The Big Picture

Piecing together the puzzle of customer information can uncover a goldmine

Companies prepared to gather multiple fragments of information about those who use their products and services in a bid to identify hidden patterns can add value for customers – and build an unrivalled market position.
Businesses can discover game-changing opportunities and gain an unassailable advantage over rivals if they learn how to view their market and customers in terms of the “Big Picture”.

To do so they must discover how to use the flood of data now littering the marketplace in order to reveal concealed patterns of behaviour and need.

Prof. Niraj Dawar, Prof. Marion Debruyne and research associate Livia Pijakova argue that the key to making this information work is the ability to aggregate data in order for a company to gain a unique perspective that no one else possesses.

In “The Big Picture: A new source of competitive advantage”, a research report by the Flanders DC Knowledge Centre at Vlerick Leuven Gent Management School, they explain how such an overview can help businesses create different types of value for customers, their company and stakeholders, and how to extract these.

They demonstrate that this approach puts sustainable downstream competitive advantage within reach of many companies – from US market giants to European small and medium enterprises – and they propose a step-by-step guide to help businesses grasp the opportunity.

INFORMATION: Pieces and patterns

Customers leave behind traces of information as they search for and use products and services that can reveal telling patterns about their behaviour, needs and activities.

Modern technology, the internet and the digitization of consumers’ lives make available an abundance of data yet, although most businesses gather vast amounts of information about customers, this remains underused. They rely on tried-and-tested techniques applying statistics or data-mining to predict the next transaction or second-guess the market.

But piecing together traces of information then stepping back to take a broader look at them can offer a unique understanding of the market – a bit like gaining an overview of what a completed puzzle will look like if all the pieces held by individual customers are put together.

Collecting and aggregating data can identify patterns of purchasing behaviour – and reveal a potential goldmine of untapped opportunities for new products and services.

Once a business finds a way to bring together the pieces, it can help customers make choices – and turn this into steadfast loyalty and long-term competitive advantage.

The challenge for a business is to recognize its unique ability to piece together information in an effort to discover hidden assets. Search giant Google, for example, began to correlate medical symptom-related search keywords with location and came up with Google Flu Trends – creating immense value for health authorities. Similarly, the mobile “cultural buzz” application CitySense evolved from showing users where people spent their time into telling them where people just like them hang out – creating a new form of value for customers.

VALUE: Reducing cost and risk

Patterns cannot be seen by looking at individual customers in isolation but through aggregation – looking at all the information at once. The sum is greater than the parts, and creating value from it implies taking a step back from over-segmented markets to see larger trends and patterns.

Businesses can use the insights they gain within the company itself, or they can pass it on to customers or other stakeholders to create value for them directly or indirectly. Washington’s John L. Scott Real Estate, for example, launched a highly successful online 3D tool enabling clients to browse properties, and benchmarking asking prices. It created value for customers by lowering costs of research related to buying or selling their property.
Businesses can also overcome constraints in competitive markets. Australian explosives company Orica aggregated years of data about factors that influence blasts to predict the outcome of any given explosion. The insights allowed it to loosen the constraints of a commodity sector where explosives are purchased by tender – because it can now sell broken rock.

Companies that put customers at the heart of their effort to identify untapped opportunities must focus on how to lower their costs and risks when they select and use a product:

**Lowering costs**: Lowering costs does not just mean selling at the cheapest price as many other costs are associated with a customer’s purchase process. By aggregating information about different customers’ behaviour, a company can reduce them. Advance information can be gold dust: take the ZAGAT Survey, for example, the “gastronomic bible” that evaluates restaurants. It created value for customers by aggregating information about the restaurant experiences of thousands of people and relaying this to millions of others – allowing them to lower their search and selection costs.

**Reducing risks**: Taking a Big Picture approach can also create value by reducing the various risks customers feel exposed to when they buy a product concerning its price, performance, durability and the identity it conveys. Mitigating these risks by informing a customer about what everyone else thinks in order to help them make better purchasing decisions adds value. Amazon personalizes its online store for each customer through recommendations, thereby reducing the risk of making a bad purchase. The internet retailer also demonstrates how the benefits of aggregating information can snowball: the more information it accumulates, the more accurate its recommendation – and the greater the value created.

**INSIGHTS: Who benefits and how?**

Businesses need to know who gains most from the value generated by insights from a Big Picture approach and whether these benefits reach those who provide the individual pieces of the puzzle or extend beyond them.

Insights gained from a Big Picture perspective can be used within the company itself or passed on to customers. If the information generated is more important to the buyer than the seller, it makes sense for the seller to provide this to customers. By sharing information in this way, for example, Amazon and ZAGAT gained a clear competitive edge. But if the information generated is worth more to the company, it can use it to make better decisions.

