



**EMERGING PAYMENTS**  
— ASSOCIATION —

# MONETISATION OF DATA

**Report from the EPA's  
Project Futures Workshop**

October 2018

Sponsored by



**T**he purpose of Project Futures is to provide members of the Emerging Payments Association with insight and thought leadership on: new innovations and technological developments, emerging market trends, and the prospective future regulatory landscape in payments.

The Project Futures workshop in October 2018 addressed data monetisation and its transformational impact upon the new payments landscape.

The focus of the discussion was to explore the disruptive innovations and technologies that are or will be relevant in shaping and managing data, the impact that these innovations will have upon the payments ecosystem, and the social and commercial drivers which will enable these innovations to flourish.

Our discussions were scoped to consider payments product developments and enabling technologies that are already visible or emerging, and which therefore have potential to offer tangible benefits at scale over a 3-5-year horizon and beyond.

**The half-day workshop was structured around three sessions on:**

- Data markets, value cycles, and evolving business models around data monetisation
- The role of disruptive innovation in identity & standards for data monetisation
- The value of monetised data to consumers, SMEs and society

This report is one of a series of four produced by the Emerging Payments Association in 2018. It highlights the content of the discussion, the insights derived and the conclusions drawn.

These conclusions highlight the direction of travel for the payments industry as it develops and how the ecosystem will fundamentally change in light of new technologies and innovations.

Thank you to the Benefactor behind this project, FICO, the facilitators, Inglis Jane, the report author and EPA member, Huntswood, and the workshop participants. ■



# Data markets and value cycles

## The value of data

The value of data to business is infinite. It can enable a business to improve revenue streams, increase efficiency within internal business process, enhance its supply chain, and increase the effectiveness of its marketing outreach and awareness. Everything that an individual does has associated data and information around it.

There is a sense within digital service providers of a distinction in consumers' minds/brand awareness between 'cool' companies and 'corporate' companies. Corporate providers include many long-established businesses (e.g. established banks), but acknowledging that internet companies can transition from cool to corporate as they age and their user base ages – for example Facebook growing up with its user base, becoming the social medium for adults but not teens.

'Cool' companies are more trusted by their users for

provision of digital services, and therefore have freedom to use data more broadly. 'Corporate' companies will find it harder to monetise data, and resist pressure to operate 'at the edge' of new trends and compliance frameworks. This can in turn lead established corporates to seek acquisitions of 'cool' companies to open up opportunities for broader usage of data.

Established, incumbent banks can respond to the threat of data driven 'cool' digital brands in a number of ways. Banks can acquire smaller digital companies, and seek to maintain distinct brands under the group umbrella.

Larger players can take a role leading the industry policy debate on responsible behaviour, seeking to limit the freedom of movement for digital only companies particularly as they grow and become more prominent. Established banks can emphasise trust and stability, and their

positioning as low-risk and high on compliance. High-profile failures in banking platform conversions for smaller/challenger banks could lead customers to have less trust in smaller players. Across the general population, people are becoming more aware of the data they are sharing and its potential value – for example health information, or payments details.

But this shift is gradual, giving a long lead time for the majority of population to move. At first hand, a consumer does not necessarily consider or know the value held by their data.

The value that a consumer sees from the use of data is the 'convenience value'; the convenience of having integrated overlay services in apps that improve their lifestyle, choice selection, and quality of life. In the trade-off of providing data in return for free services, customers typically undervalue the data they are sharing or giving access to. ▶



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**“The value that digital services can offer is subject to demographics. A consumer who lacks digital access, such as a lack of internet connectivity or the absence of a connected device, would not reap the benefit of data-informed value-added services.”**



and monetised is not a consideration by the consumer, and they will simply appreciate the convenience of the product.

When expecting free services, consumers do not appreciate the cost of processing data, of providing a robust, compliant and secure data-driven service: costs lie in IT systems and data centres; data security & physical security; and regulatory compliance for handling data.

Free services can inhibit competition; the absence of a ‘price’ means the absence of a main driver for consumers to switch services over the next decade the potential certainly exists for digital data brokers to provide a service for consumers to extract fair value for the data they make available.

