

Forbes
INSIGHTS

DIGITAL TRANSFORMATION

USING DATA-DRIVEN INSIGHTS FOR
EXCEPTIONAL CUSTOMER ENGAGEMENT



IN ASSOCIATION WITH:

pitney bowes 

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INTRODUCTION

Digital transformation (DX) is an expansive and, at times, confusing discipline, but mastering it is an unavoidable reality for any organization—even those that were “born digital”—wanting to remain competitive in a marketplace increasingly defined by digital interaction, customer experience, responsiveness and hyper-personalization. The lack of clarity around it can make DX a daunting task to contemplate; perhaps one reason that even businesses that understand the requirement to digitally transform have been slow to adapt.

The imperative to digitally transform for businesses is clear. “At this point it’s do or die for a lot of companies,” says Navin Sharma, Pitney Bowes VP of product management, customer information management. And many businesses have already experienced declining value. As Accenture CEO Pierre Nanterme, writing in 2016 for the World Economic Forum, pointed out: It was the appearance of new digital business models that were primarily to blame for more than half the departures from the Fortune 500 since the year 2000. “And yet,” he wrote, “we are only at the beginning of...the ‘Fourth Industrial Revolution.’”¹

It is unsurprising, then, that those who track the market expect DX to increase quickly. Market research firm IDC expects the percentage of organizations engaged in DX to double, to 50%, by 2020. But adoption and digital savviness still lag among many organizations. Shawn Fitzgerald, research director, worldwide digital transformation strategies, IDC, says their research shows that 67% of businesses fall into the “digital explorers” category—an early point on the maturity scale characterized as “somewhat ad hoc and opportunistic” in their digital journey. In contrast, less than 5% were at an optimized stage, or “digitally transformed,” level of maturity.² Our interviewees noted cost pressures and the challenges of replacing legacy systems as factors slowing adoption, but they also pointed to the fast pace of technological change itself and the difficulty in keeping up. Businesses are already facing a steep climb up the learning curve on the technologies that underpin DX—cloud, big data, AI, machine learning, analytics—and what those mean for their industries.

¹ Nanterme, P. (2016, January 17). CEO, Accenture. Retrieved from <https://www.weforum.org/agenda/2016/01/digital-disruption-has-only-just-begun/>

² Findling, S., Magee, F., Strohlein, M., & Ryder, G. (2015). *IDC MaturityScope Benchmark: Digital Transformation* (Doc # 254922). Framingham, MA: IDC.

Fitzgerald explains IDC's definition of DX as being "the application of third-platform technologies to fundamentally improve all aspects of society; for businesses, this means transforming decision making with technology." However, he cautions against focusing on the technology to the exclusion of the business problem it's meant to solve and the outcome it's intended to achieve. "The transformation is really around new sources of innovation and creativity, to enhance experiences and improve financial performance," he says. "It's not just a simple modernization of the technology and underpinnings of existing systems. While modernizing technology and IT architectures to achieve speed, agility and scale is certainly an important part of the journey, that is not in and of itself the transformation."

Digital transformation is a large topic that can be parsed any number of ways. However, research by McKinsey, in its 2014 Global Survey, has shown that digital engagement of customers is a primary motivator for business strategy, with 69% of respondents rating it within the top three priorities for strategy, and 62% rating it the same for investment priority.³ This paper is focused through that lens, of digital customer engagement. It is by pulling together high-quality data on customers from multiple sources, and capturing insights from advanced analytics and software tools, that customer engagement can be transformed across digital touchpoints. This paper discusses the complex topic of digital customer engagement transformation in three parts.

- **PART 1:** Provides a road map for a DX strategy that delivers unique, hyper-personalized, scalable and relevant experiences in the right moment and on the right channel
- **PART 2:** Highlights perspectives from analysts, industry professionals and real-world users on the digital customer engagement transformation
- **PART 3:** Provides key takeaways and advice for businesses looking to invest in their own digital transformation journey

We hope you find this report instructive and informative.

