wholesale-banks
[4] https://www.mas.gov.sg/-/media/MAS/Regulations-and-Financial-Stability/Regulations-Guidance-and-Licensing/Commercial-Banks/Regulations-Guidance-and-Licensing/Notices/MAS-Notice-637-effective-30-June-2019.pdf
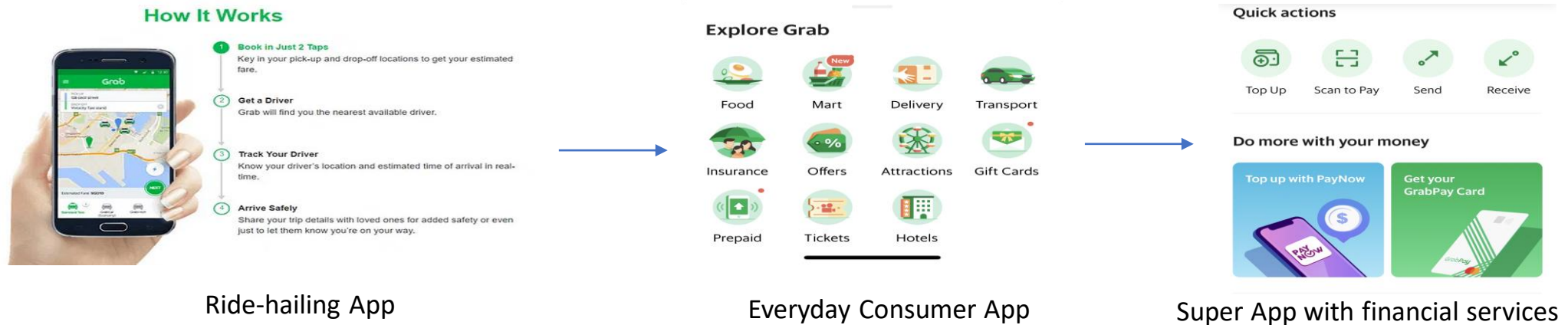[5] https://www.mas.gov.sg/-/media/MAS/Notices/PDF/MAS-Notice-649--Minimum-Liquid-Assets-and-Liquidity-Coverage-Ratio.pdf

Grab VS PayLah! History of App
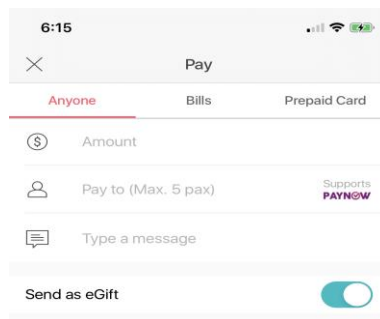
App Journey for Grab

- **Founding.** Grab started as a ride-hailing app called MyTeksi in Malaysia in 2012.[1]

- **Transformation.** MyTeksi was renamed as Grab Taxi in 2013 and it expended from Taxi services to other type of vehicles such as passenger car , van and motor bike. Grab started expanding into food delivery business.

- **Current Stage.** Grab is turning into an everyday consumer app by offering other services such as hotel booking, cinema booking and payment services

- **Future**. Grab is looking to become a super app by providing other financial services that is traditionally provided by banks. In Singapore, it is part of a consortium with Singtel that is applying for a digital banking licence.
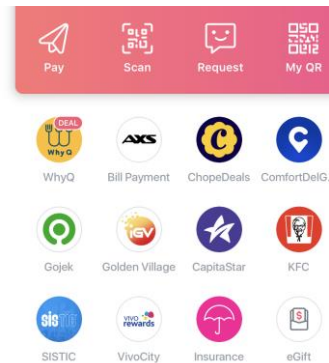
Ride-hailing App   Everyday Consumer App   Super App with financial services

[1] https://www.techinasia.com/history-unicorn-grabtaxi-infographic

Grab VS PayLah! History of App
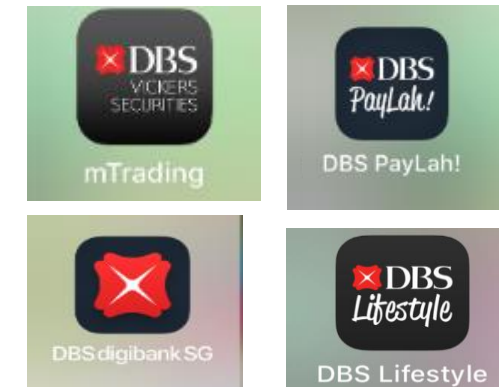
App Journey for PayLah!

