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# Opinion Piece

## The consumer data revolution: The reshaping of industry competition and a new perspective on privacy

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### Abstract

Competitive advantage for businesses is now to be found in the use of data to understand customers. In this new data age, however, the individual is gaining a new power to demand a fairer share of the economic value of personal information. This paper considers how this shift will play out in the commercial arena and what businesses need to be willing to do in order to benefit.

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### Competition for control

### Towards the data revolution

For well over 100 years, market forces have been building and pushing us towards the brink of a revolution. This revolution will not be fought over land, manufacturing, distribution or information supremacy, but over data — specifically, personal data and who has the rights to it, that is, who has the right to define, collect, mine, refine, derive, own, control and monetize it.

As the data revolution unfolds, no one will be left untouched. Skirmishes over the control of data will be waged by every actor in society, business, government, industry and consumer activist groups, and, for the first time, individuals. They will all join the fray and compete directly for control and ownership over data. New innovation and privacy practice frameworks will evolve and enable individuals to take control over and compete directly for the ownership, use and monetization of their data.<sup>1–5</sup> There will be winners and there will be losers and rest assured that, once the dust settles, the social, physical, digital, commercial and regulatory landscapes around the world will be forever changed, not to mention our collective understanding of data and privacy.

### Living in a world of data

We live in a data-filled world. According to Eric Schmidt, former CEO of Google, society generates as much data every 2 days as it did from the dawn of civilization up until 2003.<sup>6</sup> As the world becomes increasingly

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## Impact on industry competition

connected, industry pundits foresee that the rate of data growth will be exponential.<sup>7</sup> By 2020, there will be over 50 billion connected devices in the world, generating 13 quadrillion connections to the internet (ie, the figure 13 followed by 15 zeros), and by this time society will have produced over 40,000 exabytes of data<sup>7,8</sup> — 8,000 times all the words ever spoken by human beings.<sup>9</sup> This tsunami of data on the horizon, once it reaches the shore, will wash over every industry worldwide and change the landscape of business, how it competes, and the relationship businesses have with individual consumers.

## From manufacturing to distribution

Over the last hundred years, the basis of corporate competition has changed. In the first half of the twentieth century (1900–1960), companies competed with each other for manufacturing superiority. Companies such as the Ford Motor Company used manufacturing supremacy to compete and maximize profits, while individual consumers had access to quality goods at competitive prices. This period is known as the manufacturing age. Over time, manufacturing in most industries became commoditized, and in the 1960s companies began to seek competitive differentiation through distribution and the application of modern-day marketing.

In this, the distribution age, industry has profited by economies of distribution, while consumers have benefited from gaining awareness of new offerings through marketing and access to goods and services through local retail. However, after the introduction of the internet in the 1990s, distribution as a competitive advantage started to give way to information management, and information supremacy became the driving force of competitive advantage.

## Dawn of the data age

It was during this age, 1990–2010, that Google, Facebook, Amazon and other information masters became the leaders of industry. However, starting from 2010, the information age, like the manufacturing and distribution ages before it, has been giving way to a new age, the data age. In the data age, data dominance is the basis of industry competition and advantage. According to Forrester Research, data is ‘the only source of competitive advantage’ going forward.<sup>10</sup> Sir Martin Sorrell, the CEO of WPP (one of the world’s largest marketing holding companies), agrees: ‘Our competitive set is no longer Omnicom and IPG and Publicis [the other big holding companies]. It is Nielsen and GfK. It’s the data companies’.<sup>11</sup>

## Data becomes an asset

Data will be the basis for industry competitive advantage going forward. However, the data age is different in one critical way from the ages that came before it, that is, a new economic actor, the individual consumer, is rising to compete alongside industry giants for the control and monetization of data, more specifically of their own personal data.

This process will take years, if not decades, to fully come to fruition. It will require new innovation and changes in social, economic and regulatory norms. However, it is coming. As personal information becomes a currency, it will become as precious as other limited resources and managed as such, since it is the gateway to the individual’s attention and time. It will become as precious as gold, silver and other assets.<sup>12</sup> If companies want to compete successfully in the data age, they must learn to

collaborate and share data with individual consumers, commercially engaging with them as they would any vendor.

### The rise of the individual consumer

#### The age of data dominance

In the data age, everything is becoming connected and everyone is beginning to recognize the value of data of every kind. In fact, data has become a currency, a medium of exchange. Hundreds of millions of people around the world have been, knowingly or unknowingly, exchanging their data in return for access to subsidized or free services, such as the internet, search, social media and email, digital television and radio, games, mobile connectivity, access to content and commercial rebates, discounts, and offers. However, it is unclear how equitable this exchange is and for how long consumers will allow it to go on unchecked.

### Data-hungry businesses

Brands, retailers, financial services, health-care providers, data brokers, and media and advertising companies have been and are harvesting and analysing unprecedented amounts of data in order to target more effectively and anticipate individual consumer needs, to develop and improve their products and services, to plan for the future, and, in the case of data brokers, to sell access and insight about consumer groups or individual consumers to data-hungry businesses.

