**Deutsche Bank Digital Cash Products** 

# Digital Unpugged Second Album

Charts Summer / Autumn 2018



# PLAYLIST SUMMER/AUTUMN 2018



### **Digital Unplugged:** Focus on Big Data for Corporates

The variety and velocity of data in the new digital economy continues to increase. How can corporates and their banking providers leverage the power of big data?







### **Digital Unplugged:** Focus on the Internet of Things

By 2020 there will be almost 31 billion devices connected to the internet. The opportunities surrounding the Internet of Things (IoT) are growing exponentially. Learn more.



### **Digital Unplugged:** Focus on APIs & Push Payments

PSD2 and the demand for 'Open Banking' environments have led financial institutions to revisit their services and explore APIs. Find out how APIs work.





**Digital Unplugged: Regulation: Challenger or Accelerator?** 

Regulators are becoming increasingly interested in financial technologies and their impact on banking. We explore the role they play in both addressing the risks and driving innovation in the industry.





New digital trends promise to transform the way industries work, communicate and collaborate. This is especially true in financial services where emerging technology is simultaneously driving change in business models and client needs. But how do some of these innovations actually work and how can they create opportunities? Our Digital Unplugged series sheds some light. Enjoy Album No.2.

Visit: Digital Unplugged Campaign page Connect: <a href="mailto:digital.unplugged@db.com">digital.unplugged@db.com</a>

Digital Unplugged

### UNFILTERED EXPERT VIEWS





Don't miss out...

Stay up to date with the latest digital trends in these short snippet videos.

Track 1: Digitalisation in Asia, Data Science, Innovation Labs

Track 2: Big Data for Corporates, the Internet of Things, Open Banking & APIs Digital Unplugged

Watch the compilation videos



# **Big Data for Corporates**

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# TRACK 01



### Data and the evolution of Business Intelligence

"In the new economy, driven by mobile and real-time services, more and more data is being produced.

Not only has the volume of data increased exponentially but the variety and velocity of data is driving the evolution of modern Business Intelligence and Analytics solutions. \$22.8bn is the global revenue forecast on Business Intelligence (BI) and analytics software by 2020<sup>1</sup>.

The Corporate Treasurer's journey towards centralisation, standardisation and automation continues to be important as it will result in reducing the complexity of fragmented data sources and siloed reporting solutions. The resulting standardisation will bring an added benefit of enabling the treasury function to leverage data as an asset and enable strategic outcomes."

## Ways Data can enhance fraud and risk management

"New applications of data include:

- Combining historical cash flow information with real-time payments and receivables data which would significantly help the treasurer to plan their cash flow and funding needs.
- Behavioural analytics to enhance risk management. For example -analytics can help corporates to detect counterparties that are potential credit risks. Analytics tools are able to identify subtle changes to buying and payment patterns, and link them to potential increased levels of financial stress or default.
- Fraud detection big data capabilities can support the identification of unusual patterns that can help to detect and prevent fraud attempts. This is particularly critical as we view cyber-fraud as an emerging global threat."

### How/Corporates can benefit

"Many banks, including Deutsche Bank, are building up data science and analytics capabilities.

Data is a critical foundation of our digital strategy and our approach is to partner with our corporate clients to explore ways to leverage the power of data to achieve strategic business outcomes.

Opportunities include:

- Behavioural analysis of payment and collection transactions to support identification of inefficiencies, anomaly detection and payment network transparency.
- Analysis of account activity, cash flow and cash concentration structures to achieve an optimised account structure.
- Leveraging predictive analytics to aid liquidity planning and cash flow • forecasting.

Many corporates are still on a journey to harmonise their various Enterprise Resource Planning and Treasury Management Systems so that data is not fragmented and silo-ed. There is an opportunity for corporates to work leverage their bank's data and analytics platform solutions to support their strategic goals."

# The Internet of Things

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## TRACK 02



# In 2025: 100 billion connected devices

# 02

"By 2020, there will be almost 31 billion devices worldwide connected to the internet. This growth is exponential, and we will see more than 100 billion connected devices by 2025<sup>2</sup>.

Examples of these connected devices include self-driving or connected cars transmitting information between each other, refrigerators reordering food or commercial drones delivering packages autonomously anywhere. The opportunities are endless.

This is known as the 'Internet of things' – the interconnection of devices embedded in everyday objects."

# How to make a dumb object smart

"The 'Internet of Things' makes a formally 'dumb' object 'smart', and provides an unimagined level of personalisation and insights, through data, to clients.

That means that clients and their experience are at the centre of development of new services.

Amazon Go is a good example – their store is partially automated, with customers able to purchase products without using a cashier or checkout stations. Customers can just grab their order and go - all thanks to IoT technology combining sensors, cameras and a smartphone application.

This is one of many innovations in the retail field and the IoT market is expected to continue to grow enormously - up to \$561 Billion by 2022<sup>3</sup>."



# Interconnectivity creates new business models

"What does this mean for corporates? Why is hyper-connectivity something to look into?

The movement towards automation and interconnectivity between machines and devices will enable completely new business models and products around the value chain of clients. This means there is an opportunity for financial services embedded in these commercial transactions.

For instance, banks could be directly plugged into the processes and production chains of their clients. The IoT would allow banks to receive live updates from a client's production process, they could then use this data to offer tailored products in real-time.

