



INSIGHTS | WHITE PAPER

Transforming Into A Data-Driven Organization: The Modernization Imperative

The first commandment of businesses has always been to know the customer, and rightly so. Data provides a window into understanding who their customers truly are. Data gives you insights into their preferences, their needs, and the driving forces that influence their decisions to try your brand, remain a loyal customer, or explore other alternatives. These data-driven insights are instrumental in advancing business strategies, enabling organizations to tailor their offerings, experiences, and marketing efforts to resonate with their target audience effectively.

The Importance Of Being Data-Driven

According to Mckinsey Global Institute, data-driven organizations are not only 23 times more likely to acquire customers, but are also six times more likely to retain them and 19 times more likely to be profitable. This statistic, surprisingly, was published eight years ago, well before the post-COVID era. Today, data is even more crucial. While the mainstream is just now recognizing the power of data modernization, early adopters a decade ago have made significant strides to outpace their competitors and obtain key competitive advantages within their industries. A more recent study by Forrester showed that companies that are advanced in being insights-driven are approximately 8 to 8.5 times more likely to report at least 20% year-over-year revenue growth compared to companies that are beginners or less insights-driven.

While businesses have potential access to boundless information about their customers, those same customers are tapping into information that reshapes consumer behavior. The influence of social media, online reviews, viral influencers, changing demographics, and values are all reshaping consumer trends at an accelerating rate that leads to rapid changes in preferences and loyalty. Data modernization empowers organizations to keep pace with rapidly evolving customer preferences and behaviors through real-time data collection, advanced analytics, and agile decision-making capabilities. By leveraging technologies like big data, IoT, and cloud computing, they can collect, absorb, and analyze customer data in real-time, enabling the identification of emerging trends and behavioral patterns.



EP 21: Becoming An
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Untapped Data

During a recent WEI podcast on data modernization, former White House Chief Information Officer, Theresa Payton, mentioned that mobile web traffic alone will generate 84 exabytes of data by the end of 2024. To put that into perspective, an exabyte is a billion gigabytes—a standard measure not too long ago. By 2025, the world is expected to store 200 zettabytes of data, equivalent to 200 trillion gigabytes. Despite the vast amount of data available, much of it remains unused, resulting in wasted opportunities, unutilized insights, and lost business.

There is a good chance that your business already has rich insightful data spread throughout the organization. As an IT leader, you just need a way to tap into it and modernize how you aggregate, access, analyze, and act on it to create tangible value. Unfortunately, without a proper modernization strategy, your data will remain scattered across silos and legacy systems, hindering the ability to capitalize on its full value and creating significant obstacles to increased profitability.

Technology Should Have A Human Element

Beneath the underlying discussions of exabytes, zettabytes, and something called yottabytes, lies a human side of technology. Customer data is human centric. While new technology can captivate our attention, technology serves little purpose if it doesn't enhance the human experience. For instance, autonomous vehicles are highly futuristic and fascinating. Still, too often we collectively tend to focus on the hi-tech side of them while forgetting the human benefits they offer. Autonomous vehicles will improve mobility and accessibility for those who cannot drive themselves such as those with disabilities or the elderly. They will prevent people who are overly tired or impaired from getting behind the wheel, thus improving safety and reducing accidents due to driver error.

For retailers, leveraging customer data provides a holistic view of their customers, enabling them to offer more relevant and tailored products and services, which increases customer satisfaction and loyalty. At a time when many consumers are concerned about inflation, a modernized data structure can streamline operations, reduce costs associated with manual data handling,

and increase overall efficiency. This translates into better resource allocation, lower pricing, and improved customer experiences.

Data modernization is also transforming the financial services industry by enabling faster and more effective detection of check fraud. Advanced analytics, machine learning, and real-time data processing help financial institutions quickly identify suspicious patterns and potential fraud, allowing immediate action to mitigate losses and protect customers.

Similarly, utility companies are using data modernization to enhance repair and maintenance processes. By integrating data from smart meters, IoT sensors, and customer reports, they can rapidly diagnose issues and use predictive analytics to anticipate failures.

Defining Data Modernization

According to longtime WEI partner HPE, data modernization is a multi-step process of transforming access to data to radically improve business intelligence and decision-making. Organizations modernize their data ecosystems by shedding data silos and the complexity of legacy systems in favor of a cloud operational model that encompasses their entire landscape from edge to cloud. This positions data as the central organizing principle for the entire business, better enabling companies to focus resources on cultivating, connecting, managing, analyzing, and acting upon data. This shift marks a move from infrastructure-centric transformation to data-centric value creation, emphasizing the importance of data in driving digital transformation and business success.

