



IS YOUR COMPANY READY FOR THE BIG DATA REVOLUTION?

By IMD Professor Carlos Cordon and Teresa Ferreiro – May 2015

IMD
Chemin de Bellerive 23
PO Box 915,
CH-1001 Lausanne
Switzerland

Tel: +41 21 618 01 11
Fax: +41 21 618 07 07
info@imd.org
www.imd.org

The number one topic for CEOs for the past two years has been big data. According to the Conference Board's CEO Challenge survey, CEOs see that the exponential growth and availability of data — the big data revolution — is transforming the business environment and creating huge opportunities for their companies. Nevertheless, our research shows that most traditional companies are still not leveraging big data to create better business models for themselves.

Mediq, a major Dutch health care company, is a very good example of a company that has successfully harnessed big data to transform its business model. In 2012, the Dutch government deregulated pharmaceutical fees, triggering an immediate 90% drop in the company's profits. Mediq had no choice but to rethink its business model. Under the leadership of a new CEO, the top management team boosted a company shift: from seeing its main mission as the packaging and distribution of medicines and medical supplies, the company switched to looking after patients. Mediq transmuted its DNA. Big data made this change possible.

An external company was brought in to estimate – using big data – yearly hospital admissions per patient and the total cost to insurance companies. By knowing their customers and tracking their history of medical treatment, Mediq could avoid many admissions. The company then proposed to share the savings with the insurers. The resulting deal accounts for around half of Mediq's total current profits.

By using big data to get to know its patients (80% of prescriptions are refills for chronic illnesses and 99% of the customers always buy at the same pharmacy), Mediq could foresee 80% of demand more than one month in advance. General forecasting became practically unnecessary and it only had to focus on predicting the remaining 20% of demand. As a result, Mediq's distribution model also changed. With advanced knowledge of demand, the company could reduce its overall inventories with 50%.

When Mediq decided to embrace big data to make its survival shift, the whole company changed – its business model, its mission, its services and the way it made its money.

Digital routes

To take advantage of the opportunities offered by big data, companies need to adopt strategies that will fall between any of these three instances:

1. Digital fit: A company can pursue digital "fits" to exploit the advantages of big data and seize the opportunities for improvement it offers.

Thanks to the implementation of a system to visualize delivery routes, some organizations are saving 15 to 20 % of their total transportation costs.

Digital fits may turn out to be as important for companies as was the introduction of the computer. Back when computers were new on the scene, it was thought that they would change processes but not lead to fundamental shifts in the way organizations operate. Today we can't imagine a company working without them.

2. Digital masterplan: Where a company faces a fight for survival and needs to review and change its overall strategy, it will require a digital master plan.

Fast moving consumer goods sectors, such as toy manufacturers, are witnessing the rise of a new consumer profile that combines the digital and the physical worlds (playing digital games and online shopping, for example). To respond, a company needs a master plan for the digitization of its business.

3. Digital DNA: When a company's DNA becomes digital, it goes through a transmutation: it changes its whole business model. The company's strategy, therefore, has to shift towards one driven by big data. Some organizations are already including big data in the core of their business.

The global financial company BBVA has made its digital transformation one of its main strategic priorities, to such an extent that it has named a new CEO to lead its big data journey.

However, incorporating big data may not be as straightforward as it seems. If we go back to the toy industry example, the sector is certainly experiencing a situation that could go in many directions. All industry players seem to agree that the digital fusion implies a change that is here to stay. But to what extent will this justify a shift in the whole strategy of a company?

A toy company may choose to become digital down to the core of its business and adapt all its toys and games to a digital ecosystem. Or it may choose to just create a strong digital strategy, keeping the essence of the company (and its toys) untouched.

To navigate this big data tsunami, executives need appropriate business tools. They need to "unlearn" past models that were based on stable industries and embrace tools that are based on managing ecosystems.

Carlos Cordon is LEGO Professor of Supply Chain Management at IMD, where he teaches on the [Leading the Global Supply Chain](#) program and is Director of the IMD Global Value Chain Center (VC2020).

Teresa Ferreira is the VC2020 Research Project Manager.

Related Programs



LEADING THE GLOBAL SUPPLY CHAIN - <http://www.imd.org/lgsc>

Growth through agility and efficiency

Program Director Ralf Seifert

- Understand and manage global supply-chain complexity and risks
- Protect sales and revenue growth through efficient execution
- Anticipate surprises and avoid problems within your global material, information and financial flows
- Explore collaboration and various forms of integration that allow you to take advantage of uncertainty



ORCHESTRATING WINNING PERFORMANCE - <http://www.imd.org/owp>

The global business program for individuals and teams

Program Directors Michael Wade, Bettina Büchel, Dominique Turpin

- Get exposed to the latest management thinking and to practical and innovative solutions for your business
- Anticipate global business trends
- Boost your performance, broaden your perspectives and expand your global network
- Design the program that suits you and your team
- Become a complete executive through activities that develop your mental, physical, and emotional health