- **Founding.** Paylah! was launched as a mobile wallet for DBS bank customer in 2014.[1] It was the first banking app that allows peer to peer transfer of fund by using mobile number as identifier in Singapore.

- **Transformation.** Over the years , Paylah! has onboarded many other merchants, corporation and government organisation where user can make payment to.

- **Current Stage.** As part of a government initiatives, PayNow services was launched in July 2017 where fund transfer can be transacted using recipient mobile number or identify number. Paylah! User can now transfer money to other bank customer as Paylah! Is linked automatically to PayNow

- **Future.** Super App ?

Mobile Wallet App

Everyday Consumer App

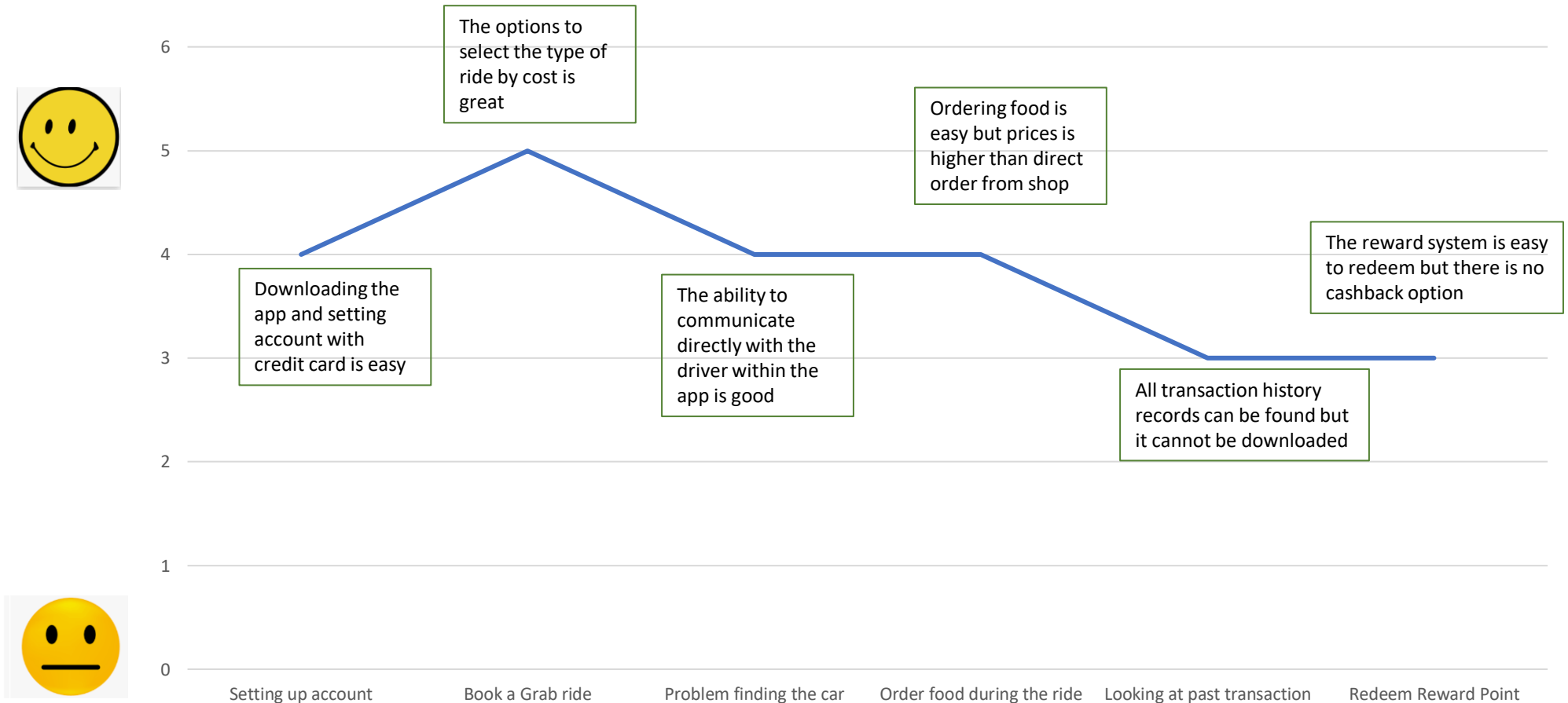Super App leveraging its Banking App

