Shifting values:
An introduction to the value of data in the digital economy

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A word from our sponsor

As a global leader in People Based Marketing we, Merkle, are continuously challenged to utilise data and technology to drive value for consumers which in turn drives value for our clients.

However, this landscape is constantly changing - technologies, data sources, consumer influences and regulations to name just a few.

Because of this constantly evolving landscape it is key for organisations to think laterally and become truly adaptive in order to grasp the opportunities that surround them.

This brings with it the need for more cross-industry collaboration and with the Value of Data campaign, the DMA are driving a collaboration which can only serve to help all parts of the data, digital and value jigsaw find their place.

Steve Farquhar
Commercial Director, Merkle

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/ About the authors

Chris Speed

Chris Speed is Chair of Design Informatics at the University of Edinburgh where his research focuses on the Network Society, Digital Art and Technology, and The Internet of Things.

Chris has sustained a critical enquiry into how network technology can engage with the fields of art, design and social experience through a variety of international digital art exhibitions, funded research projects, books, journals and conferences.

At present Chris is working on funded projects that engage with the flow of food across cities, an internet of cars, turning printers into clocks and a persistent argument that chickens are actually robots.

Chris leads the Design Informatics Research Centre that is home to a combination of researchers working across the fields of interaction design, temporal design, anthropology, software engineering and digital architecture, as well as the MA/MFA and MSc and Advanced MSc programmes.

Ewa Luger

Ewa Luger is a Chancellor's Fellow in Digital Arts and Humanities, a Fellow of the Alan Turing Institute (Ethical AI by Design: Formalising an HCI agenda), a consulting researcher at Microsoft Research UK (AI and Ethics), and the Research Excellence Framework co-ordinator for Design (ECA).

Her work explores applied ethical issues within the sphere of machine intelligence and data-driven systems.

This encompasses practical considerations such as data governance, consent, privacy, explainable AI, and how intelligent networked systems might be made intelligible to the user, with a particular interest in distribution of power and spheres of digital exclusion.

Ewa's current research interests include ethical/intelligible AI, human-agent/human-data interaction, consent and ambient systems, and voice as platform, along with its various privacy and ethical implications.

Academic partners

THE UNIVERSITY of EDINBURGH   design informatics   BayesCentre

/ Introduction

The Value of Data campaign has been created to help elevate and champion the role of data - from the classroom to the boardroom - and help organisations responsibly deliver value to their customers.

In partnership with the University of Edinburgh, we will create an engaging, navigable roadmap through a challenging ethical and legal landscape to allow bold, innovative and data-led approaches to customer engagement to thrive.

Values are becoming more and more important in customer decisions regarding which brands they engage with and which brands they don't.

This is happening at a time when we're producing more and more, and capturing increasing amounts of data across all of the interactions we have on a daily basis.

Companies are gathering this data and storing it with the promise of providing us with great experiences and services. But are they delivering on this promise?   I m

If so, how many brands could you say are delivering on it? And does it make a difference if what they're offering ties in with your personal values as an individual?

The DMA is launching an exploration into the 'Value of Data'to find answers.

We want to ask difficult questions about where the 'value' of data really lies. In the data? Its quality, quantity etc., or in the way we use it to create better outcomes for customers?

Also, by having better'values' could organisations deliver better outcomes to their business, their customers, and society at large?

Join us on this journey and help unpack the true value of data to help us develop better services, create better experiences and evolve into better societies.

We hope you'll find some of the examples laid out in this paper, by the ever ever-thought-provoking Chris Speed and Ewa Luger, a fascinating introduction to this multifaceted topic.

Firas Khnaisser
Head of decisioning, Standard Life
Chair of DMA Scotland

/ Letting go of control

Technology and marketing are constantly evolving.

And as they evolve, the definition and creation of value in this data-driven economy is something that a single stakeholder can no longer control.

