



Voice Biometrics Opus iA Conference

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Global RBWM Contact Centres



- One of the world's largest banking and financial services organisations
- Around 4,000 offices and 235,000 colleagues in both established and emerging markets
- We aim to be where the growth is
 - Connecting customers to opportunities
 - Enabling businesses to thrive and economies to prosper
 - Ultimately helping people fulfil their hopes and realise their ambitions
- We serve more than 37 million customers worldwide
- Network covers 70 countries and territories in Europe, Asia, the Middle East and Africa, North America and Latin America
- Listed on the London, Hong Kong, New York, Paris and Bermuda stock exchanges, HSBC Holdings plc shares are held by more than 204,000 shareholders in 133 countries and territories

RETAIL BANKING AND WEALTH MANAGEMENT

Advice and personal wealth products from personal banking and pensions to tax efficient investing and life insurance

COMMERCIAL BANKING

Our global reach and expertise helps customers from small businesses to large multinationals unlock their potential

GLOBAL BANKING AND MARKETS

Provides financial services and products to corporates, governments and institutions

GLOBAL PRIVATE BANKING

Private banking and wealth management services to wealthy individuals and their families

- Investor Update June 2015 set out strategic actions to further reshape, resize and simplify our business to redeploy resources to focus on growth opportunities
- Through these actions we're adapting to changes in the external business and regulatory environment, helping achieve our medium-term financial target
- One action to resize and simplify is to deliver USD 4.5-5 billion in cost savings, we're now expecting to achieve annualised saves of USD 6 billion by end of 2017
 - We're achieving this by **putting customers first and doing what's best for them**, Digitising the bank and optimising our network footprint and our people
 - Using technology to give a better experience, **making it easier to access and manage their money through Digital and our human assisted channels**
 - **Making it easier for colleagues to** do their jobs, including using technology to remove repetitive and manual tasks so we can **spend more time helping customers**



RBWM Global Contact Centre Business

Empowering our 16,000 people to drive customer satisfaction and digital transformation

SERVE

Delivering a consistent, engaging and cost efficient service to all our customers

EMPOWER

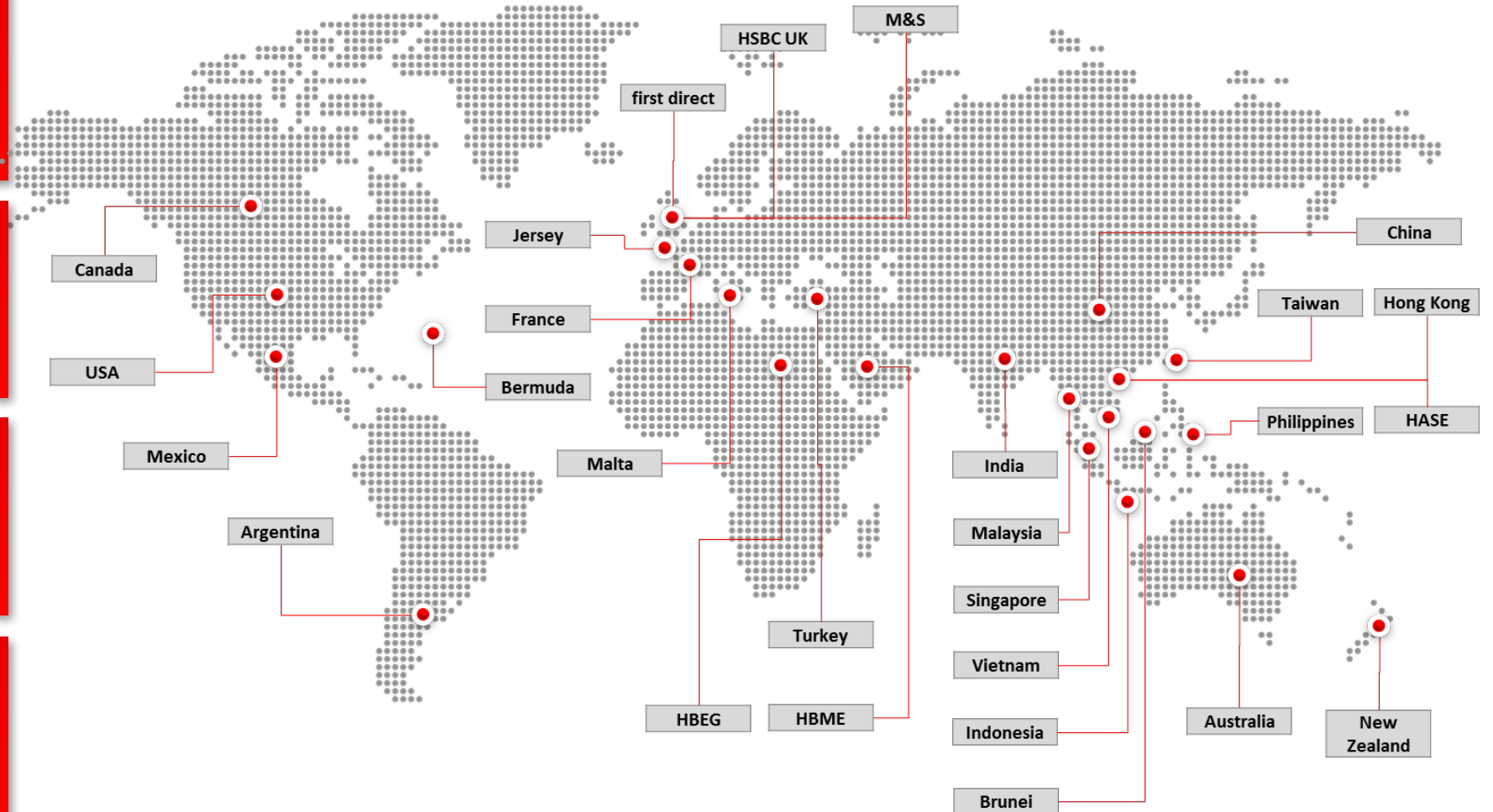
Enabling our people through coaching, technology and leadership