[1] https://www.zdnet.com/article/dbs-bank-launches-mobile-wallet/
[2] https://blog.seedly.sg/paynow-paylah-pay-anyone/

Grab VS PayLah! Customer Journey

Grab Customer Journey

The options to select the type of ride by cost is great

Ordering food is easy but prices is higher than direct order from shop

The reward system is easy to redeem but there is no cashback option

Downloading the app and setting account with credit card is easy

The ability to communicate directly with the driver within the app is good

All transaction history records can be found but it cannot be downloaded

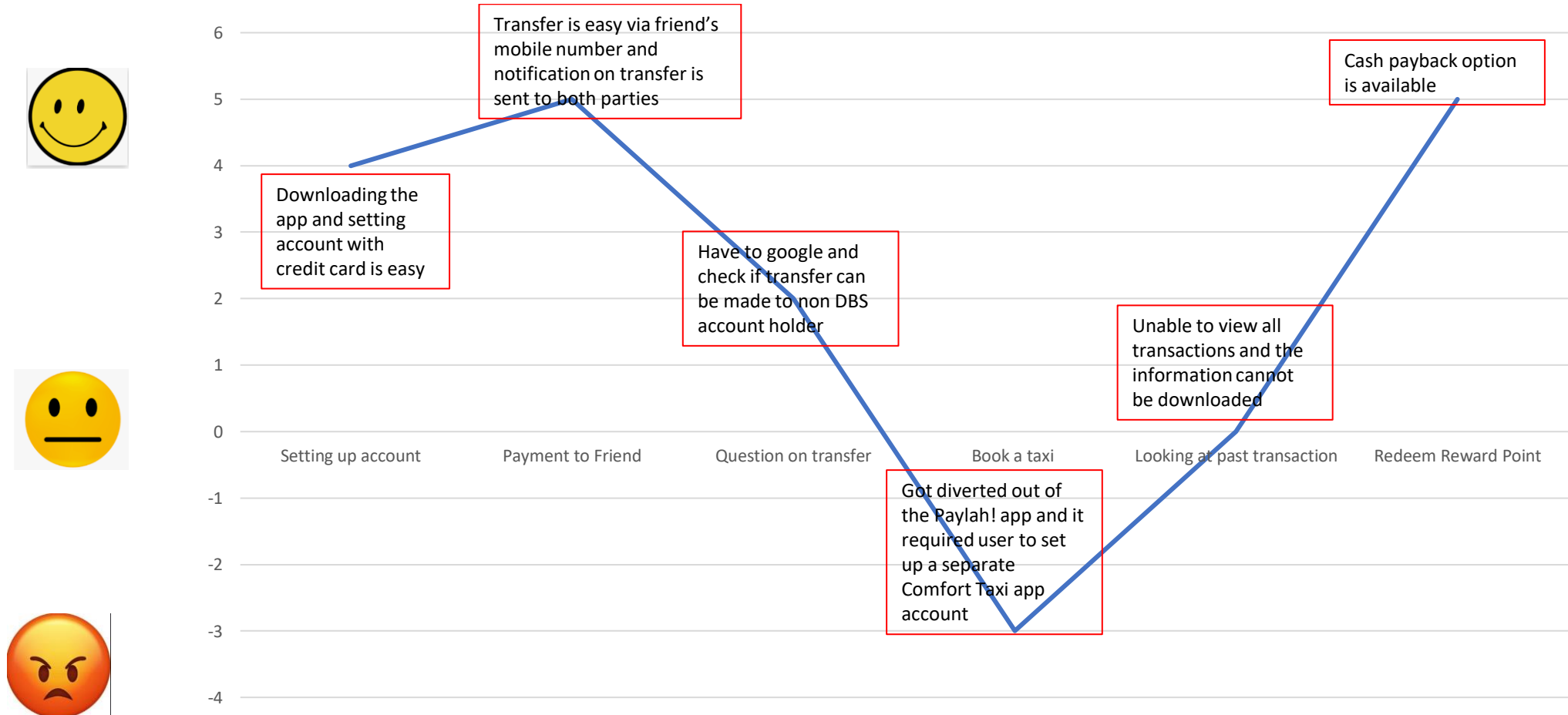Setting up account | Book a Grab ride | Problem finding the car | Order food during the ride | Looking at past transaction | Redeem Reward Point

