

Today's organizational challenge

From gut feeling to data-driven decision making

Advanced business analytics

Most organizations today recognize that analytics has great potential to create a competitive advantage. However, many organizations still struggle to reap the benefits of fact based decision making and keep relying heavily on gut-feel and consensus decision making.

Where once gut feeling and proven experience were the most important factors in business decision making, today we have the

goals, misalignment of priorities and ambitions across business units, hidden agendas, lack of leadership commitment and too much focus on gathering data, building models and technology solutions. In general there is too little attention for user engagement right from the start, capability building and making analytical tools simple and engaging.

Sitting at the heart of these issues is a central question that organization's need to resolve: How can we get people to change their behavior and use analytics in their day-to-day jobs and rely on facts? [REF: [Guszcza, J. - The last mile problem: How data science and behavioral science can work together](#)]

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ability to use data and advanced analytics to identify and understand complex business processes and interdependencies, predict what will happen next or analyze the needs of clients in great detail. The value of business analytics lies in enabling evidence-based decision making and avoiding biased judgements.

An organizational challenge

Creating value from analytics is not a technological or data challenge anymore, it is an organizational challenge [REF: [MIT Sloan Management Review - The new intelligent enterprise](#)]. Recent research indicates that most organizations aren't ready to step up to the challenge [REF: [2015 Human Capital Trends report](#)]. Symptoms of failure are for example too little stakeholder engagement, unclear (analytics) strategy, vaguely defined

'Moneyball'

For binary decision making tasks where large amounts of data are involved, such as whether or not to hire a person or detect if someone is committing fraud, several studies have demonstrated that simple statistical models easily outperform even leading experts in the field [REF: [Dawes, RM. et. al. - Clinical vs Actuarial Judgment](#) , [Dawes, RM. - The robust beauty of improper linear models in decision making](#), [Thaler, RH. - Edge.org: Who's afraid of artificial intelligence?](#)]. Yet even in these cases it can be a challenge to get people to act according to the model's recommended action, instead of following their own insight.

A famous practical example of this in recruitment is 'Moneyball' [REF: [IMDB - Moneyball](#)], the story about baseball manager Billy Beane's successful attempt to assemble a winning team on a lean budget by employing analytics to acquire new players. Though the benefits of using analytics in decision making are clear, the use in recruitment is still not widespread. The hiring of new employees is

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still mostly based on interviews and individual judgment.

'Willing' and 'able'

So if there are many examples that indicate that data driven decisions yield better results, why are companies not using or acting on them? We explore five factors that inhibit people from making fact-based decisions. It is not an exhaustive listing of all possible factors, but a trigger to shift the lens that analytics is not only about data, modelling and tools. It is about people acting differently to reap the benefits.

Let's first get a conceptual view on how change works. The two important pre-requisites of change are that people are both "willing" and "able" to use the tools provided [REF: [Video about Deloitte Change Management approach](#)]. Each pre-requisite should be targeted with different interventions. For instance if people aren't able to change, the solution can be found in building the right capabilities e.g. by training, coaching or ensuring effective organizational design.

On the other hand, the "willingness" of people asks for different interventions. Are your employees committed to carrying out specific actions? Do they feel they belong to the part of the organization that needs to change? Do they share a common understanding of how things are done? This can be applicable in the case of analytics as an itinerary: *"People clearly understand how to reach the goal of the analytic solution, they just don't feel like walking that path"*. In the case of the recruiters; think about what questions they will ask themselves when a dashboard can outperform their decision making skills?

See below five practical actions organizations can take to effectively support employees in embracing a more fact-based decision making style.

1. Create ownership and understanding by involving stakeholders in the design phase

Solution design is not just about creating the best possible analytical tool or model. The word "design" suggests the use of design thinking techniques [REF: [Design Thinking at Deloitte](#)], such as stakeholder engagement, multiple iterations and prototyping. The involvement of relevant stakeholders from the start can support you in building their ability and willingness to support the solution. By developing the analytical tool together, you create ownership and understanding. Keep in mind that once the design is ready, the work isn't completed yet. The final embedding of the tool, by translating it to the business context of the end-users, is just as important.

2. Assess your organizations readiness

Conducting a change readiness assessment can help you understand what possible risks and opportunities exist within your organization related to the change. This can support you in defining your change approach. New data driven change readiness tools like the Change Adoption Profiler [REF: [Change Adoption Profiler \(CAP\) introduction video](#)] use data and techniques from marketing to provide insights into your organization's attitude towards change and allow you to address it head on.

#3. Be aware of the impact of a provided solution on each of the involved stakeholder groups

The impact the implementation of a new tool can have on various stakeholders can differ tremendously. People who are most involved in the development of a new tool are usually not the most impacted by the tool.

A change impact assessment can help you understand which groups within the employee population are impacted most by a change. This assessment can help you determine your key messages, communication plan or possible employee-specific interventions. Drawing an “employee journey” can help you understand in which step an employee is positively or negatively impacted in a specific process. For example, sales employees will use a customer segmentation differently and at different times than the people from marketing. Having a clear view on how your tool impacts their roles will support you in engaging them in the most effective way throughout the project.

4. First, understand that technology is “just” a pre-condition - have a human/user-focus from the start

Though the result of analytics might seem a technological solution (e.g. dashboards), the real successful outcome would be the use of that solution in a users’ day-to-day job. A good technological solution is a pre-condition for success but, right from the start, the human aspect is important. Several scientific models about the adoption of technology underline the importance of these non-technological/ human aspects [REF [Unified Theory of Acceptance and Use of Technology \(UTAUT\)](#), [Technology Acceptance Model](#), [Decomposed Theory of Planned Behavior](#)]. A stakeholder assessment at the beginning of the project can help determine who has influence on and is impacted by an analytical solution. This allows you to manage and engage your stakeholders and define which action each stakeholder should take during each phase of development and deployment. It is key that leaders and designers involve and engage their end-users as early as the ideation and design phase. Note that people have different data-needs. Were some prefer to use ratio (and have a natural tendency towards data-driven decision making), other prefer a less fact based, more emotional approach.

5. Create a campaign for your analytics solution and tailor your approach to your target group(s)

“Change is a campaign, not a decision. CEOs can demand, but the people must want to act. Visions must be sold over and over” [REF: [Rosabeth Moss Kanter](#) (Prof. at Harvard Business School)]. This means communication from and to different stakeholder groups involved in the analytic solution is key. What impact would it have if a leader stimulates the use of analytics within the organization? Your “change campaign” should provide clear benefits around the change that can be tailored to specific groups. The method you use should best fit the group’s needs.

5 Tips to successfully embed analytics in your organization

1. Create ownership by involving end-users from the beginning of the design process
2. Assess the readiness of your organization for the change
3. Be aware of the impact of the new analytical solution on each stakeholder group
4. Engage stakeholders from the start and keep their (different) interests in mind throughout the development process
5. Create a campaign for your solution, involving leadership

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