The development of globalisation through the Twentieth Century led to a form of 'linear value engineering; commonly known as a value chain.

Carefully designed and under constant review, industries across every sector designed their business models to deliver products and services within tight margins of economic value.

Processed, manufactured and pushed to market, it was ad verti sin g's job to attract people's attention and encourage them to place value on a product while forgetting or ignoring the ethical values that led to its production.

Conversely, equipped with the internet, customers are searching for products and services that allow them to achieve their goals and match their own ethical values.

Described as a pull economy, people are not only using money to buy things that they value according to an item's utility, they are using data to co-create value according to social, political and environmental factors as online shops become connected to social media platforms.

It's crucial as the value of a p roduct is no longer defined by what it costs in monetary terms, but by the values that a product represents as data in social media platforms like Facebook, Snapchat, and Instagram.

Do companies properly understand this changing flow of value in the digital economy?
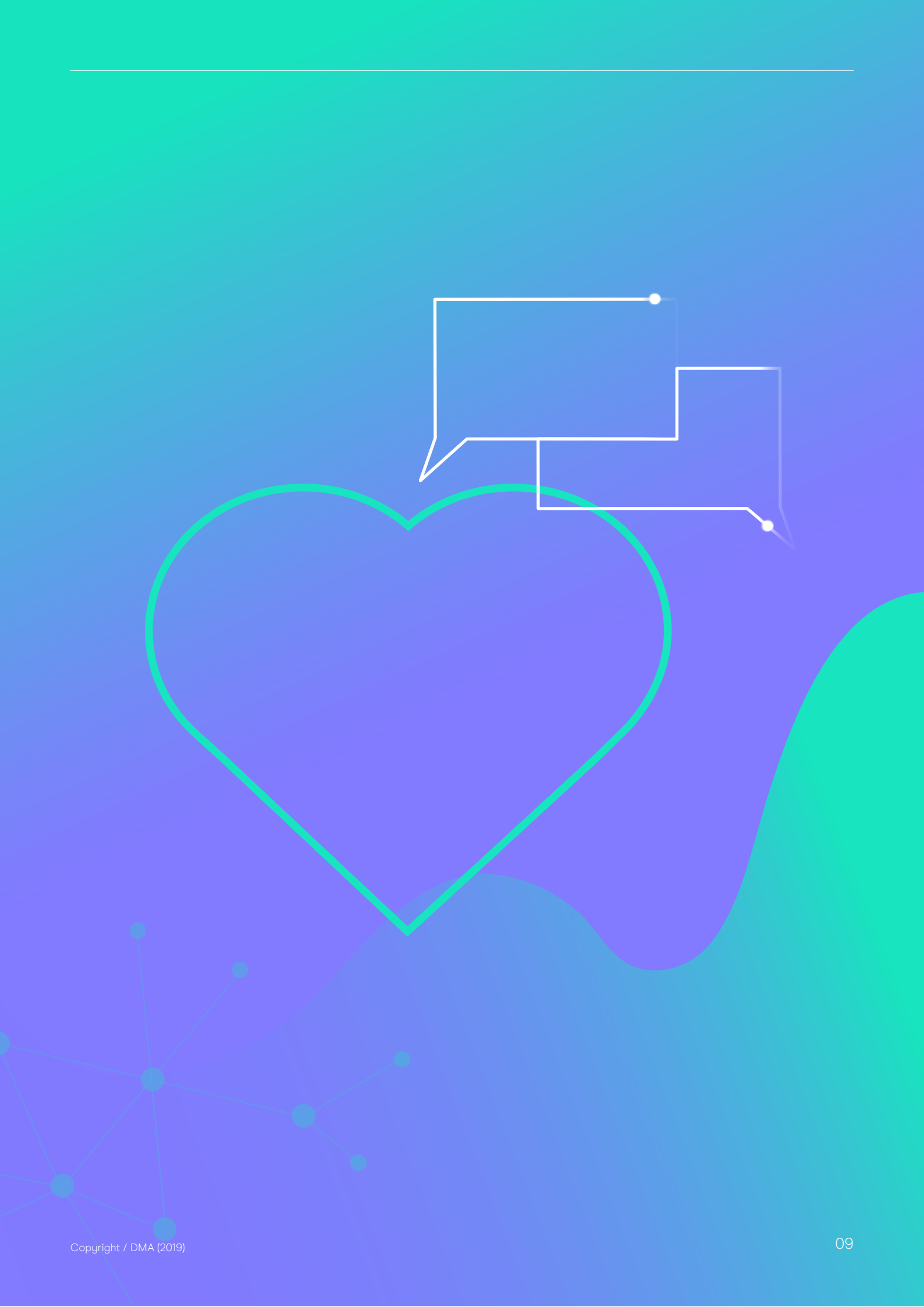
/ Horizontal thinking