Grab VS PayLah! Customer Journey

Persona

Tom

Male
27 Years Old
Civil Servant

PayLah ! Customer Journey

Transfer is easy via friend's mobile number and notification on transfer is sent to both parties

Cash payback option is available

Downloading the app and setting account with credit card is easy

Have to google and check if transfer can be made to non DBS account holder

Unable to view all transactions and the information cannot be downloaded

Got diverted out of the Paylah! app and it required user to set up a separate Comfort Taxi app account

Setting up account | Payment to Friend | Question on transfer | Book a taxi | Looking at past transaction | Redeem Reward Point

SWOT Analysis PayLah!

STRENGTHS

- Cash can be transferred immediately
- Allow transfer to multiple parties in one transaction
- Customers like the cash payback option
- Allow parents to setup on behalf of child via Singpass

OPPORTUNITIES

- Integrate other banking services into Paylah!
- Onboard more merchant and provide credit for purchase of goods

WEAKNESSES

- Missing dashboard on customer transaction history
- Does not empower customer with enough data for decision making
- The lifestyle and everyday consumer application is limited and difficult to use
- The QR code scanning payment service require too many steps
- The home screen is too cluttered

THREATS

- Competition from Fintech that is offering banking products
- Issuing of Digital Banking License by MAS in Singapore to consortium who are not banks in 2020

Recommended Changes Useful Features

We want to borrow some delightful experiences with other lifestyle apps that can be potentially implemented in PayLah!

UOB Mighty

Google Maps

Entertainer 2020

"Set daily data limit"- Mobile phone.
Data limit/alert so that users are reminded when they are about to exceed their data limit

"Find nearby function" – Entertainer.
Allows users to quickly locate restaurants around them
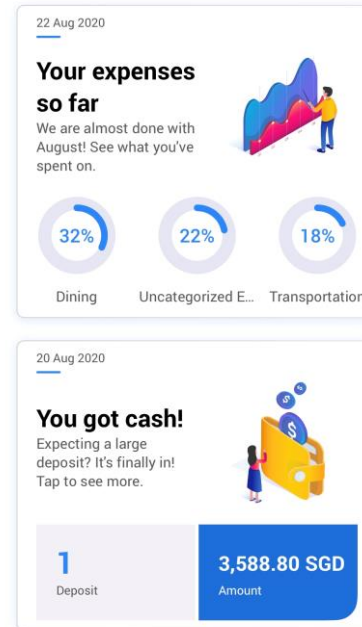
"View Recent Insights" - UOB Mighty App
Know your consumption patterns and habits.

"Ride alternatives and timings" - Google maps
Pay less to get to destinations

Recommended Changes Three Main Segments

Lifestyle

- **Smart "wallet" with insights and friendly reminders**

We want to use data to help customers' know themselves better and empower then to make informed lifestyle choices within their budget.

- **Partnerships with more merchants**

We want customers' to have wider range of choices for goods and services.

- **Ride aggregating**

We want to help customers' get the cheapest ride to their destinations.

Geo-locality

- **"What's nearby?"**

We want to *suggest* from within our partnership ecosystem to help customers' work within their budget and lifestyle.

Data Analytics

- **Understand customers' preferences/activity**

We want to know customers' activity base on their consumption habits and timing to as to offer time-based suggestions, i.e. recommend restaurants during lunch hour.

