From Debriefing Management to Briefing Management: Pioneering Future-Oriented Strategies in the Digital Age

by Thierry Warin

Shifting from past-focused to future-ready decision-making with digital innovation.

INSIGHT | FRONTIER   26 Mar 2024
Digital transformation goes beyond data collection technically to optimize machines and improve human-robot relations. Although these elements are essential to the digital revolution, they are but the tip of a much larger, revolutionary wave that is affecting the fundamentals of management philosophy and corporate strategy. Digital transformation starts with a basic change in management techniques from looking backwards (like looking in the rearview mirror) to looking forwards (like using fog lamps to navigate through fog). We believe that this symbolic shift from mirrors to fog lamps represents the shift away from past results and current circumstances and toward a proactive, anticipatory management approach that recognizes and thoughtfully tackles future challenges. Why is it important, though?

**RELATED CMR ARTICLES**

“Designing the Intelligent Organization: Six Principles for Human-AI Collaboration” by Vegard Kolbjørnsrud

Organizations are forced to adopt reactive strategies by the traditional management strategy, which mostly relies on historical data, expert-systems, and prior experiences. In this setting, choices are frequently made in an effort to learn from the past and duplicate successful strategies, with a particular focus on streamlining present processes and technological advancements. Although this method can result in small improvements, its backward-looking focus limits it and leaves firms unprepared for the uncertainties and fast changes that characterize today’s business world. And to tell the truth, it is costly for an organization to always take a moment to think back on the past, assess the circumstances, and draw lessons from them.
Managing the future of an organization based on future, not past, data

Let us use past data for what they are good at: depicting the past. They are not good at representing the future. And when we manage using past data, we manage the past. Not exactly what CEOs and boards want. However, past data have some value: in particular, their value lies into being training data for artificial intelligence (AI)-based predictive models. Digital transformation advocates for the use of advanced analytics, AI, and machine learning to harness the power of historical data not just for optimization but for predictive purposes. This shift represents a managerial revolution where leaders use insights derived from data analytics as fog lamps to illuminate the path forward, reducing the opacity of the future or the “fog” of uncertainty (McAfee & Brynjolfsson, 2012; de Marcellis-Warin & al., 2020). By analyzing patterns, trends, and correlations within vast datasets, businesses can forecast future operations, market dynamics, consumer behaviors, and technological trends, thereby gaining the ability to navigate through uncertainties with greater confidence.

However, it is critical to recognize that digital transformation, particularly the forward-looking use of predictive analytics, does not eliminate uncertainty. The future, by its nature, remains unpredictable. It is subject to a myriad of influencing factors, including technological breakthroughs, market shifts, and socio-economic changes. Instead, the role of digital transformation is to reduce uncertainty, by equipping leaders with more robust tools to anticipate possible futures and prepare accordingly. This enhanced capability for foresight allows businesses to develop more adaptive, resilient strategies that can be adjusted as new data and trends emerge (Teece, 2018).

Predictive modeling emerges as a critical tool for strategic decision-making, transcending traditional approaches that primarily rely on historical data analysis. The shift towards utilizing AI for predictive modeling signifies a paradigm shift from reactive to proactive management, enabling businesses to anticipate future trends, challenges, and opportunities with unprecedented precision. This forward-looking approach, which I like
to call “briefing” management, leverages the potential of predictive analytics to not only forecast future outcomes but also to influence and alter these outcomes proactively. It allows managers to act to make their future different.

Predictive modeling, underpinned by advanced machine learning algorithms and vast datasets, provides a framework for understanding potential future scenarios based on current and historical data (Bishop, 2006). Unlike traditional data analysis, which offers insights based on past performances, predictive modeling facilitates a dynamic strategy that focuses on future potentials, enabling businesses to devise strategies that preemptively address emerging trends. The importance of this shift cannot be overstated, as it represents a move from merely interpreting data to actively shaping the future business landscape.

**Predictive Insights: Steering the Future of Business in the Digital Era**

In fact, the fundamental idea behind digital transformation in the business world is to move managers’ attention from the past to the future. This paradigm shift highlights the strategic use of historical data as a training dataset for predictive modelling, informing future corporate plans and operations, rather than as a ledger of past activities to be fixed. This change is primarily about allowing businesses to manage their future trajectory proactively, as opposed to reacting to past results, by using the enormous amounts of accumulated data as a training ground for algorithms that can predict future trends, behaviours, and challenges.