GROW

Delivering solutions to our customers that meet their needs now and tomorrow

TRANSFORMATION

Technology and process investment transforming Contact Centres



Voice ID – simplifying customer identification and verification through biometrics

Improving customer experience, reducing cost and risk exposure

- No usable authentication system, including biometrics, is invincible. Biometrics are probability based, analysing many unique characteristics
- To realise both customer and risk benefits we designed customer journeys and a multi-layered authentication strategy with 2 independent voice biometric verification solutions and a fraud detection layer
- Collaboration from day 1 across Business, Customer Experience, Operations, Risk, Compliance, IT, HR, Marketing and Nuance teams

Voice ID Components



IVR – VocalPassword – within a new enrolment IVR, customers repeat the same phrase (e.g. ‘my voice is my password’) between 3 and 5 times to create a voice print. In some markets customers choose the passphrase language.

On subsequent IVR calls customers are prompted to repeat the phrase to complete verification rather than input a PIN or answer security questions



Non-IVR – FreeSpeech – used by contact centres without an IVR (e.g. first direct) and when a call is transferred from an IVR to an agent. Voice prints created during a minimum 2 calls with agents, no need for customers to take any new action. Subsequent verification completed during natural conversation with agents without the need to ask any password characters, significantly reducing need for memorable security questions.

A verification decision is received typically between 5 and 10 seconds of callers net speech

Fraud Detection

- Background Model (BGM) checks the callers voice to both the customer’s voice print and to a representation of all of the voices held on the BGM to provide a verification decision
- Channel Playback and Footprint Algorithms help reduce risk of recorded playback of the IVR VocalPassword passphrase
- FraudMiner provides configurable real time and offline checks of callers against known fraudster call recordings
- Increased data feeds to existing HSBC fraud detection systems



Voice ID is much more than just technology and speech science



Cultural change and communication are key to explain

- PIN/Passwords Vs probability based biometrics authentication
- Achieving balance between ease of use and improved security controls
 - False Accept and False Reject rates
- Courage needed with a False Accept, remember overall customer, risk and financial benefits
- Importance of training, procedures and communications to explain biometrics confidently to customers and respond to press and other media biometric coverage
 - Learn from each one and update customer and employee communications
 - Sustained multi media campaigns
- New operating model, roles and accountabilities to optimise performance
 - Reporting, analysis, actionable insight and clear governance
 - Recalibration across the end to end solution
 - Translate speech science, simplify language and performance forecast

Voice ID

Getting it right is worth the effort, time and investment

CUSTOMER EXPERIENCE

Ease and speed to enrol and verify with added security
More likely to recommend

EMPLOYEE ENGAGEMENT

Less frustrating and lengthy failure handling
More engaging conversations

REDUCED COST

Increased Self-Service
Less failed verification
Reduced calls and handle time

REDUCED FRAUD

Telephone fraud reducing, volume and value

29% FreeSpeech enrolled customers represent 63% of inbound call verifications, immediate frequent caller benefit

Higher volume IVR calls successfully verified by VocalPassword is 11% and increasing

4.4m successful UK Voice ID verifications since September 2016 launch

HK launched March 2017, US April 2017

Deployments continue to more markets, Global Businesses and Functions to leverage investment

A key step to improving customer journeys across channels