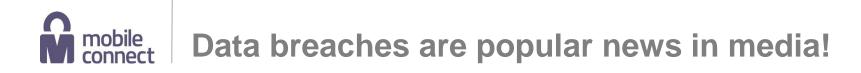
Mobile Connect Summit Singapore

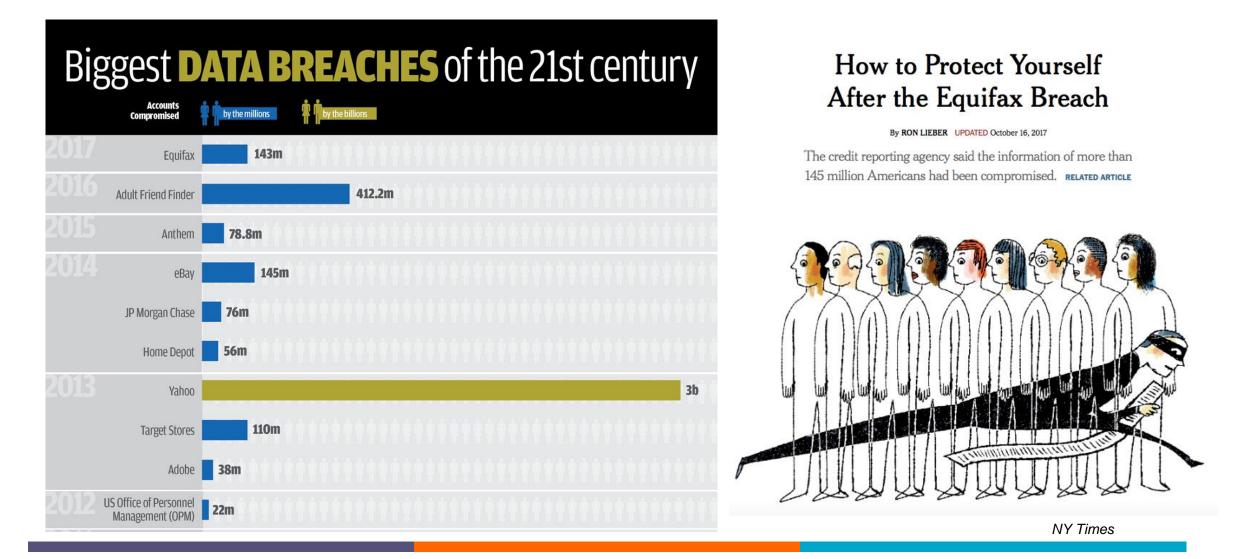
21 & 22 November 2017 Suntec Exhibition & Convention Centre, Suntec City

Why have a digital ID strategy?

Julian Gorman

Head Strategic Engagement, Asia Pacific, GSMA







RI Attorney General files legislation on security freezes following Equifax data breach



Sarah Doiron blished: November 20, 2017, 9:02 pm





Equifax CEO Richard Smith Resigns After Uproar Over Massive Hack

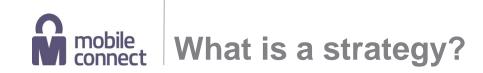
By Jennifer Surane and Anders Melin 26 September 2017, 22:02 GMT+8 Updated on 27 September 2017, 00:06 GMT+8

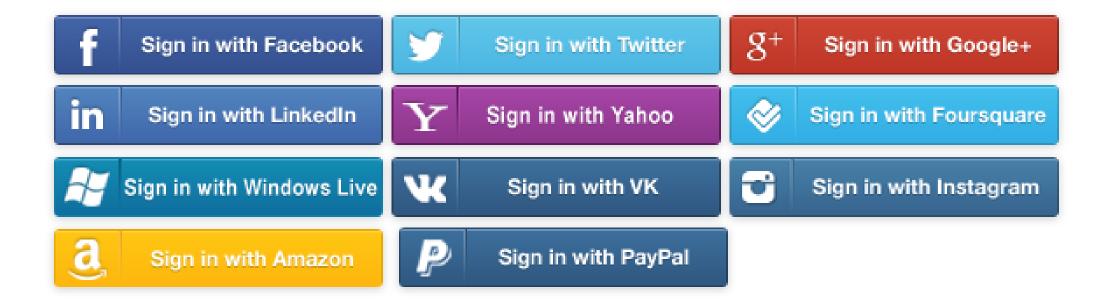
How a data breach battered Yahoo!'s reputation