Many companies are not only capturing and exchanging an individual consumer's name and address, but they are also starting to mine, refine and derive past and real-time locations, contacts lists, preferences, moods, device type and usage, and online and off-line behaviour such as browsing, search, social media, check-ins, likes, purchases, financial, health care, driving, walking, store visits and related behavioural history, and so much more. They are also using the collective data set to predict customer need. For example, Target — a leading American big box retailer — by analysing purchase patterns can accurately predict whether a shopper is female and whether she is in the first trimester of pregnancy. This type of insight can help Target earmark the consumer and potentially influence her future purchasing patterns.<sup>13</sup>

### Consumers lack control

The market for data, the data exchange marketplace, is predicted to bring an annual benefit of well over 1 trillion dollars a year in Europe alone by 2020.<sup>14</sup> Today, the individual consumer has little to no control or ownership of their personal data: how it is used, disclosures for use and, most importantly, an equitable share in the economics.<sup>15</sup>

But this will change. The time is nearing for the consumer data revolution. As is the case in nearly all revolutions, society reaches a point where the minority — in this case the individual consumer — demands a redistribution of wealth. Individuals are becoming more aware of industry data practices in light of recent events, such as Edward Snowden's exposure of the United States' National Security Agency's data collection practices,<sup>16,17</sup> Target's 2013 data breach of over 70–110 million (and growing) customer accounts<sup>18</sup> and related corporate data breaches, *The Wall Street Journal's* exposé,<sup>19</sup> the 2013 documentary 'Terms And Conditions May Apply' ([www.tacma.net](http://www.tacma.net)), and stories like the 'Immortal life of Henrietta Lacks',<sup>20</sup> where for over a half-century

Henrietta Lacks' most personal information, her DNA, was brokered and sold without compensation to her or her family. These and countless related reports are changing consumer perceptions of data and its appropriate use.

### **The need for active management of privacy**

#### **The loss of anonymity**

Individuals, consumer advocates and governments have begun to recognize that, due to advancements in data collection and predictive analytics, there is little, if any, possibility of anonymity left in the digital age. According to Commissioner Brill at the US Federal Trade Commission, consumer data collected today may forever be linked to an individual, and personally identifiable information, including associated links to connected devices (which she notes should be considered personally identifiable information), should be owned and controlled by individuals.<sup>21</sup>

### **Privacy is a verb**

Companies, in order to compete in the data age, must respect the privacy of each and every individual or else face the consequences, that is, loss of customer trust<sup>14</sup> and revenue, and potential regulatory oversight and fines. They must recognize that privacy in the data age is not a noun, it is a verb — it is the act of individuals managing access to, and the eventual monetization of, their personal data and preferences so that they can regulate their solitude and individual freedom.

Many in industry attempt to argue that consumers are uninterested in privacy-related matters and that they will never want to take control of their information — that they are unwilling to be inconvenienced by the management of personal information. However, numerous industry studies contradict this position, showing that consumers are concerned about their privacy and how their personal information is collected and used.<sup>22,23</sup> Moreover, consumers are increasingly distrustful of industry and government.<sup>24,14</sup>

### **Opt-in practices must change**

To counter this trend of distrust, companies must change decades of established practices. For instance, in the data age, an opt-in — the common practice used by companies to obtain permission to engage an individual — should not be based on a simple binary yes or no, for example the practice for opting in to a mailing list or service as it is today. Rather, the opt-in should be treated as a dynamic variable, one that is based on contextually relevant parameters accessed in real-time through an individual's personal data store (see below). In fact, according to Gartner,<sup>25</sup> 2014 will be the year consumers begin to take ownership of their personal data, like the use of their location, and actively manage their personal data through online cloud services.

### **Granular data control**

#### **Managing data through personal clouds and data stores**

There is a solution for personal data management. It is not a new idea, but an idea that has come of age — the personal data store. This is a service that hosts all of a consumer's information in the cloud and gives the

individual consumer granular control over the collection, management and dissemination of their information.

In fact, the concept has been building up pressure for decades and, like a volcano, has been waiting for the right moment to erupt. Don Peppers and Martha Rogers first envisioned it in 1996 in their book *The One to One Future*.<sup>26</sup> In 1997, Hagel and Rayport<sup>1</sup> first proposed the concept of an info-intermediary, a service provider that would represent the consumer to the marketplace for the direct exchange of their personal information through a personal data store (see [www.privowny.com](http://www.privowny.com) as an example), and new industry groups, including the Personal Data Ecosystem (<http://pde.cc/>) and ProjectVRM ([www.cyber.law.harvard.edu/projectvrn](http://www.cyber.law.harvard.edu/projectvrn)), have been developing consumer personal data control and identity frameworks for years. Again, the idea of individuals controlling and owning their data is not new. What is new, however, is the awakening of the consumer and the fact that they will soon have the tools — mobile devices, wearable computing, personal data clouds and stores, privacy presence management layers and so on — to manage and take control of their privacy in the data age. The time is ripe for a change.

Many industry players, naturally, fear giving up control of the data. However, those that wish to survive and thrive in the data age must respond to changing industry dynamics. They should head the industry change and work with, rather than continue to try to control, the consumer.

## Work with the consumer

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