They sign up for ‘free’ services because they are free, whether or not they intend to use them heavily; if the service had even a small charge, sign up rates would drop significantly. If consumers valued their data more accurately, they would be more discerning about the services the sign up for in return for data sharing. Furthermore, the idea of value comes into play when discussing privacy. Consumers perceive the value in their data when there is an impact, such as a service

outage or a data breach. In the latter case the more private the data leaked, the greater the perceived loss by the consumer.

Free in-credit banking does encourage the value of data to be perceived, until there is an obvious cost such as those associated with being overdrawn or through foreign exchange fees.

The concept of a financial value of ‘free’ services is not considered by the consumer; how a user’s data is commodified



**“Digital marketing is more valuable for service providers than traditional marketing channels, due to targeting of customers”**





device, would not reap the benefit of data-informed value-added services. Similarly, it could be argued that younger demographics have a lower perceived value of their data. This evident in their lack of loyalty to particular service offerings and their willingness to use a multitude of digital services – as long as they are free.

Digital marketing services will not entirely eradicate traditional marketing services. The value of traditional marketing, or rather the potential for traditional marketing to adapt in an eCommerce world, is recognised by the larger eCommerce entities. This is evident in Amazon’s push to launch Amazon Go – an Internet of Things inspired retail outlet – to create a physical customer experience and with desired growth plans to expand to 10 locations by the end of 2018, growing to 50 in major city areas by 2019.

The viewpoint of various workshop attendees is that this will enable such organisations to acquire the holistic consumer data – capturing both their online and offline data. ■

A risk here is that the ‘digerati’ who ‘get it’ will access the higher value and security from commercial data broking, and a digital divide issue arises where majority of the population stay in the environment of casually sharing data without securing fair value for that data.

### Digital Marketing

Digital marketing is more valuable for service providers than traditional marketing channels, due to targeting of customers, responsive medium enables feedback/measures in a short turnaround; lower distribution costs for marketing communications; ability to amend messages quickly; ability for ‘A-B testing’ of different approaches/messages. The risks/downside of digital marketing are the volume / clutter that users receive (due to its low

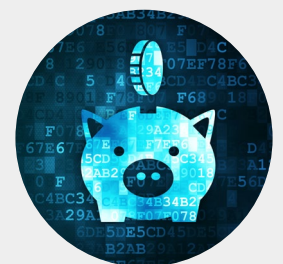
cost), and the low barrier for customers to respond which (paradoxically) can lead to less committed customers showing an initial interest in a product.

Digital marketing services should lower customer acquisition costs. The effective utilisation of data should reduce friction in business processes and the amount of resource required - whether through materials or through personnel.

In the case of the latter element, businesses have already embraced the concept of automation – whether through the use of AI and machine learning in providing enhanced KYC checks and fraud detection, machine automation in the production process, or even automation within the customer service process (i.e. complaint bots).

Digital marketing services are more valuable to the consumer than those offered through traditional means. The data proposition has increased the volume of choice available for the consumer and has evoked an evolution in how products are advertised and marketed. However, it should be noted that analytics drawn from consumer behaviour and spend may not result in a greater choice – potentially tailoring the user experience around the ‘known knowns’ that will cause consumer spend rather than providing diverse options.

However, the value that digital services can offer is subject to demographics. A consumer who lacks digital access, such as a lack of internet connectivity or the absence of a connected



# The role of disruptive innovation in identity & standards for data monetisation

## Standards

The workshop discussed the dynamics of standards being defined in an innovation product/ service environment, and how the timings and benefits of standards is very directly linked to the stage of development or maturity of the emerging services. Technical and regulatory standards are recognised variously as a potential 'barrier' or an 'enabler', depending on context.

Disruptive innovation by its very nature is trying to do something by 'running away from the crowd' in some key components of the new service. If the disruption lies in underlying technology, then then standards are damaging our ability to do things in a new way. But if the innovation lies more in the business model and usage of data, the existence of standards may be at the heart of the ability to operate a disruptive service.

The impact of regulation and the role of the regulator in a data-driven economy is critical from a standards point of view. Standards are rarely defined and imposed by a regulator.