We investigate how the fallout of Yahoo!'s data breach may affect the company's chief executive, Marissa Mayer, finalising a \$4.8 billion deal to sell Yahoo!'s core internet business to Verizon

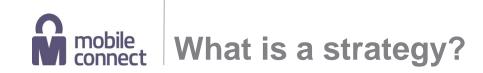
HACK BRIEF: HACKERS BREACH A BILLION YAHOO ACCOUNTS. A BILLION

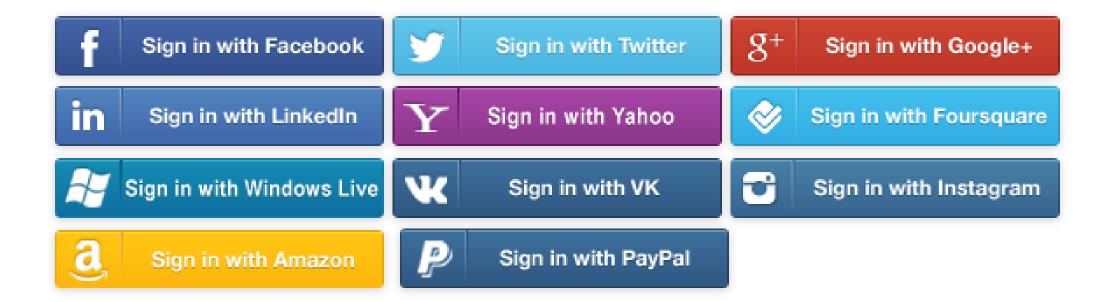






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This is not a strategy!

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Non Exhaustive Elements of a Strategy



Session Agenda

13.40 - 13.50 Emanuela Lecchi, Head of Public Policy APC, GSMA 13.50 - 14.10 Pedro Hernandez, Head of Product Management, Cyber Security at G&D Asia 14.10 - 14.30 Veljko Vasic, CEO, CrelTive 14.30 -14.50 Anthony Howe, Think Howe 14.50 - 15.30Industry Experts Discuss: Are we having a Digital Identity Crisis? Moderated by Julian Gorman • Veliko Vasic, CEO CrelTive • Dan Clarke, CrelTive • Pedro Hernandez, Head of Product Management, Cyber Security at G&D Asia • Anthony Howe, Think Howe • Paul Meyers, Head of Muru-D 15.30 - 15.45 Angus Yu, Technology Director, Asia Pacific, GSMA Getting started with Mobile Connect 15.45 - 15.55 Summit Close

Mobile Security

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Security Strategy for Mobile ID

GSMA Mobile Connect Summit

Singapore, 22nd November 2017 G+D Mobile Security

G+D

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Dan Clarke



THE ROAD TO GREAT UI/UX ABOUT

Dan Clarke

Europe

Worked with Rocket Internet in Berlin helping to head up Groupon's international expansion ahead of the company's \$17.8 billion public listing on the New York stock exchange in 2011.

Middle East

Senior manager in Digital Marketing focused on UI/UX with two of the largest global media agencies, with clients including HSBC, Nissan, and Adidas.

Asia

Co Founder and CEO Disruptient, a leading Digital Marketing agency in South East Asia, based out of Singapore, with clients across Asia Pacific and the Middle East, including Visa, Axiata, and EY.



GROUPON



ZALORA ASIA'S LEADING ONLINE FASHION DESTINATION







THE ROAD TO GREAT UI/UX MOBILE USAGE

In Asia, Mobile > Desktop

Which devices do people use?

USA		
	57%	
China		
	70%	
Hong Kong		
	74%	
South Korea		
	105	
Malaysia		
	51%	
Singapore		
		35%
Australia		

Which devices do people use?



THE ROAD TO GREAT UI/UX CHANGING WORLD

Rivals to the Crown

Shifting search usage to Mobile

— Siri, Cortana, Mobile Assistants

More than 60 percent of all Google searches are now performed on mobile devices

What can I help you with?

THE ROAD TO GREAT UI/UX FOLLOW THE MONEY

Google & Apple are unlikely bedfellows

Power shifts to device maker

PS & SOFTWARE

Google pays Apple \$3 billion to be the default search engine on the iPhone



Share Tweet

As the Android vs iPhone rivalry began to intensify a few years ago, Apple pulled a power move and quickly removed Google apps like YouTube and Google Maps from the iOS homescreen, the most valuable piece of screen real estate in mobile. These days, Apple and Google remain fierce competitors in the mobile space, but the two companies still enjoy a longstanding and mutually beneficial relationship when it comes to mobile Safari.