Recommended Changes Lean Canvas

Customer Problems

1. Lack of organization from user interface, hence difficult to find what he/she wants

2. Low level of merchant partnerships hence less use cases

3. Does not really help client to make lifestyle choices base on his/her preferences

Customer Solutions

[Manager-level Dashboard]

1. Better categorisation of products and services so customer can find what he/she wants easily.

2. Suggest/recommend base on customers' consumption habits, frequent timing of activity, geo-locality and budget.

3. Onboarding of wider range of merchants/partnerships to enhance lifestyle choices to customers.

Key Metrics

1. Increase in PahLah! users and wallet dollars

2. Increase in time PayLah! users spend on app

3. Increase in sales revenue both for PayLah! and participating merchants

Unique Value Propositions

Providing a competitive e-wallet and lifestyle app that all levels of customers will want to use daily to make simple life decisions

Data we need to make better decisions

1. Greater marketing details on what do customers spend on most and where?

2. How many merchants partnerships are willing to onboard onto PayLah ecosystem?

3. Merchant's expectations: additional revenue that merchants can make on the partnerships

4. Cost of merchant partnership

Unfair Advantages

1. Access to customers' demographics not typically available to general public, hence able to perform targeted marketing more effectively

2. Integration with current database

3. DBS branding and reputation (wallet security)

Channels

1. Emails to existing DBS customers with or without PayLah!

2. Marketing channels such as Youtube, Instagram, Facebook

3. Retail presence in merchants' stores and websites

Customer Segments

1. Different levels of customers based on demographics, geo-locality and consumption behaviors - can be further segmented based on existing DBS segmentations for their retail customers.

For example: consumption preferences for DBS Treasures customer vs DBS mass market customer could drive different marketing strategies

2. Local merchants who want to tap on existing DBS customer base for more effective marketing reach

3. Global merchants who want to tap on Singaporeans/ DBS customers

Cost Structure

- App Development - $25,000
- Salary - BD associates and lead - $4000/month x 10 + $8000 = $48,000
- Leads generation - $1000/month
- Allowances and Transport - $400x10=$4000
- Marketing - $5000
- Technical support and maintenance - $10,000
- Misc cost - $5000

Total estimated costs = $98,000/month

Skill Sets Needed

- Heavy data analytics
- UX/UI design (for good data presentation within app)
- Programming skills
- Business development (for partnerships)

Revenue Streams

Partnership revenue sharing: hybrid model of monthly subscription plus percentage of revenue via PayLah!
Tiering based on turnover:
Tier 1: $50/month
Tier 2: $100/month
Tier 3: $200/month
Example: 500(T1) x $50 + 750(T2) x $100 + 250(T3) x $200 = $150,000
$150,000 + % of PayLah sales ($500,000) = $650,000/month

Prototype Budget friendly

**Helping you stay disciplined in your consumption budget.**

- Uses have the **option to set daily budget**

- Users will be **prompted upon exceeding of budget** but not restricted to pay

- Parents can have **budget control and prompts** over allowances given to their children and know where their children are spending their money on
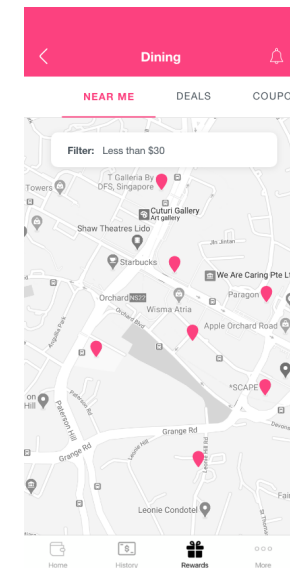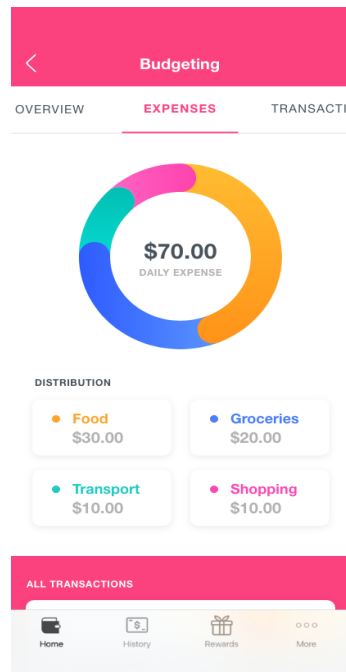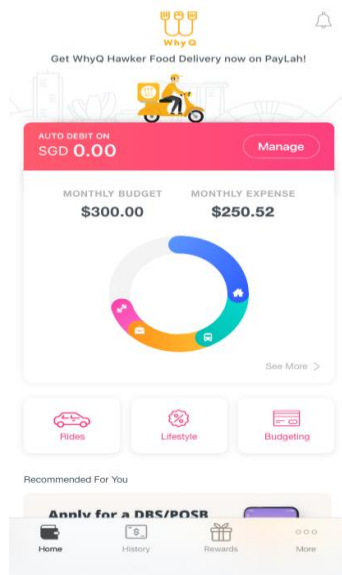
Prototype SmartER wallet