³ Gottlieb, J., & Willmott, P. (2014, June). The Digital Tipping Point: McKinsey Global Survey results. Retrieved from <http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/the-digital-tipping-point-mckinsey-global-survey-results>

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—Shawn Fitzgerald
Research Director,
Worldwide Digital
Transformation Strategies,
IDC

Part 1

A ROAD MAP FROM INSIGHTS TO ENGAGEMENT



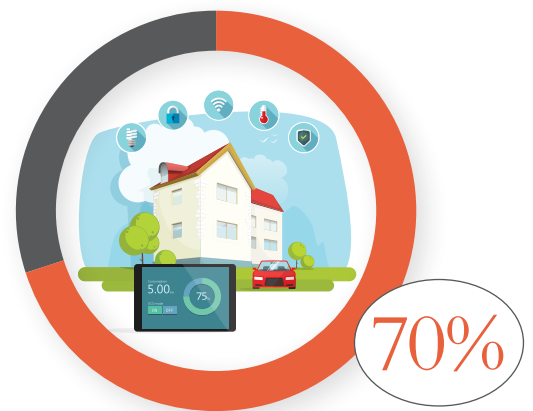
Forecasts by IDC give a sense of how quickly customer engagement, and the uses of data driving it, are changing already. By 2019, for example, the market research firm predicts that 5% of revenue will come through customer interactions with a digital assistant like Amazon's Alexa® or Google Home®, and that demand for digital-related services will account for more than 70% of all external services growth. It also forecasts that as early as the end of 2017, revenue growth from data-based products will be double that of the rest of the product or service portfolios for one-third of all Fortune 500 companies.⁴

These forecasts indicate something about the topography of the business landscape we're entering and, significantly, the kinds of business models that will dominate in that space. But whether it's engaging customers effectively through Alexa, positioning a business to quickly take advantage of new, unknown communication channels or creating a new information-based revenue stream, it is critical that organizations get their data—the underpinning on which the rest of the transformation runs—right from the start.

The goals of digital transformation of customer engagement—the hyper-personalization, relevancy,

real-time feedback and on-the-fly agility—are not attainable without access to relevant data available at the right time. But for many organizations, dealing with data challenges can be daunting, too. That often comes down to the sheer volume of data in organizations that might have decades-long histories, as well as the dispersal of that data—in multiple CRMs, on spreadsheets, in filing cabinets—much of it conflicting, incomplete, inaccurate or otherwise untrustworthy.

The following road map outlines three stages to navigating these challenges, with a clear path to customer engagement transformation.



By 2019 demand for digital-related services will account for more than 70% of all external services growth.

⁴ Parker, R., Ng, S., Carter, P., Versace, M., Hand, L., Prouty, K., . . . Silva, J. (2016). *IDC FutureScape: Worldwide Digital Transformation 2017 Predictions* (Doc # US40526216). Framingham, MA: IDC.

1 **STAGE** UNDERSTAND YOUR CUSTOMER, COMPLETELY

This first stage in customer engagement transformation is to know who your customer is, to understand their relationships, interests and behavior, and to coalesce that information into a single customer view.

Pitney Bowes' Jesse Hoobler, global VP of solutions consulting, explains: "The premise behind identification of your customer is really about creating a single view. It's about consolidating multiple data points, likely from disparate repositories, into a single, cohesive view so that you can truly engage with that customer in an effective and hyper-personalized way. Using this single view, you will truly know who they are, what they need and how best to engage with them."

To do that, businesses need to be able to effectively bring together unique data about their customers, like their purchase histories, communication preferences, purchase power, shopping behavior and social media activities. This means businesses are increasingly required to synthesize both structured data (like addresses, household composition, socio-economic bracket, etc.) with unstructured data (like the free-form text of a Twitter feed). Doing so requires systems and processes that can handle both kinds of data, pulling together historical information along with the real-time data being generated by customers' real-world activities.

This stage begins with inventorying and cataloguing data, whether it is in a spreadsheet or a CRM system, and assessing it according to its completeness, accuracy and trustworthiness, as well as where it needs to be enriched by external data sets. The data is recorded according to the state it is in (analogue or digital, for example), and then a plan is created to bring it together to create a single customer view.



Businesses need to be able to effectively bring together unique data about their customers, like their purchase histories, communication preferences, purchase power, shopping behavior and social media activities.

GRAPH DATABASE

As organizations seek to communicate with their customers more intuitively, they are also looking to understand the relationships among their customers—especially in terms of creating a more accurate single customer view. To do so successfully requires storing data in a way that goes beyond ensuring the correct name, address and phone number on file.