TECH

Search Deal with Apple Shows Google's Mobile Vulnerability

Payment made in 2014 underscores importance of smartphones as access point for online services.

THE ROAD TO GREAT UI/UX MOBILEGEDDON

Performance on Mobile:

- Huge "Mobile-Friendly" Update
- Responsive Design
- Ranking penalty for non-compliance



THE ROAD TO GREAT UI/UX

STEPS:





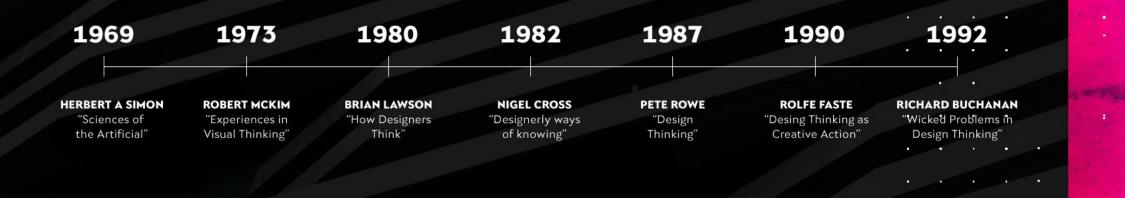






THE ROAD TO GREAT UI/UX DESIGN THINKING

The notion of design as a "**way of thinking**" in the sciences can be traced almost 50 years back



THE ROAD TO GREAT UI/UX DESIGN THINKING

The most important goal of this phase is focus on the **WHAT** and the **WHY**, so that the design team can design the **HOW**.

THE ROAD TO GREAT UI/UX RAPID PROTOTYPING

Rapid prototyping is the process of quickly designing screens or visuals and implementing them as a simple interface, with the purpose of showcasing the UX/UI design or functionality. Rapid prototyping enables quick validation of ideas and assumptions, with minimal resources necessary.

Horizontal Prototype

Vertical Prototype

Full Prototype

•

THE ROAD TO GREAT UI/UX

The goal of minimum viable product is to use feedback from the design thinking and prototyping sessions and get a live product ready for outside world testing in an agile way. After the MVP is done, the next steps would depend on your customers that will provide feedback and direct your growth.

Stages:

Design

Development

Testing

User Experience

THE ROAD TO GREAT UI/UX LEAST ABLE USER

Apps should be intuitive

Language and literacy free

KISS

Steve Jobs has designed a powerful computer that an illiterate six-year-old can use without instruction,



THE ROAD TO GREAT UI/UX USER STUDY & FEEDBACK

Consumer focus groups

Tasks/Goals given to complete

Screen recording to observe user behaviour



THE ROAD TO GREAT UI/UX A/B TESTING

Split testing traffic

Control and variation

Monitor and track user goals/tasks







n de la defendação da fanta factor da factor da de alta A seconda de alta de alt

23%

37%

THE ROAD TO GREAT UI/UX UX DESIGN IS NEVER OVER

Constant ongoing process

Always be testing

Move and adapt with chang



THE ROAD TO GREAT UI/UX

Future Banking

Results of testing

Future Banking UX Concept was compared with 3 traditional online banking design solutions.



3 traditional online banks



Steps amount to perform main tasks





Customer satisfaction

+320%

Engagement for services

+85%

Readiness to

recommend

Readiness to

switch bank

-26%

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THE ROAD TO GREAT UI/UX UX MAKES DOLLARS AND SENSE

— Stay customer centric

Listen and incorporate

Streamline and simplify



THE ROAD TO GREAT UI/UX

Our mission is to implement a startup way of creating digital products in to the MNC world. Great UI/UX design of digital products come from a step by step process followed by user feedback and proof of concept.

The outcome is making the user experience better on each and every platform and save time and money to both users and service providers.





Digital ID & Payments



Optimising payments with a robust digital ID plan!



A bit about me...

- Started Australia's first mobile marketing company in 2000, 5th Finger.
- Designed and commercialised a range of software products in the mobile communications and education sectors.
- ThinkHowe is a SERVICE DESIGN agency headquartered in Singapore.
- NUS Industrial Design Lab guest tutor.
- Design Thinking Training & Product Validation / Sprints.
- Jazz. Drums.





So where are we in time?



13 % of smartphone owners have a digital wallet app.





...while the majority of those who do have an app (76%) ...rarely use it.