Rather, innovation occurs from standards emerging, from example, from industry trade bodies / associations where all participants are interested in growing the pie (for example GSM, 3G, 4G standards for mobile telecoms driven by the ITU); or standards can emerge from a leading player in the innovative sector who chooses to enable other organisations to participate in a value chain that it leads -

for example Android ecosystem for smartphone apps.

As new technologies establish some momentum in service development, there is the opportunity for standards to assist in accelerating the growth of participants in a new service value chain, whether as partners in the supply chain, or as competitors in the end user service.

Standards can also play a lead role in enabling ensuring a modular or layered approach in the technology stack (architecture) underpinning a service. This is seen in broadcast, telecoms, and increasingly in banking and payments, where the high investment in infrastructure networks/platforms is economically viable for only a few large-scale players, but where standard APIs can enable over-lay services to be offered by many end-user-service providers 'over the top' of the network infrastructure. Clearly the UK's Open Banking API standards fit into this area, seeking to have one set of API standards implemented across all ASPSP which makes it much easier for payment service providers to scale up their service across the infrastructures of many incumbent banks.

For payments infrastructures, the industry and regulators in the UK are judging that the time is now right to drive for greater standardisation of underlying payments infrastructures for inter-bank transfers, and thus enable greater innovation opportunities for service providers running payment services/ apps over these



infrastructures. The UK's 'new payments architecture' initiative plans to adopt ISO20022 as the principal standard for payments messages and transmission in the core infrastructure.

### Digital Identity

Digital identity services are seen by the workshop as vital in enabling a secure and trusted environment for digitally service providers with data-driven business models to thrive. A large proportion of fraud and financial crime in today's online environment is enabled by misuse or misrepresentation of identities. The group considers there are significant areas for industry to collaborate in establishing best practice guidelines or fully-enforced standards for digital

identity for banking/ payments services. This would span on-boarding, recurring customer checks, and checks specific to the point of payment initiation.

Digital identity can lead to greater services for the individual consumer and their wider network. There is big potential for digital identity brokers or digital identity providers. These would be commercially-driven providers of an assured digital identity. For example, when logging into your bank (or gas utility, or air-miles account, or telco/broadband account, or government benefits account) that provider would link real-time to an identity assurance provider whose role is to provide a high level of confidence to the service provider that

the person logging in is indeed the genuine account holder. By responding to millions of 'identity requests' each day, these identity assurance providers would have a viable pence-per-call business model. This model also has the benefits of concentrating identity management in a small number of competitive providers (e.g. a market for 6-10 players) rather than having personal identity-related information held by every single service provider across multiple sectors.

Banks need to be central in driving digital identity as they act as the data custodians - having an access to all consumer spending behaviour, including transaction volume, location, payee. ▶



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Banks are increasingly aware of the need to collaborate with FinTechs to offer better data managed services and provide enhanced in-app or overlay services for consumers.

Banks recognise that FinTechs can instil greater value in the payments process and the payments experience, sometimes acquiring FinTechs. However, this collaboration varies between geographical markets with the group highlighting that the Nordics have showcased more collaboration than the UK.

In respect of artificial intelligence, or adaptive intelligence systems, the group recognised the risks of Ai being a driver of monopolistic powers in the data industry. Successful early providers of AI or algorithm based services, will benefit from scaling up

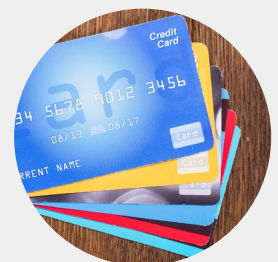
a user base, which in turn enable it to access more data on user preferences and behaviours. This will improve the insight and value from their AI engines, in turn attracting more users. This is less about standards, more about the market power available to successful early movers.

A key area of good-practice, requiring strong regulatory oversight, lies in the balance between human judgement and machine decisioning. The GDPR for example gives people the right not to be subject to solely automated decisions, including profiling, which have a legal or similarly significant effect on them. This balance needs to be addressed in all areas of machine-driven decisioning to ensure the fair treatment of customers/ citizens.

The workshop also considered the critical

role, in terms of power and potential scarcity, of data scientists who create and train the algorithms that AI systems use.