For example, the data the bank receives indicates changes in production parameters such as machine usage or health. This could immediately be reflected in the financial offering to the client. The bank would be able to update the client's credit score in real-time and optimise their financial situation. The bank could totally automate regular data requests from the bank to the customer and become super-responsive to their needs."



# Applicability in Financial Services

"The Internet of Things has the potential to massively reduce manual processes that cost a lot of time and money. Furthermore, by accessing real-time information of a company's assets, the bank can have a better view on its performance.

In the transaction banking space, that means new cash management solutions. For example, allowing cars and small devices to authorise payments autonomously for services. Also, when it comes to cybersecurity and fraud, ensuring that the client is always protected from outside attacks."



# **APIs & Push Payments**

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### TRACK 03



## **Real-time** treasury

# 03

"The payments industry is undergoing a significant and rapid change across the globe. Be it real-time payments in Australia or the US, mobile wallets in China, the Unified Payment Interface initiative in India or the move to open banking through PSD2, the Payment Services Directive in Europe, change is everywhere.

Innovations in financial services are paving the way towards real-time treasury.

Traditional B2B businesses are looking to enter the B2C market and are increasingly focusing on end consumer demands who expect a better user experience, as well as control over their own data.

These demands, combined with new regulations and emerging technology, have created a more competitive landscape with an enhanced focus on client experience."



## What are **APIs?**

"PSD2, and the demand to create an 'Open Banking' environment, have led financial institutions to revisit how they provide their services. As a result, new payment solutions are being developed, facilitated by APIs.

APIs, short for Application Programming Interfaces, are a technology solution that enables one system to connect to another. APIs act like a messenger that takes your request to a system and then takes the response from the system back to you.

APIs have played a key role in some of the new developments in the market. In fact, the use of APIs has increased 4 times since 2012 and has doubled since 2014<sup>4</sup>.

For example, the Unified Payments Interface in India is a payment system that allows money transfer between any two bank accounts and leverages APIs provided through the India Stack."

### API enabled Push Payments

"Push Payments are an alternative payment method to credit or debit cards and are facilitated by APIs.

How does it work? A new payment button on a merchant portal would allow a payment to be initiated from a customer's bank account and directly credit the account of the merchant.

For example, Deutsche Bank is piloting a Push Payments solution for the airlines industry. With PSD2, IATA, the trade association for the airlines, created a new online payment method with Deutsche Bank as the third party payment provider collecting 'push' payments from the passenger's bank to the merchant's bank account.

For merchants, this means greater cost savings, enhanced security, reduced risk of fraud, and improved collection and working capital. In combination with SEPA Instant Payments, push payments will build the foundation for real-time treasury, and APIs make this possible.

This current initiative in the airlines industry is one of many examples where APIs and push payments solutions are bringing real-time treasury to reality."

# Regulation: Challenger or Accelerator?

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## TRACK 04



## Regulators increased interest in technology

# 04

"Over the last few years, regulators have become increasingly interested in financial technologies, and their impact on banking. This is hardly surprising, given that more than \$115 billion were invested into FinTech ventures alone last year<sup>5</sup> and the banks actively deploy these companies' new technologies for their everyday business operations.

It's for these reasons that regulators are playing a significant role in both addressing the risks and driving innovation."

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# What are the risks?

"There are a number of risks associated with innovation in the financial services industry:

- The increasing frequency and sophistication of cybercrime is set to cost the economy \$2.6 trillion by 2019<sup>6</sup>. This has been a key driver for the development of cyber security standards for banks around the world.
- Whether it is a requirement to conduct strong customer authentication, or to perform fraud monitoring - as required by the second European Payments Services Directive (PSD2) – the overall aim of these initiatives to protect client data and money by enhancing banks' cyber security. Scaling up Europe's response to cyber-attacks is one of the objectives of the continent's Digital Single Market.
- Another set of regulations is directed at data protection. These address questions such as how can data be used? And where can it be stored? Enacted in Europe in May 2018, the General Data Protection Regulation marked a new milestone in this journey."



### How regulators are driving innovation

"Regulation isn't all about mitigating risk. Regulators certainly recognise that new technologies and FinTechs have the potential to drive significant innovation in the banking sector and they are doing significant work to support this:

- Open Banking initiatives are spreading across the world. PSD2 in Europe and open banking in the UK allow third-party providers to securely access client data. These initiatives aim to support competition, as well as drive new product development and the provision of an enhanced service to banking clients.
- Distributed ledger technology has also been on regulators' radars for a few years now, with the European Union introducing the Blockchain observatory and Forum this year to accelerate blockchain innovation and the development of the blockchain ecosystem within the EU.
- Regulators have also played a role in the widespread adoption of sandboxes and a number of other initiatives that aim to foster and support innovation in the financial ecosystem. These initiatives include the EU Capital Markets Union and Single Digital Market and the European Commission's FinTech Action Plan."

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# Collaboration & innovation

"There are many issues that regulators need to consider when it comes to financial technologies and FinTech firms. And with these becoming an integral part of the banking ecosystem, regulations can be a driving factor for their secure and successful development.

In this journey, collaboration between the regulators and the market will be key to achieve a thriving and innovative banking industry."



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