Source: Gallup



Less than 2% of the 1.2 billion population of India have a credit card (and nearly 20% have never been to a bank). and yet ... Over 1 billion mobile phones in India.

Source: Daily Fintech July 15, 2016



"Despite the growing tendency to enlist the help of a smartphone when making purchasing decisions, millennials are still completing 53 percent of their purchases in physical stores."

WHY?.....SECURITY CONCERNS!

November 2016, Osterman Research



Different markets are more or less messy with money, & ID, for different reasons.

Source: Daily Fintech July 15, 2016







...a PAYMENT is what occurs after a WHOLE BUNCH OF OTHER TRANSACTIONS HAVE HAPPENED!



OPPORTUNITY ???

The Key to Mobile Money IS DIGITAL ID



OPPORTUNITY ??? The Key to Mobile Anney IS DIGITAL ID



OPPORTUNITY...

ONE (1) key to mobile money is Digital ID that creates <u>ease</u> & <u>trust</u>.



WHAT CREATES EASE & TRUST?

Technology – Ease. People – Trust.



HOW DO USERS SEE IT?



State based...



One digital ID to rule them all?

Benjamin Goh For The Straits Times

() PUBLISHED MAR 17, 2017, 5:00 AM SGT



Efficiency of the online system is appealing but there might be serious costs and risks

Last month, Prime Minister Lee Hsien Loong reiterated his vision for Singapore to have a

digital ID for more efficiency.

Nets QR code to roll out to 120 hawker centres by 2018



howker stalls



Bank based...





Brand based...

•••• Ve

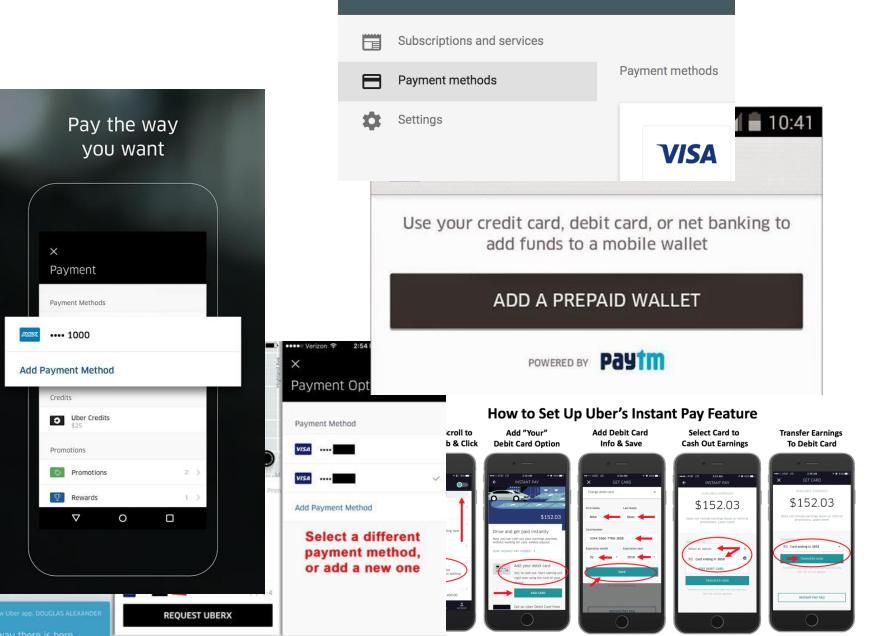
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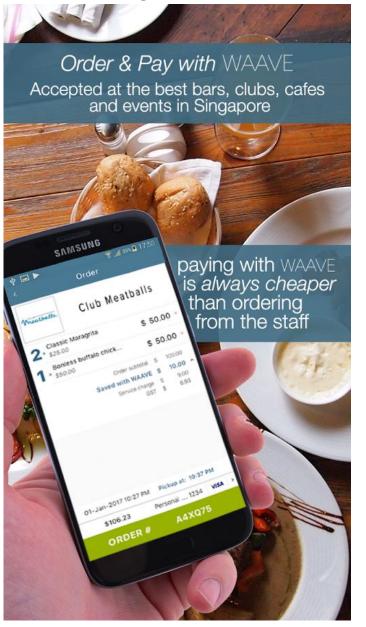


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Google payments center



Club / community based...





So what can we do?



Ideas for Action...

