

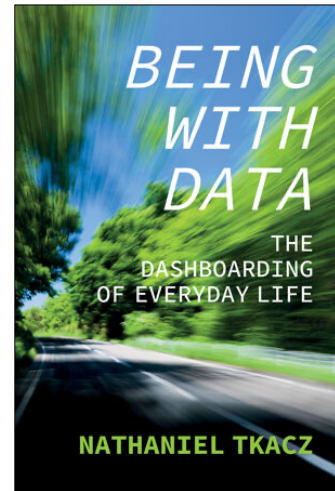
Nathaniel Tkacz, **Being With Data: The Dashboarding of Everyday Life**, Cambridge, UK: Polity, 2022, 256 pp., \$69.95 (hardcover).

Reviewed by

Li Zeng

Arkansas State University

Our world is datafied. Every day, an incomprehensible amount of data is generated, yet we often overlook the ways in which we encounter and experience this data. In ***Being With Data: The Dashboarding of Everyday Life***, author Nathaniel Tkacz offers a fresh perspective on data by highlighting its cultural nature and advocating for an analysis of both data and format. To fully understand our data-driven societies, he argues, we must scrutinize the formatting of data and its inherent power. Tkacz provides a comprehensive analysis of the format of dashboards and its cultural significance, revealing its profound impact on our subjectivity, social interactions, and experiences of space and time. By exploring questions such as the origins of data, its effects on our cognition, and its influence on our individual and organizational behaviors, he encourages readers to reexamine their relationship with data. Through his insights, Tkacz emphasizes the importance of considering not only the data itself but also its format to understand our data-driven societies.



Today's dashboard is primarily a single-screen display that provides individuals with the necessary information to perform their jobs. This interface is designed to enable users to quickly monitor and understand data and establish a connection with it. For Tkacz, modern dashboards consist of three critical components: display, data, and cognitive function.

In chapter 1, Tkacz uses cultural archeology to examine the history of the dashboard format, presenting historical resources to better understand the continuity of its evolution. He highlights significant moments in the evolution of the dashboard, tracing its origins back to the horse and carriage. The primitive dashboard of that time was a piece of wood or leather placed between the horse and driver to separate the driver from splatters of mud during fast travels. The essential function of the primitive horse-and-carriage dashboard centered on separation and movement.

As technology advanced and motor cars became popular, the dashboard underwent major changes. The "Panhard et Levassor" design of 1891 was the first to move the engine to the front of the car, leaving the dashboard to separate the driver and passenger from the engine. As cars gained speed, instruments and controls were added to (and later embedded on) the dashboard to aid the driver's increased responsibilities.

Driving was an activity reserved for the elite until the introduction of the Model T Ford in 1908. The Model T Ford's dashboard was simplistic, featuring only an ammeter and an ignition switch, leaving out the luxurious automotive measurements that were prevalent in more expensive car models. However, as the dashboard's instrumentation continued to develop, it evolved into communicators of quantitative

measures. For instance, the luxurious 1933 V16 Cadillac featured a multitude of instruments to communicate the condition of the engine (an amperage gauge, a temperature gauge, a pressure gauge, etc.), the speed of the car (odometer), and the passing of time (a Jaeger clock). Through these historical accounts, Tkacz paints a vivid picture of how the dashboard format evolved into what we know today and its impact on our cultural relationship with data.

Tkacz proceeds to discuss the development of the dashboard in the realm of French industrial accounting and management. In this context, the dashboard was repurposed from its original use in vehicular travel and utilized by business leaders in daily decision-making. Known as the *tableau de bord* in French, this “paper dashboard” enabled managers to monitor key performance indicators through a set of essential dials. Much like the dashboard in an automobile, *tableau de bord* would selectively display pertinent information, also creating a separation between managers and the sites of work.

The concept of decision support systems (DSS) has played a crucial role in the development of computerized dashboards. The foundation of DSS is based on Herbert Simon’s three-phased approach (intelligence gathering, design, and choice) to decision-making (Simon, 1960) and Robert N. Anthony’s organizational theories (Anthony, 1965). Michael Scott Morton (1971) expanded Simon’s decision ontology by mapping out how structured, semistructured, and unstructured decisions are positioned in grids that reflect the levels of planning and control for a system. Moreover, within each phase Morton added subphases, which revolve heavily around data, resulting in the creation of a data ontology. This ontology supports managers throughout the different phases of decision-making that constitute managerial work. The decision support is realized through a terminal interface, using computer-driven interactive visual display devices. This interactive system allows for rapid presentation and assimilation of data by managers, with graphical output capabilities that produce highly conceptually meaningful reports with graphs, trend lines, and plots. Morton’s decision system ultimately increases the overall effectiveness of managers through the use of a graphic interface.

The growth of DSS as a research field in the 1980s, coupled with the widespread adoption of personal computers in the 1990s, gave rise to the data warehouse. This new approach to organizing and storing data seeks to untangle the operational and decision systems and reformat data in terms of relation, storage, and processing to better serve decision-making. By the mid-1990s, all of the graphical, storage, software, and processing requirements for data dashboards were in place, allowing for their development and extensive utilization. For Tkacz, however, the dashboard represents more than just an endpoint; it is a meaningful movement.

Today, the dashboard is the main interface for realizing the value of data in the thriving intelligence and data analytics industry. In the second chapter, Tkacz explores how dashboards format data and cognition in the present. Through interviews and observations about the use of the Qlik dashboard software in hospitals and even participation in a Qlik training course, he leads his readers in pursuit of a deeper understanding of the formatting that takes place when dashboards and their supporting systems are integrated into organizations in ways that change the forms of cognition that take place within them.

In the last chapter of the book, Tkacz explores the third component of the dashboard: data. He argues that what data are and can do is largely determined by how they are formatted. Using the example of the situation room in the Brazilian National Centre for Monitoring and Early Warning of Natural Disasters, he explores the relationship between data and display under conditions of decision-making. He seeks to answer the following questions: "What attention to format can add to debates around the epistemology of data? What happens to data when they are subject to the formatting powers of dashboards? What ways of knowing do these data participate in?" (p. 146). Tkacz emphasizes the importance of uncertainty and time-value in dashboarded data, which enable decision-making and give the data their epistemological significance. Dashboards are not designed to provide absolute facts but prioritize the value of time. The forms of perception embedded in dashboard formats are shaped by uncertainty, which plays a crucial role in facilitating decision-making. Although dashboard data may have a baseline level of accuracy, their significance derives from their temporality.

Tkacz's book presents a compelling argument for the integral role that data plays in shaping our decision-making and understanding of the world around us. Through insightful analyses of the cultural history of dashboards, he demonstrates how this history continues to shape their current usage and challenges readers to rethink about data and its formats. The book crosses multiple academic fields and is aimed at academic readerships, but Tkacz's engaging writing style and insightful critique make it accessible and thought-provoking for a broader audience. Tkacz's multidisciplinary background enables his mastery of the terrain and contributes insights to experts in each respective area.

References

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