

Dear Readers,

As already reported in our last Quarterly, the team at the Dream Factory of the ICV is currently focusing on the topic of “Big Data”.

Big Data will change the work of the controller fundamentally along the road to becoming a business partner. It is here that the risks and opportunities lie. In this newsletter we outline the new developments in analyzing and using data in your company. Against the background of the 3Vs (Volume, Variety, Velocity) presented in the last newsletter, our aim is to show you how controllers can enhance the perspective of their company in order to position it successfully. Additionally, we discuss the challenge of a fourth V (Veracity = the accuracy of the data) from the viewpoint of managers and controllers.

In the second part of our newsletter we report on the Green Controlling Prize 2013 which was awarded at the 11th CCS Controlling Competence Stuttgart. We present two projects which the jury singled out: “fairport Controlling” from Flughafen Stuttgart GmbH and “Think Blue. Factory.” from Volkswagen AG. The Green Controlling Prize is awarded by the Péter Horváth Foundation and has its roots in the work of the Dream Factory on Green Controlling in 2009 and 2010.

We hope you enjoy reading this issue of the Dream Factory Quarterly and wish you a good start to 2014.

Best regards,



Péter Horváth

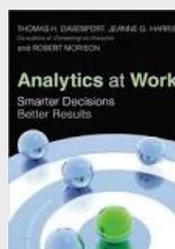
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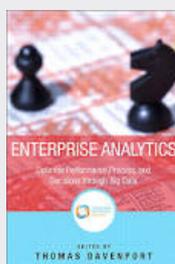
Uwe Michel

Recommended reading

Thomas H. Davenport is Professor for IT and Management at Babson College in Wellesley, Massachusetts, member of the MIT Center for Digital Business, senior consultant at Deloitte Analytics and co-founder of the International Institute for Analytics. He is regarded as an expert in the field of Big Data and Analytics.



In 2010, his book “Analytics at Work: Smarter Decisions, Better Results” was designated a “must read” by the IT community CIO Insight. In it, the author constructs a roadmap to identifying and tapping into the hidden potential of data in the company and describes the tools to do so.



In his second comprehensive work on Big Data, “Enterprise Analytics: Optimize Performance, Process and Decisions Through Big Data”, **Thomas H. Davenport** presents numerous best practices from a wide variety of industries for the successful planning, implementation and management of Big Data in companies.

Big Data | It all comes down to the manager and the controller!

The use of information in decision-making in companies is not really a new determinant in Big Data, but it is a fundamental one. In our last newsletter we gave you an introduction to the topic of Big Data, an initial definition and a few examples of applications. Now we would like to show you how decision-making in companies based on data has changed over time and the current challenges Big Data is creating for managers and controllers.

Decision-making based on Analytics 3.0

The idea of using information as the basis for decision-making is as old as decision-making itself. *Davenport* (2013) broke down the development of the analysis and use of data in companies into three phases: Analytics 1.0, 2.0 and 3.0.

Analytics 1.0 describes the creation of data warehouses in companies. The data quantities were manageable and static. Analysts spent most of their time preparing the information and very little analyzing it. They described the past but didn't dare to forecast the future.

Analytics 2.0 saw the birth of the term Big Data. Increasingly, companies analyzed large external volumes of data (Volume), which is available in different structured and unstructured formats (Variety) and is constantly changing (Velocity). This also saw the advent of the *data scientist*, who should master the challenges inherent in Big Data for the company.

The point at which the data scientist was no longer satisfied with merely analyzing the data but started to use it to design new products and further develop the business model marked the transition to Analytics 3.0. Data becomes information and that information can be used to improve products and services and tailor them to specific customer needs. So, if Amazon recommends books which match our previous purchases – to use the example from our last newsletter – the customer's (our) decision-making process can also be shortened on the basis of information. What is important is that it is not only information services and online companies which have the opportunity to profit from Analytics 3.0 and to integrate it into their decision-making processes but companies from all industries.

Here, it is controllers – the first advisors to the manager – who must step up to the plate. They must take on the task of interface between the new roles in the company, like the data scientist, and the manager.

Expand the perspective to include Big Data analytics

As a result, the traditional view of Big Data analytics as shown in Figure 1 no longer suffices. The application of Big Data analytics can no longer only be limited to corporate processes but must be integrated into the company's portfolio of products and services. This development towards Analytics 3.0 also has inherent new challenges for the manager. Those who face up to these challenges early enough will be able to establish the

best position on the market for their companies. For this reason, *Neely* (2013) calls for the traditional perspective to be augmented by three dimensions, in particular:

1. Big Data and analytics should be used to ensure that resources are allocated and distributed to the right corporate processes.
2. Big Data and analytics should be used to question the efficacy of the company's own corporate processes.
3. Big Data and analytics should be used to create and tap into potentials for value enhancement and to create innovative business models.