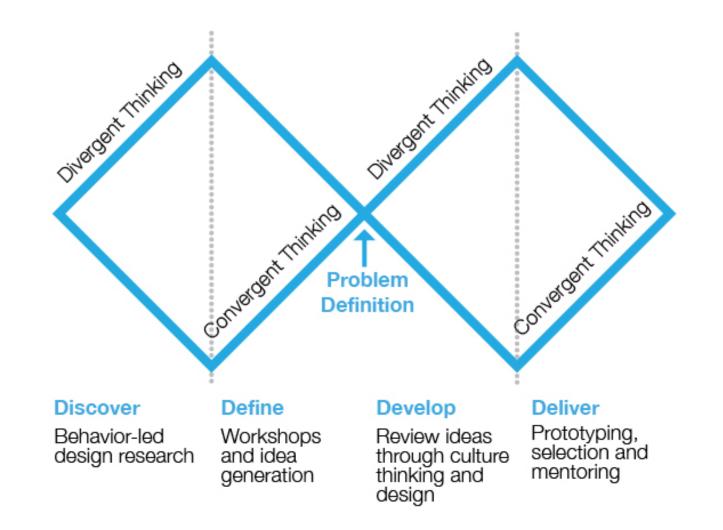
- A human centred design approach using familiar experiences that create EASE.
- Trusted technologies (e.g. Braintree / Paypal) that help bridge the gap between PEOPLE and TECH.







The human centred approach!





THE DESIGN PROCESS - TASK Examples

Discover

Initial Ideas or Inspiration & Establishment of User Needs

Market Research User Research Design Research Technology Research Interviews & Insights Gathering Observation & Shadowing Empathic Modelling Information Management

Define

Interpretation & Alignment of Findings to Project Objectives

Information Analysis Synthesis & Identification Project Refinement Project Management Project Sign-off

Develop

Design-Led Concepts & Proposals iterated & Assessed

Ideation Multi-Disciplinary Working Visual Management & Progress Testing & Prototyping Review & Improvement

Deliver

Process Outcome(s) Finalised & Implemented

Final Testing & Approval Production Launch of Outcome(s) Evaluation & Further Feedback Future Work

THANK YOU!

Anthony Howe +65 90574877 anthony@thinkhowe.com



Are we having a digital identity crisis?