**Presenting you choices according to your preferences**

- Data on consumption patterns will enable PayLah! To p**erform targeted marketing at users preferences with greater accuracy**

- Data empowers users on their consumption behavior and enables them to make better informed choices according to their desired lifestyle.
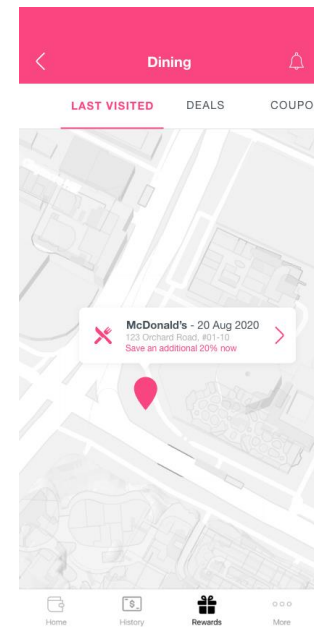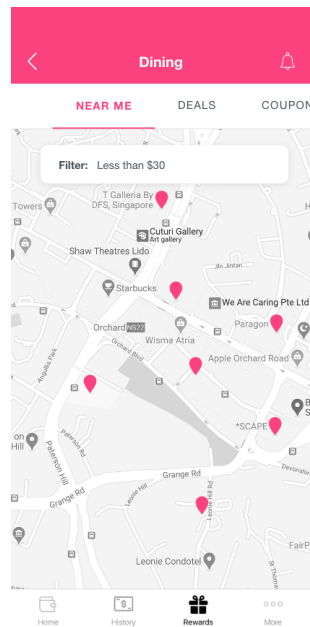
Prototype Transport at your fingertips

Reaching your destination in the most cost-effective way possible

- The implementation of a **ride aggregator** allow users to see which is the cheapest ride-sharing option at glance.

- Users will key in the pick-up location and drop off location and the app would scrape data with APIs to **compare prices** among the different ride-sharing apps.
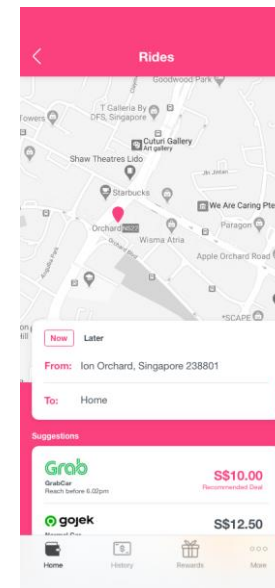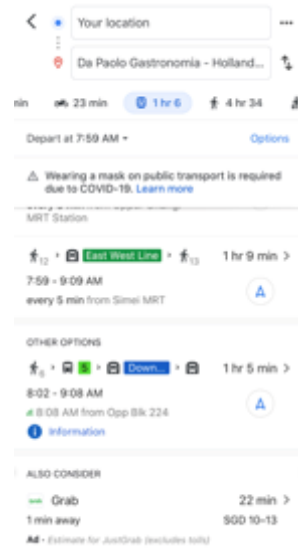
Prototype Geo-locality

One-app a day, put the rest away

- Your best e-secretary that stays ahead of your schedule and appointments

- PayLah! uses machine learning and AI to understand user consumption behaviors/patterns and offer time based suggestions, i.e. if a customer pays for coffee frequently around 330pm, PayLah! is able to pick that up and subsequently offer suggestions around the same time