For modernized data-first organizations, data is a strategic asset that drives decision-making, innovation, and competitive advantage. Rather than being siloed as an afterthought, data becomes the foundation upon which the organization operates, enabling data-driven insights that drive value. By adopting a data-first mindset, organizations can unlock the full potential of their data, leveraging it to drive operational efficiencies, personalized customer experiences, and the development of new data-driven products and services. This approach fosters a culture of data literacy and collaboration, breaking down traditional silos and enabling cross-functional teams to work together in harnessing the power of data.

Three Cybersecurity Challenges For Data Modernization

You cannot discuss any facet of IT without mentioning cybersecurity. Data is the crown jewel of any organization, and valuable jewels of any type attract sinister players. Today's threat actors aim to exfiltrate, encrypt, or delete your data, disrupting your business operations and damaging your reputation and brand. At WEI, we like to discuss three primary challenges faced by those seeking to incorporate a data-first driven mindset.

The **first challenge** is the expansion of the attack surface. Originally, the term 'attack surface' applied to devices, systems, and data centers – tangible assets with a visible surface area. However, in today's landscape, data is scattered across on-premises storage, multiple clouds, and remote locations, expanding the area that needs to be defended – a challenge that military strategists have grappled with for thousands of years. Are you fully prepared to secure such a vast area that continues to expand?

The **second challenge** is the sheer volume of data that security analysts must contend with in a data-modernized organization. The proliferation of generated data is not limited to business operations. It also manifests in the form of cybersecurity data, including metrics, alerts, notifications, and analysis. While more data might seem to simplify the cybersecurity team's job, it can paradoxically complicate their efforts. Teams must sift through an endless stream of alerts, determining relevance, prioritizing critical issues, and deciding how to act upon them effectively. Failure to effectively manage and analyze this data can lead to missed vulnerabilities, delayed response times, and increased risk exposure for the organization.

The **third challenge** is the acceptance that, despite diligent patching efforts and the deployment of numerous security tools, some type of security incident is inevitable. At some point, a successful phishing attack, credential stuffing attempt, or zero-day vulnerability exploitation will occur. Regardless of how an unauthorized intruder enters your enterprise environment, their likely target is your data repositories.

However, this inevitability does not mean surrendering or waving the white flag. Instead, it underscores the need for a modernized data storage environment that is resilient to an eventual breach that will threaten actors from stealing, destroying, or manipulating your data. This resilience is crucial because the consequences of a successful data breach can be catastrophic, including financial losses, reputational damage, regulatory fines, and erosion of customer trust.

The Business-First Approach Of WEI

As a premier IT solutions provider, WEI's deep technical bench enables customers to realize the value of their technological investments. When WEI engages in a data modernization or cybersecurity project, we strive to understand the entire landscape, encompassing the data center, cloud initiatives, and the broader business context and objectives. Our approach involves learning about the client's business and existing/future business objectives to build a comprehensive story and relationship. This initial phase involves bringing together the right specialists from both WEI and the client's side to leverage their respective expertise to facilitate a fruitful engagement. By aligning the relevant personas and subject matter experts, we can then delve into the technical discussions and craft a holistic cybersecurity solution tailored to drive the desired outcomes. Rather than offering a single product or feature, our goal is to provide a comprehensive solution that addresses the client's unique requirements and business needs, ensuring a seamless and effective cybersecurity strategy.

WEI Cybersecurity Solutions

While our approach is centered around creating tailored solutions that cater to the unique needs of your business, we are also deeply focused on leveraging cutting-edge technologies to drive innovation and deliver exceptional results. In the realm of cybersecurity, we are obsessed with metrics, particularly two critical ones: mean time to detect a threat (MTTD) and mean time to remediate or respond to a threat (MTTR). Our unwavering commitment is to shrink these crucial metrics, enabling us to detect threats faster and eradicate them from your network more rapidly, even while your attack surface continues to expand.

Talk To WEI Today

Data modernization is a journey of transition, a transformative process that empowers organizations to unlock the full potential of their data assets. It represents a fundamental shift in how data is perceived, managed, and leveraged across the enterprise. By embracing a data-first mindset, organizations can break free from siloed data environments, legacy systems, and outdated processes that hinder their ability to derive value from their data.

Like any transition, data modernization presents real challenges, but these can be overcome with the guidance of those who have successfully navigated this journey before. Contact WEI to speak with our data modernization specialists and learn how you can become a data-centric leader in your industry.

About WEI

WEI is an innovative, full service, customer centric IT solutions provider.

Why WEI? Because we care. We go further.

WEI is an expert in business technology improvement, helping clients optimize their technology environments and work efficiently. WEI works with clients to understand goals, integrate strategy with technology solutions, and leverage their current IT environment into one company-wide model to increase utilization and efficiencies around their unique business processes.