Dan Clarke, CrelTive

Veljko Vasic CEO and a co-founder of CrelTive.com



Pedro Hernandez, Head of Product Management, Cyber Security at G&D Asia



Anthony Howe, Think Howe

Moderator

Julian Gorman Head of Strategic Engagement, Asia Pacific, GSMA

#MCSxSG

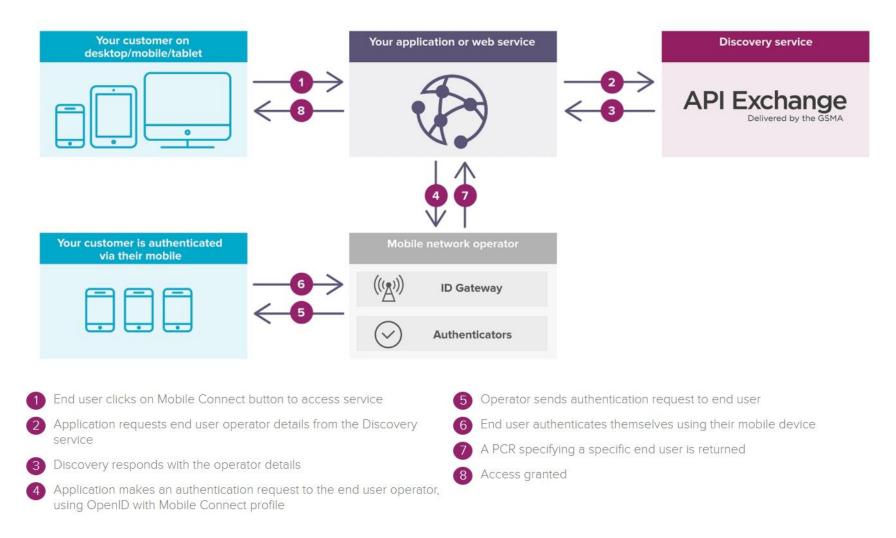
Getting started with Mobile Connect

Angus Yu Technology Director, Asia Pacific, GSMA

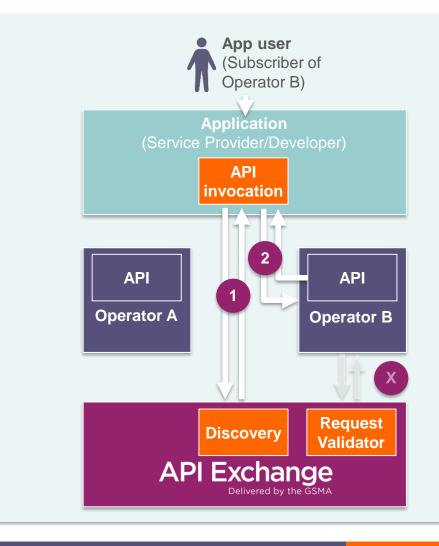


- 1. Mobile Connect Overview
- 2. API Exchange
- 3. Developer portal

Mobile Connect Overview



M mobile connect **API Exchange Basics**



Flow

Application calls global "**Discovery**" capability to determine to which operator a subscriber / user of the application belongs, leveraging IP address, MSISDN, MCC/MNC from SIM ...

Return: Operator B details, API exposure endpoint address and access credentials

2

Application calls "API" of discovered, Operator B

(optional): Operator B calls "**Request Validator**" to validate API access credentials and details of invoking application/ developer ^(*)

* If operator does not want to use "Request Validator" they can instead implement an application whitelist





- 1. Support for ALL developers to integrated Mobile Connect into their App/Service
- 2. Central and only place for developer tools & documentation
 - Technical documentation for MC APIs
 - Product documentation
 - Operator status & contact information
 - Entry-point to Sandbox
 - Developer registration
 - Acceptance of MC license agreement and privacy principles

- App registration
- Click-to-accept contracting
- Application promote to MNO ID Gateways
- API Exchange provisioning of SPs / apps
- Hosting of SDKs & example apps



- URL : <u>https://developer.mobileconnect.io/</u>
- Step by Step guide: <u>https://developer.mobileconnect.io/step-by-step-guide</u>
- Operators listed on Developer Portal: <u>https://developer.mobileconnect.io/operators</u>

Status: Live: Open for 3rd parties, service available now; Live: Internal, available on internal services or selected partners's only - not currently on-boarding; Pilot, will launch shortly; Coming soon, date to be confirmed

IQSS Help and Support: <u>https://developer.mobileconnect.io/contact-us</u>



mobile Connect Developers

API Step-by-step guide SDK's What's New FAQ Support

Login

Register



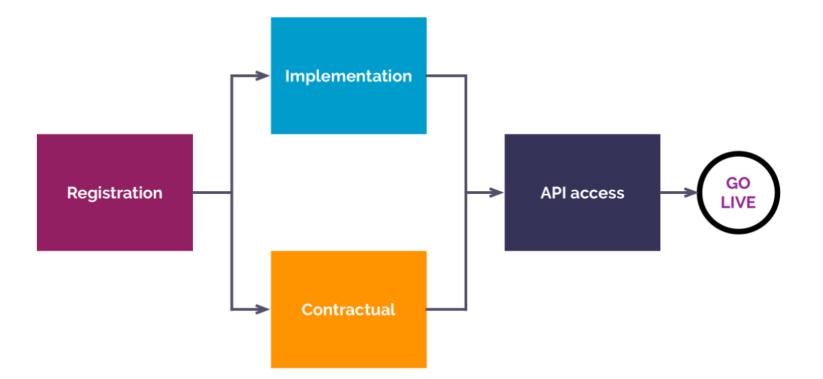
The new standard in digital authentication.



Identity - Mobile Connect

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Mobile Connect : Go Live



Registration - setting up your organisation and applications on the Developer Portal

Integration - implementing and testing the Discovery and Mobile Connect APIs with your applications or services

Contractual - accepting the Mobile Connect Marketing Licence Agreement and the Operator Terms & Conditions for Mobile Connect.

API access - requesting access to Operator environments

Step By Step Guide in Portal

Developer process

Step	Process
1. Register as a Mobile Connect developer	Register on the Mobile Connect Developer Portal or Login to your existing account.
2. Learn how to make Mobile Connect API Calls	Make your first call
3. Integrate Mobile Connect APIs into your app	Master the fundamentals
	Choose your Mobile Connect product
	Understand country specific variations
	Access Mobile Connect brand assets for your app
	Take a look at Implementation and Security best practices
4. Test your application in the sandbox	Using the Sandbox
	Take a look at Testing Best Practices
5. Preparing to go live	Complete Contractual Pre-requisites
	Request Access to Operator Networks
6. Going live	Confirmation from operators

Please contact Mobile Connect Developer Support for any questions or issues you might have during your implementation

