Machine Data: The Secret to Winning the Digital Experience Arms Race

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March 2019

There is plenty of talk in enterprise circles these days about the *digital experience*.

But that's the problem – it's mostly just talk.

Organizations have done all sorts of things in the name of improving the digital experience – modernizing interfaces, improving workflows, and other similar cosmetic efforts – but a combination of recent trends has made these previous efforts insufficient.

The elevation of various forms of artificial intelligence into our daily existence and the continual stream of automation into every element of every customer interaction have caused a fundamental shift in expectations.

Customers now expect organizations to create intuitive interactions, to anticipate their needs and desires, and to respond in real-time as circumstances change.

As a result, it has kicked-off an all-new digital experience arms race as organizations seek to find ways to rise to this challenge and seize competitive advantage.

As enterprise leaders evaluate their options as they respond to this now-urgent matter, however, they may be missing a crucial fact: they already have one of the most powerful enablers of creating exceptional digital experiences.

They just need to unleash it.

Why Machine Data is a Critical Enabler of the Digital Experience

When most people hear the words *digital experience,* they immediately start thinking about a computer or mobile screen — the user interface. But an experience — even a digital experience — isn't about an interface, per se. It's about an interaction.

The perceived quality of that interaction extends far beyond the bounds of the interface and is driven by something else entirely: *insight*.

Imagine a scenario in which your job is to deliver a change-the-game experience to a customer, employee or partner. Now imagine that you must deliver this experience to an anonymous person. You know nothing about them, their past experiences, and their needs - nor have you any way of anticipating what they may want next. How good an experience could you provide?

This is the situation in which most enterprises find themselves.

They have massive amounts of historical data, which is the necessary foundation of a curated experience, but little actionable data that helps them understand that past data in context of the interactions occurring in real-time. And, as a result, they also have no way to predict behaviors or recommend actions that will create the type of intuitive digital experiences that customers now crave.

The question, therefore, isn't how to get more data, but rather, how to get the right data at the right time that will enable organizations to transform the experience from one based on a backwards glance to one that is in-the-moment.

The answer? You already have it.

The modern enterprise has digitized nearly every business process, customer engagement, and employee interaction. And each of these digitized touch points has generated machine data.

More importantly, unlike human-generated data which is, by necessity, summarized, retrospective, and static, this machine data provides organizations a deep, granular, and dynamic view into customer interactions as they are occurring.

Ironically, however, this machine data is sitting there — undervalued and underutilized – in almost every enterprise.

It represents an untapped goldmine that can help organizations close the gap between the historical data found in systems-of-record and the need to understand digital interactions in real-time.

As a result, machine data can be the keystone that transforms the digital experience and helps organizations do everything from improving customer satisfaction to increasing operational efficiency.

Business Context Drives the Digital Experience

There is already plenty of talk in tech circles about machine data, but it comes in the form of conversations about monitoring, log management, and events. Machine data remains underutilized precisely because these conversations are focused on the wrong things.

The challenge is that organizations have thus far relegated machine data to technical use cases. IT teams use it to monitor technical health, do root cause

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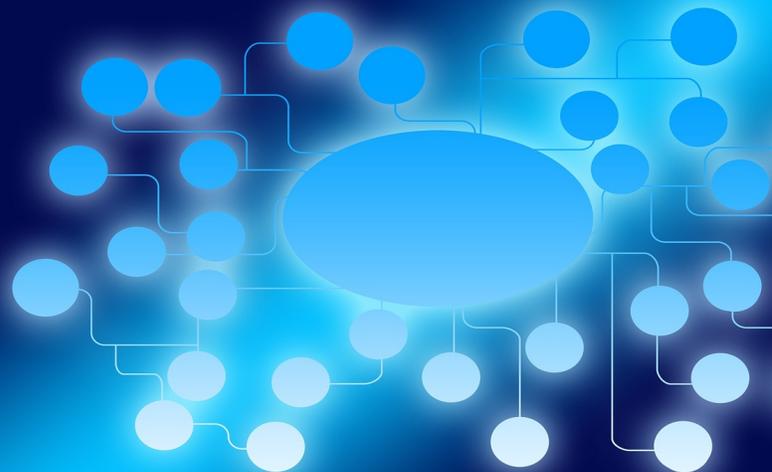
analysis, and perform other technical functions.

But few organizations have begun to leverage it to enhance and enrich the digital experience. The reason? Because to do so organizations must move beyond the

technical frame of reference and apply a business context to find the experiential relevance in machine data.

The reality, however, is that vast elements of the digital experience are now digitized and kick-off machine data that organizations can use to improve and sustain it. This data includes everything from sensor data, to tracking information, to transactional records of human-to-human interactions. The challenge for most organizations is the decoding and collating of this machine data into a business context.

When organizations can do so, however, machine data becomes the glue that connects the dots between the business value a digital experience can deliver and the underlying technology that supports it in real-time.

This need to use machine data to connect the dots between business context and the real-time digital experience is also critical because it will help organizations overcome some of the technical and organizational challenges they've faced in creating this context, such as:

Increasing Complexity
There's no question that the complexity of the enterprise technology stack has been growing exponentially. And it shows no signs of abating. While organizations have many tools they use to manage the various elements of their technology stack, each was designed for its specific technical purpose and, as a result, their narrow technical focus makes it difficult for enterprise IT teams to see the big picture — particularly from a business context perspective. Machine data is the common denominator that can enable organizations to pull this together.

Longer Times to Resolution & Insight
A by-product of this increased complexity is that it makes it harder for IT teams to sort through the mishmash of tools and data sets when they are trying to create context. This static is most impactful in two scenarios. The first is during an outage or other service impact. To restore a service as quickly as possible, it's essential that IT teams understand how everything works together and how they connect to business processes. The same is also true as organizations seek to uncover insights that may improve how they deliver their services. In both cases,

machine data can help organizations connect the dots between these otherwise disparate and disjointed technical domains and understand the business context correctly.