While we can no longer control value, we can work to understand the flow of data.

Understanding this flow can help better support an organisation's ability to anticipate how the values associated with products and services can be better articulated.

Our relationship with online marketplaces is not only defined by what we type into a search box, but through the myriad of data connections that exist between our PC's, smart phones, Internet of Things devices and the software applications that they support.

In the digital economy, the vertical sectors in which linear value chains operate become traversed horizontally through the linked data exchanged between the devices and apps that we use.

In these horizontals, we get clues to what customers really value in order to get particular jobs done, and gain insights into the values they care about.

Contemporary marketing theory tells us that while people believe they want a product, the value of the product is better understood as a service that is able to account for emotional, personal and social dimensions, as well as functional.

Having coffee has evolved from a refreshment transaction and is now bound up with many social, environmental and health values.

Data driven technologies have been effective in trying to understand this change in value.

However, choosing to gather data involves significant responsibility; responsibility that many organisations are only just beginning to understand.

How can we help to facilitate understanding?

/ From value chain to value constellation

Value in the digital economy can be understood to be co produced.

Data now travels between the producer, the supplier, and the consumers (and their friends), bringing a host of new values into play.

Mediated by algorithms and involving potentially hundreds of parties, the term 'value chain' has now largely been superseded by the concept of a value constellation.

A value constellation describes how value is entangled within a complex network of social and environmental connections.

It is critical for organisations to recognise the role of co-created value within networks.

As custodians and processors of personal datasets, they can help both the consumer and the producer to identify the value of a product or service that it is commensurate with social, environmental and political values.

Acknowledging that your organisation is working within a value constellation offers an opportunity to better understand how data flows.

It also calls attention to the need to take responsibility for the safeguarding of personal customer data.

How do we make sure businesses operate in accordance with the values that matter to everyone in the constellation?

/ Designing value

The value of a service is constantly mediated within a value constellation.

That is, according to algorithms and check-sums that recalibrate the network to sustain the value proposition associated with a product, service, or experience .

Such opportunities require reframing what designers think they are designing - not products, not services, but the propagation of value.

This propagation is reliant upon data. Not just the collection of data, but the effective generation, recording, curation, processing, dissemination, sharing, and use.

Where once the use of data was poorly policed, the advent of the EU General Data Protection Regulation (GDPR) and the UK Data Protection Bill have laid out a detailed set of conditions and created new data subject rights that broaden the responsibility of any company seeking to mine data for insights or economic gain.

Any company operating in the digital economy has a great deal to consider in order to make sure its handling of data for the co-creation of value with its customers is done in a trustworthy manner.

Are businesses aware of everything they need to protect?

/ Rethinking our ethical solutions

The associated value construction is now extremely complex.

There are multiple actors, interests and distributors, giving rise to a new problem: how do we identify morally good and bad behaviours and solutions for handling all of this?

It was, in many ways, easy to identify risk and harm when value transactions were easy to map; one transaction building upon the other.