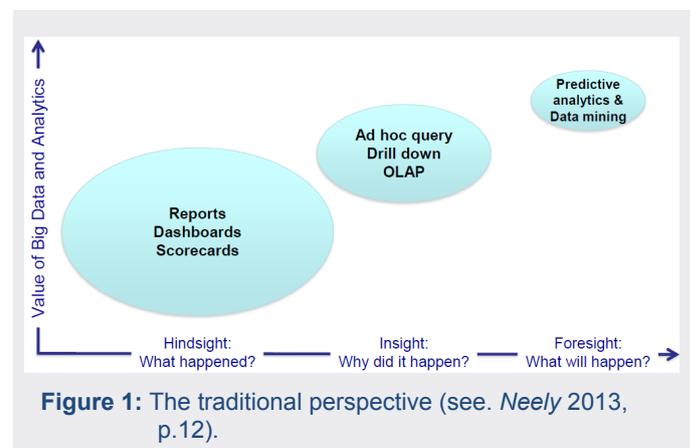


Figure 1: The traditional perspective (see. *Neely* 2013, p.12).

The challenge of data quality

Both *Redman* (2013) and *Neely* (2013) use the term *veracity* (= accuracy, correctness) to describe a further challenge for managers and controllers in data-driven companies: To increase data quality in the company. Poor data quality can have an extreme impact upon the decisions management make and undermine the trust managers have in the information they receive.

The solution to this problem does not, however, lie in new technologies but in the communication between controller and manager. Basically, there are only two moments which are decisive in assessing data quality: The time the information is created and the time it is used. A simple feedback loop between creator and user can resolve identified problems and protect subsequent users from the same mistakes.

11. CCS Controlling Competence Stuttgart | Green Controlling Prize 2013

This year, the Managing Director of IPRI, *Prof. Dr. Dr. h.c. mult. Péter Horváth*, presented two companies with the Green Controlling Prize for the second time. At the specialist conference “Controlling Competence Stuttgart – CCS 2013” run by the International Controller Association (ICV) at the IBM-Forum in Ehningen, Germany, Professor Horváth awarded the prize to Flughafen Stuttgart GmbH (Stuttgart Airport Ltd.) and Volkswagen AG. After the ceremony, the winners presented their award-winning projects.

The Green Controlling Prize is a major contribution by the Péter Horváth Foundation to increasing the importance of the ecological dimension of sustainability for the controlling community. The company which implements the most effective and innovative “green” controlling solution of the year wins. For the first time, this year two applicants received the award, which comes with a €10,000 endowment.

In his laudation, head of the jury and founder of the Foundation *Professor Horváth* emphasized the criteria the submissions must satisfy in order to convince the jury their concept was worthy of the prize:

1. The controlling solution must be a complete system which manages all environmental activities and is aligned with the company’s overall corporate strategy.
2. Additionally, the definition of clear KPIs is necessary as controllers can only manage what they can measure.
3. Also, the concept must be implemented, maintained and continuously developed, and all employees must be involved.

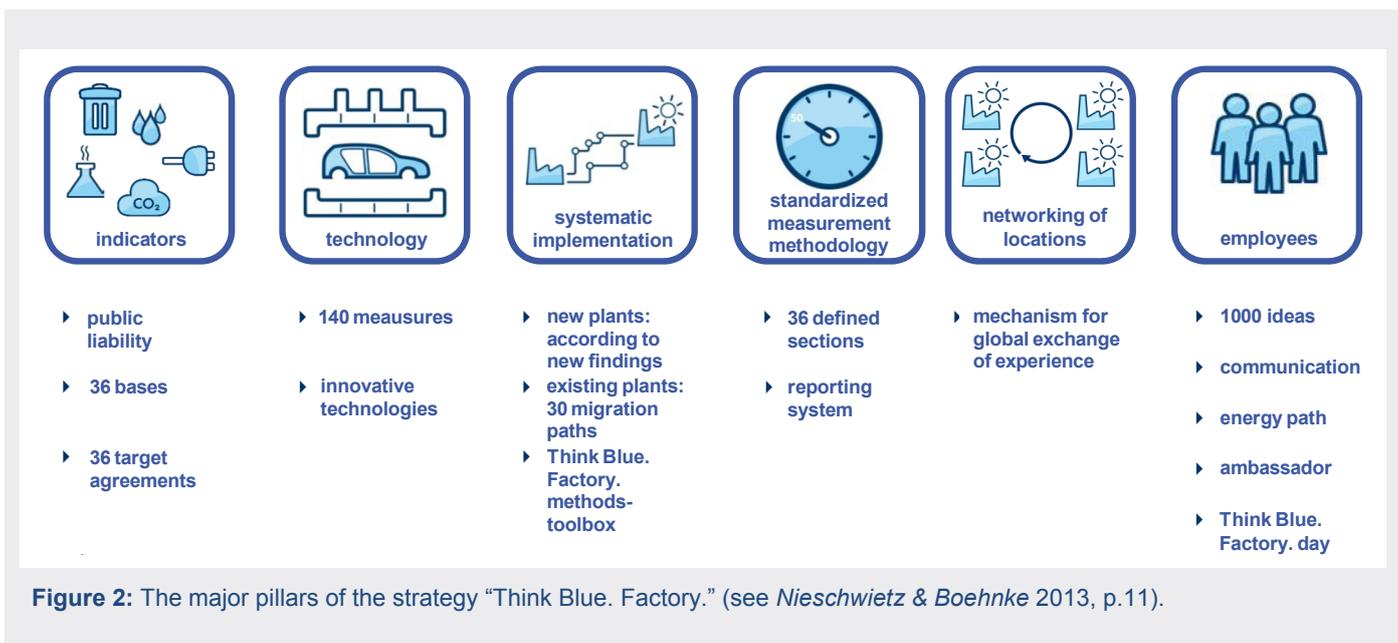
According to Horváth, these requirements were satisfied “outstandingly” by both projects, “fairport Controlling” by Flughafen Stuttgart GmbH and the “Think Blue. Factory.” initiative from Volkswagen AG.