The input of a few people can be scaled up to impact millions of customer outcomes, requiring the risks to be recognised and fully overseen. ■





# The value of monetised data to consumers, SMEs and society

**T**he viewpoint of the workshop is that, as consumers, people value time savings disproportionately higher than they value the data they are sharing. Whereas businesses are strongly aware of the value and risks of data, consumers need to think more about the money other people can make from their data, and the reputational or fraud-driven damage that others can do with your data.

For businesses, data-driven business opportunities lie in many areas. Adapting legacy ways of approaching and considering data, and reducing the easiness of organisation to be risk-averse in its approach to data, can be highlighted as the most important obstacle to overcome.

The digital world has opened up new opportunities for SMEs, such as the Amazon Marketplace. Digital marketplaces are how SMEs are now engaging with consumers, rather than a typical brick-and-mortar operation, and are utilising the data analytics tools provided. Businesses can consider how their service to customers can be enhanced by

better understanding of customer usage patterns, for example. Harvesting and analysis of operational performance data can open up opportunities for significant process cost savings, which can be fed back into a stronger competitive pricing position or greater profitability.

However, despite the quality and breadth of data analytics tools offered by such market places, the scope of the benefit has barely been touched upon by SMEs. ▶



Small SMEs are only now exploring the benefits of data analysis and are lagging behind the big players who embraced the benefits of data.

Although, it is important to highlight that the access to infrastructure for data analytics was previously costly and not tenable for SMEs.

The democratisation of data and increased access to analytics tools have enabled SMEs to flourish and to reap the benefits previously available to the larger incumbents. At a social level, there are clear 'greater goods' from data sharing, for example in city planning, traffic planning, health research – provided of course that the users' data is anonymised.

Through the Internet of Things, operational systems and services can be tuned up or re-engineered in light



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of larger volumes of data available bringing service-level benefits or cost reductions for consumers/end-users. For example, connected in-vehicle black-boxes can drive down the cost of insurance for careful drivers. Fit-bit style of lifestyle data gathering can lead to more accurate advice or intervention by medical professionals.

For consumers users, participants reflected on a range of ways that digital services, and data-driven businesses, have impacted user groups. For working age people, there is value in the convenience and immediacy of dealing with multiple tasks, while also sensing that the 'slack' has been taken out of people's lives – that people can now fill any spare minute doing a task rather than slowing down. In these groups, there is a readiness to share data in return for convenient digital services. For other user demographics,

the retired for example, there is a greater reluctance to share data linked to having more time available to apply to required tasks.

Data-driven businesses understand this and emphasise their relevance to time-challenged customers for whom immediacy is a big factor. ■



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# About FICO, Benefactor of Project Futures

FICO (NYSE: FICO) is a leading analytics software company, helping businesses in 90+ countries make better decisions that drive higher levels of growth, profitability and customer satisfaction. The company's ground-breaking use of Big Data and mathematical algorithms to predict consumer behaviour has transformed entire industries. FICO provides analytics software and tools used across multiple industries to manage risk, fight fraud, build more profitable customer relationships, optimize operations and meet strict government regulations.

## With thanks

- To the EPA Benefactor of Project Futures, FICO
- To the Project Lead of Project Futures, David Core at Bacs
- To the facilitator of the workshop, Nichola Hickman at Inglis Jane
- To the author of this bulletin, Andrew Ducker at Hunstwood
- To the participants of this workshop listed below

David Core (Bacs) is Project Lead of Project Futures. The workshop was facilitated by Nichola Hickman of Inglis Jane. This report was produced by Andrew Ducker from Huntswood and Thomas Connelly from EPA.

The EPA would like to thank the Benefactor of Project Futures, FICO, for their backing of the project, its workshops, and in helping identify technology and future innovations that will spark a dynamic change for both businesses and consumers.

## To work with us to create a better payments industry in future...

To join our Project Futures (members only) contact:

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To find out more about joining the Emerging Payments Association, contact:

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## Organisations represented

- Answer Digital
- Bacs
- Barclays
- Consulting Stream
- Emerging Payments Association
- Entersekt
- Ethoca
- FICO
- Huntswood
- Inglis Jane
- Lightpay
- Marqeta
- Prepay Solutions
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