The value of the insight gained by taking a Big Picture approach can remain with those who contributed data, or it can extend beyond them. Take the social network for the chronically sick, PatientsLikeMe, which aggregates patient information and reflects it back for others to learn from. Because the beneficiaries contribute their own data to create the Big Picture, its value stays with them. By contrast, Orica uses historical information to reach beyond them.

Four mechanisms create value:

> **Segmentation**: Aggregating customer and stakeholder data to reveal similarities can be used to gain a picture of trends and patterns in order to target a product in a way that goes further than the classical marketing trends towards personalisation and micro-segmentation. Take the Australian public electricity network Energex which uses customer information to discern energy profiles and project future usage through the notion of a “smart grid” that is now also growing popular among European providers such as EANDIS, a Flemish grid operator that initiated a smart metering pilot in 2010 with Infrax and PBE in Belgium.

> **Benchmarking and ranking**: This is a common mechanism of value creation whereby insights created by ranking – from music and movie charts to the FT’s business school league tables and Fortune 500 lists – are a simple reflection of aggregated information and the value produced stays within the data points. Companies that benchmark establish themselves as key influencers and benefit from enhanced brand authority and recognition.
Mirroring: Companies that reflect an important Big Picture reality to customers offer them value they cannot otherwise obtain. Many websites employ a simple version of mirroring by displaying a counter indicating the most popular items on the site. Online fashion retailer Net-a-Porter, for example, uses mirroring to give customers a real-time view of items that other women around the world put in their shopping bag. More complex mirroring reflects only relevant customized information back to customers, as illustrated by Amazon for example.

Prediction: Companies can use the Big Picture approach as a crystal ball to forecast events, and the longer a business produces such predictions, the more accurate – and the more valuable – they tend to be. The Connecticut-based Otis Elevator Company, for example, developed a remote monitoring system scanning components from thousands of elevators then collating information to detect deteriorating parts that can be preventatively replaced. Customers are spared the time and effort of booking a maintenance check while cutting the risk of an unexpected breakdown.

COMPETITIVENESS: A sustainable advantage

Exploiting a Big Picture approach can help companies establish a competitive advantage that is sustainable in the long term. The complex skills a company acquires by gathering and aggregating data from hidden, neglected, or latent sources to offer unique insights about a market are not easy for competitors to imitate. Moreover, a competitive advantage built through a Big Picture approach can generate network effects. Often the business models created through the Big Picture principle generate a winner-takes-all market.

Accumulating specific information on customers over time both enhances a company’s ability to refine its Big Picture insights, and benefits the customers by allowing businesses to target products and services more accurately – thereby increasing the value they pass on. This in turn can deepen customers’ trust in a company, making them less resistant to relinquishing their privacy and share further personal information, and can lock in their loyalty.

Online movie rental company Netflix, for example, employs its Cinematch recommendation engine to identify similar movie-watching habits among users. While in theory this can be reverse engineered, Netflix’s data advantage as a first mover and the huge number of ratings it has accumulated means Cinematch is so precise that it is difficult for rivals to replicate. Customers get more value from their relationship with Netflix the longer they use the service.

STEPS: Exploiting the Big Picture

The following steps will help any company to reap the benefits of a Big Picture perspective:

1. Identify possibilities: Each customer possesses one piece of a larger information puzzle, but where should you look for this? Focus on the buying process and ask the following: What process do customers follow when they purchase products? What information can be found at each stage of this process? What are the costs and risks customers face? How can you find information that reduces those costs and risks?

2. Scan for data: Identify specific pieces of information about customers that can be aggregated to gain a Big Picture. Sources to scan include any data a company generates as a by-product of its normal operations as well as external information on trends and the social landscape or material from the web. In a directed scan, managers will seek to answer a specific question or build a predictive model; in an undirected scan, they will seek a wider perspective about underlying processes.

3. Aggregate and analyse: Putting together data from various sources and aggregating them in a quest to gain the Big Picture offers an overview – but managers must then consider what unique insight can be derived from this and the value it will create.

4. Select the value-creating mechanism: Extract and employ value from data by gaining insights useful to both customer and company. Use these to create value for customers directly by sharing it with them or to enhance existing products or services.

5. Embed Big Picture thinking: To create a sustainable competitive advantage businesses must commit to continuously collecting, maintaining and refreshing data. Companies should dedicate resources to building their ability to scan information, and adjust and refine this process constantly as they develop greater expertise.

Reference:
The Big Picture: A new source of competitive advantage, by Niraj Dawar (Richard Ivey School of Business), Marion Debruyne and Livia Pijakova (Flanders DC Knowledge Centre at Vlerick Leuven Gent Management School), 2011.