Volkswagen AG: “Think Blue. Factory.”

Volkswagen AG received the award for their project “Think Blue. Factory.”. This approach is part of the car manufacturer’s brand and group environmental strategy, which is to reduce the environmental impact of production the Volkswagen brand by 25 percent per vehicle by 2018. This gives the main VW brand a pioneering role which other brands in Wolfsburg group should follow.

Current figures show that the company hasn’t been too ambitious in its targets. According to Volkswagen AG, the environmental impact per vehicle has already been reduced by 10 percent since 2010. “This goes hand-in-hand with corresponding cost-savings per car through lower unit costs for energy, waste and water.”

Nevertheless, there is still a long way to go. First, the major environmental factors in production for energy, carbon-dioxide, water, waste and solvent emissions per vehicle and component had to be defined in uniform environmental indicators (KPIs). With over 100 locations to consider, this was a highly complex challenge. Subsequently, a catalog of over 140 measures and innovative technologies was developed to implement the targets.



The result is a KPI reporting system with innovative evaluations and forecasts which expands the basic tracking of indicators to include the ecological dimension of sustainability. The global exchange of ideas and experiences is fostered by networking the locations and involving all employees in the "Think Blue. Factory" strategy.

Flughafen Stuttgart GmbH: "fairport Controlling"

Alongside Volkswagen AG, Flughafen Stuttgart GmbH (FSG) also won the Péter Horváth Foundation's Green Controlling Prize 2013. The airport operating company used its project "fairport Controlling", an approach to managing business sustainability performance, to tackle the challenge of "green" planning, performance management and control of its corporate activities.

To this end, it developed a sustainability codex containing sustainability targets and performance indicators. These were integrated into strategic and operative planning, performance management, control, and investment analysis, as well as internal and external reporting. For green controlling at FSG, this is a step towards integrating the ecological dimension into all corporate functions and decision-making processes and to becoming the central instance for reporting ecological aspects in the company.

The decisive factor in achieving these goals is the close cooperation between controlling and environmental management. To ensure this, the controlling and environmental management functions share controlling tasks which are subject to strict controlling standards. The result of this cooperation is an integrative supply of data which avoids parallel information streams from the two functions, which is of particular benefit for management.

Professor Georg Fundel, Managing Director of Flughafen Stuttgart GmbH, sees the award as confirmation of his company's activities. "This recognition of our sustainable corporate development by the Péter Horváth Foundation and the International Controller Association shows that we are on the right road." Moreover, "fairport Controlling" continues to be developed. The airport operating company has already initiated



Green Controlling award ceremony (from left): Siegfried Gänßlen (ICV Chairman), Christoph Nieschwietz & Benjamin Boehnke (Group Environmental Research for Production, Volkswagen AG), Prof. Péter Horváth (Founder of the Péter Horváth Foundation and Head of the ICV Dream Factory), Prof. Georg Fundel & Rainer Koch (Flughafen Stuttgart GmbH)

the next development phase by integrating social aspects into corporate performance management. In doing so it is focusing on the future: "The further development of our controlling function creates an even greater awareness of ecological and social issues in all corporate functions. "fairport Controlling" is a crucial step towards our goal of becoming one of the most sustainable, high-performance airports in Europe."

Applications for the Green Controlling Prize will be welcomed again in 2014. Further information about the submission process will be published on the website of the Dream Factory of the International Controller Association e.V.

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