However, where once there were value chains - and therefore clear points at which ethical solutions might be embedded - there are now complex networks within which value is created, distributed and co-constructed in ever-changing ways.

Value constellations, in which the flow of data is the primary 'currency', are becoming more complex than ever before.

The burgeoning complexity of connections across the various internets mean that it is no longer possible to trace the source of data, and transparency is not possible.

We are also no longer dealing solely with human actors, but rather, with ever-changing and informal human-agent collectives (HACs), where value co-production occurs not as product of human-human or human-object transactions, but also human-agent.

This value production may happen multiple times, over various temporalities and multiple legislatures and socio-cultural contexts.

What unprecedented ethical issues will this complex web give rise to, and how can we help businesses to navigate these complicated relationships?

/ The ethical use of data

Data is the bi-product of our lived experience.

Data regarding our energy consumption, shopping behaviours, preferences, social relationships and biometric fingerprint can now be drawn together to construct a relatively accurate picture of our everyday lives.

This has implications for privacy, identity and whether we find ourselves included or excluded from the socio-economic sphere.

This raises issues of ethics, rules which govern our moral conduct, to the fore.

Value constellations problematise our approaches to the ethical use of data as they remove much of the predictability inherent in the value chain.

With the loss of the linear 'chain' comes the loss of a guarantee that data is 'machined' with the same ethical, social, and even economic values at every point in the constellation.

This presents significant challenges to civic, commercial and cultural business models and questions the ability of any organisation to assure its stakeholders that the value of data is commensurate with the values of all of its communities.

The potential insights generated from data can have enormous positive impact.

How do we make sure data is anonymised while retaining its value for businesses and customers?

/ About the campaign

The Value of Data

A campaign born in Scotland - and led by DMA Scotland – we join forces with partners and advocates across the UK to reshape the understanding of the true worth of information.

We want to elevate and champion the role of data through this campaign – from the classroom to the boardroom - and help organisations responsibly deliver value to their customers.

If we can put data on the balance sheet people might start to appreciate it more and begin to look after it. There could be real behaviour change.

We will create an engaging, navigable roadmap through a challenging ethical and legal landscape to allow bold, innovative and data-led approaches to customer engagement to thrive.

And we'll do it all with a future-focused, nurturing approach to local and young talent.

/ Campaign sponsor

Merkle

Merkle is a leading data-driven, technology-enabled performance marketing agency. We specialise in the creation and delivery of unique, personalised customer experiences that drive performance across all platforms and devices. We call this 'people-based marketing' and, with over 25 years' experience, we are proud to be recognised as a global leader.

Performance marketing focuses on creating testable campaigns with measurable outcomes. Results are judged on how well a campaign has performed, the value of your customer relationships and the loyalty earned against your marketing investment. But what sets us apart is our truly customer focused approach. We employ individualised targeting and personalised messaging that works as a key driver of performance. It takes personalisation to another level, delivering unique and tailored customer experiences in real time.

Marketing campaigns optimised to the individual level - simple to understand, not so simple to achieve.

But that's what we do.

We help brands transform their marketing into people-based marketing that works. Using a combination of first- and third-party data, we create, target, and measure the highly customised customer experiences that not only drive immediate results in the form of today's response and conversion, but also build on tomorrow's increased loyalty and customer value.

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/ About the DMA

The Data & Marketing Association (DMA) comprises the DMA, Institute of Data & Marketing (IDM) and DMA Talent.

We seek to guide and inspire industry leaders; to advance careers; and to nurture the next generation of aspiring marketers.

We champion the way things should done, through a rich fusion of technology, diverse talent, creativity, insight – underpinned by our customer-focussed principles.

We set the standards marketers must meet in order to thrive, representing over 1,000 members drawn from the UK's data and marketing landscape.

By working responsibly, sustainably and creatively, together we will drive the data and marketing industry forward to meet the needs of people today and tomorrow.

www.dma.org.uk

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