Data Noise

Ironically, one of the most significant challenges facing organizations as they seek to establish the connection between business context and the real-time technical components that support the digital experience is the abundance of data itself. Organizations are now awash in data — and it's made it almost impossible for human operators to make sense of it all. Within all of that data, however, are the seeds of the solution. The real-time nature of machine data and the fact that it contains markers that organizations can use to connect disparate interactions means that they can also use machine data to help human operators turn all that data noise into context.

Machine Data: Your Gateway to the Future

As crucial as machine data is to creating context and helping organizations solve some of their current challenges, that's not the whole story.

In fact, that view of it may downplay the real importance of machine data as we move into the digital era.

The current focus on the digital experience is only the opening salvo in a broader application of cognitive technologies that will transform every facet of how organizations operate and engage with their customers.
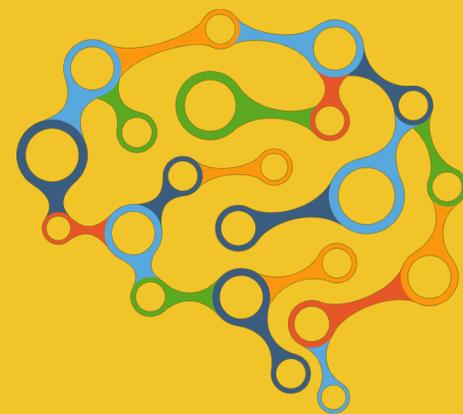
The current focus on the digital experience is only the opening salvo in a broader application of cognitive technologies that will transform every facet of how organizations operate and engage with their customers. The result will be the dominance of data-driven, cognitive enterprises in every market segment.

Customers, employees, and partners will increasingly expect that organizations employ artificial intelligence (AI) and other cognitive technologies to anticipate their needs, predict behaviors and outcomes, and take automated actions on their behalf.

Moreover, they will also expect this intelligence to transcend organizational boundaries and processes. They will demand that these new cognitive capabilities work seamlessly, transparently, and automatically without any regard to systems, technical complexities, or organizational dynamics.

And they will increasingly make buying, partnering, and employment decisions accordingly.

Just as data is the key to delivering a superior digital experience today, the organizations that will be in the best position to realize this vision and, therefore, lead their respective markets, will also be those with the best data.

Those organizations that can best harness and leverage the data they need to create and operationalize cognitive models will be the ones that are best positioned to make this future vision a reality — and reap the rewards as a result.

And just as is the case with today's digital experience, harnessing the power of machine data — with its real-time nature and ability to create business context — will be an essential element in helping organizations build the cognitive capabilities they will require to compete and win in the digital era.

The Intellyx Take: Using What You Already Have to Create the Future You Need

The digital experience arms race is now proceeding at a feverish pace.

As the drivers of competitive value have shifted, organizations are urgently seeking ways to leverage data at both velocity and scale to help them build the experiential capabilities they need to compete and win.

Many enterprise leaders are acting upon the mistaken belief that to do so, they must create new data sets and build new capabilities. While organizations may sometimes need to do so, in many cases, the fastest path to success will be to leverage the assets and resources that they already have and are merely underutilizing.

These assets and resources include the machine data they are already generating. But effectively leveraging machine data will also help them better utilize their most essential resource: *their people*.

> It will not be a lack of either data or human capital that inhibits organizations from marching forward into their data-driven future, but their inability to leverage the machine data.

Unleashing machine data and using it to create business context by connecting the dots between business value and the technology that supports it will also have a broader effect. It will enable organizations to automate routine activities and then augment their internal experts to make them more productive and effective.

In most cases, it will not be a lack of either data or human capital that inhibits organizations from marching forward into their data-driven future. Instead, it will be their inability to appropriately leverage the machine data and resources they already have that will be their most significant barrier.

Recognizing this gap, leading organizations are turning to technology companies, such as [Devo](#), that specifically help them unleash the power of machine data and turn it into a strategic asset through business context.

As we fully enter the digital era, the stakes in the digital experience arms race will continue to rise, while the challenges will only become greater. It will be those organizations that can best leverage machines — and machine data — to link the creation of business value to the technologies that support it that will win.

About the Author: Charles Araujo

Charles Araujo is an industry analyst, internationally recognized authority on the Digital Enterprise and author of _The Quantum Age of IT: Why Everything You Know About IT is About to Change_.

As Principal Analyst with Intellyx, he writes, speaks and advises organizations on how to navigate through this time of disruption. He is also the founder of The Institute for Digital Transformation and a sought after keynote speaker.

He is a regular contributor to CIO.com and has been quoted or published in Time, InformationWeek, CIO Insight, NetworkWorld Computerworld, USA Today, and Forbes.
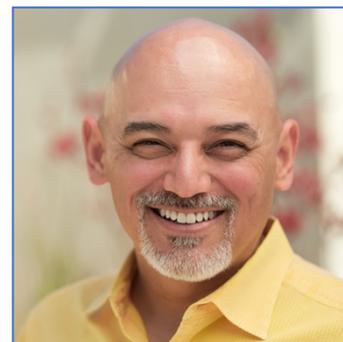
About Devo

Devo Technology is the data engine behind today's digitally-driven enterprises, helping organizations maximize the economic and operational value of their machine data.

The Devo Data Operations Platform delivers real-time analytics on streaming and historical data to turn machine data into actions that help enterprises achieve sustained performance and growth. By collecting, enhancing and analyzing machine data, Devo provides business-driving insights for IT, security, and business teams at the world's largest organizations. For more information visit www.devo.com.