At the heart of this strategic reorientation is the advanced application of AI and machine learning techniques, which have the capability to analyze historical data patterns and, through sophisticated predictive models, offer insights into future probabilities (Jordan and Mitchell, 2015; LeCun, Bengio, & Hinton, 2015). These techniques serve as the engine for the digital transformation, offering a lens through which businesses can anticipate market shifts, consumer preferences, and operational challenges before they manifest, thus providing an invaluable tool for strategic planning and decision-making (McAfee and Brynjolfsson, 2017).
Predictive modeling is significant in the context of digital transformation because it represents a fundamental change in the conceptual foundations of company management, going beyond simple technological improvement. In the past, companies have functioned in a reactive manner, examining previous results to implement remedial measures. Nevertheless, this strategy is becoming more and more unworkable in the quickly changing digital economy. Modern marketplaces are dynamic, with consumers expecting different things and technology advancing quickly. As such, management must be proactive (Christensen, Raynor, & McDonald, 2015).

This change is best represented by the idea that a company’s future can be managed by “looking at future data.” It emphasizes how crucial it is to cultivate a strategic mindset that places more value on the capacity to predict and influence future events than it does on the analysis and correction of previous outcomes. A company’s culture and operations must change in order to implement such an approach, which encourages an atmosphere that emphasizes creativity, adaptability, and ongoing learning. Companies that successfully embrace this forward-looking viewpoint can develop a competitive advantage by anticipating possible disruptions, staying ahead of trends, and grasping opportunities before rivals do (Teece, 2018). It is also complicated for managers to find time to analyze past data while they are dealing with present issues. Another point is that learning something valuable from past data will often be based on a hypothetico-deductive approach – or an expert-system – possibly creating some reinforcement bias. Working on future data with potential recommendations based on neural networks will offer an inductive approach and may highlight some options that the traditional expert-system does not consider.

Moreover, the transition to future-focused management facilitated by digital transformation has profound implications for all facets of business operations, from product development and marketing to supply chain management and human resources. The implementation of predictive modeling facilitates a more agile and adaptive organizational structure. By embedding predictive insights into daily operations, businesses can foster a culture of continuous improvement and innovation, ensuring that strategic decisions are informed by a forward-looking perspective rather than solely by
retrospective analyses. This approach encourages managers at all levels to act decisively to influence outcomes positively, aligning operational activities with strategic objectives to preemptively address potential challenges and leverage emerging opportunities.

**Limitations and challenges**

Incorporating predictive modeling into business operations requires a nuanced understanding of AI’s capabilities and limitations. The models are inherently probabilistic, acknowledging that forecasts will invariably be imperfect (Kahneman and Tversky, 1979). However, the iterative nature of predictive modeling allows for continuous refinement of forecasts as more data becomes available, enhancing the accuracy of future predictions (Silver, 2012). This aspect of predictive modeling underscores a critical shift in managerial mindset: the recognition that the success of a forecast lies not in its absolute accuracy but in its ability to inform strategic decisions that mitigate risks and capitalize on potential opportunities (Tetlock and Gardner, 2015). And predictions should always be wrong as managers will apply corrective behaviors either to better the outcomes or to fix a downcycle.

Moreover, this managerial change demands a cultural revolution within companies, cultivating an attitude that prioritizes adaptability, ongoing education, and creativity. In order to guide their enterprises through the mist with a strategic vision based on predictive insights rather than just historical hindsights, leaders must accept a new role as **Navigators of Uncertainty**. This method necessitates a willingness to try new things, learn from mistakes as well as successes, and keep refining plans of action in response to changing projections of the future.

**Conclusion**

The transformative potential of predictive modeling in business is evident in its capacity to redefine management practices. By shifting the focus from **debriefing to briefing**, from **reactive analysis to proactive strategy**, businesses can navigate the complexities of the modern market with greater agility and foresight. The evolution from traditional data
analysis to predictive modeling marks a significant milestone in the application of AI in business, heralding a new era of strategic management where the emphasis is on shaping the future, rather than merely responding to the past.

Hence, the true change brought about by digital transformation is not merely technological but fundamentally managerial and philosophical. It challenges traditional business paradigms and requires a reimagining of leadership roles, where success is derived from the ability to anticipate and shape the future, navigating through uncertainty with strategic foresight. This transformation represents a profound shift in how organizations perceive and respond to the dynamic business environment, emphasizing the need for a proactive, forward-looking management approach that leverages digital technologies to reduce, though not eliminate, the fog of uncertainty.

References


Thierry Warin

Thierry Warin is Professor of Data Science for International Business at HEC Montreal and Principal Researcher at CIRANO (Canada). His research mainly focuses on digital multinationals and the platform economy. His preferred methodology is data science, focusing on natural language processing techniques and Bayesian statistics.