That's where graph databases come in. Unlike traditional relational databases, which store data in discrete tables and columns and require complex code to construct relationships, a graph database inherently stores information as relationships. Its key components are “nodes” and “relationships” that join and define information, and can reveal relationships that were previously unknown or unclear, much in the same way you see relationship information being surfaced in consumer-based applications like Facebook and LinkedIn.

It is not uncommon, for example, for a single consumer to be known by multiple names and identities—even within the same organization: as J., John or Johnny. There may be more than one customer with the same name, and each of them may have multiple addresses associated with them. That can create unnecessary expense for an organization that finds itself spending two or three times what it should on communicating to a single customer, and doing so in ways that aren't relevant.



By mapping relationships, a graph database can resolve those multiple identities down to a single person and determine when John and Johnny Doe are actually different people—bringing a true single view of the customer into the realm of achievability.

Beyond identity management, graph databases are powerful tools with a number of uses for digitally capable organizations to capitalize upon—fraud detection, financial crimes and compliance, master data management and social network analysis.

STAGE
2

USE LOCATION TO ADD PRECISION AND CONTEXT

The second stage of customer engagement transformation adds in location and context. In a mobile world, it's no longer enough to know who your customers are; you also need to know where they are in order to deliver a real hyper-personalized and responsive experience. This phase covers both the customer's physical context—i.e., where they are in the world—and the digital context—i.e., where they are most active on social media and their preferences around communication.

Location helps to provide an important context by which to align data. For example, if a business experiences a sudden spike in returns of a faulty product, they may understand there is a problem but not what's causing it. However, if they can see that the returns are predominantly confined to a geographical region, that may reveal a problem relating to temperature or humidity—two elements that may be affecting their product in a specific way. In this regard, location analytics reveals the proximity relationships of seemingly unrelated pieces of data that now have relevance because of their juxtaposition—something that typical charting of data, like pie charts, is not capable of revealing.

“As companies are trying to move away from manual processes, particularly around serving their customers, location and location analytics can play a significant role,” says Clarence Hempfield, VP of product management, location intelligence, at Pitney Bowes. That is, he explains, how businesses make their products and services relevant to where their customers live and what their interests are. And sometimes that's counterintuitive. Hempfield gives the example of a sporting goods store in a cold climate that found slow sales despite stocking the expected slate of snow and winter sports gear. It wasn't until the staff paid attention to the interests of the customers in their specific location that they understood customers were shopping for warm-weather sports gear in preparation for holidays that took them to more summery climates. Then they began to increase sales.

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VP of Product Management,
Location Intelligence,
Pitney Bowes



Location adds other important dimensions for DX. It provides physical context by which to identify customers and objects, and can reveal relationships among people, places and things. For example, the relationship between a hurricane's projected path and intensity, and an insurance company's customers, could help it quickly and accurately predict the number of adjusters it should dispatch and to where, saving time and improving the experience of its customers at a stressful time.

Location can provide important information about customers, answering questions about where they live and work, how exposed to natural hazard risks they are—like flooding or hurricanes—as well as their neighborhood boundaries and compositions. It also provides important data about a company's own business, including drive times to physical locations, nearby points of interest, and routing and logistics for shipping and fulfillment.

In marketing, Bluetooth Low Energy Beacons, RFID and Wi-Fi can all be used in-store, along with a loyalty app, to determine location and serve up personalized messaging tailored to a customer's location within the store and their past purchase history. Wayfinding and queue management in large venues are another emerging usage of location to enhance customer experience.

For a more comprehensive discussion of location data and analytics, see the Forbes Insights and Pitney Bowes white paper, ***The Power of Place: How Location Intelligence Reveals Opportunity in Big Data.***



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3
STAGE

CREATE RELEVANT COMMUNICATIONS AT THE RIGHT TIME ON THE RIGHT CHANNEL

The third stage of customer engagement transformation is where the preparations made in the previous two stages converge—using data to inform customer interaction. This phase, says Hoobler, is about being able to create multiple points of conversation: “It is what many people refer to as omnichannel engagement—allowing the right person to get the right communication, at the right time, in the right place, through the most effective delivery channel.”

Creating relevant communications, or those delivered through the right channel and at the right time for the customer, requires the use of data to inform personalization preferences around channel and device, to understand response rates at different times or days of the week, and how to devise an optimal channel mix for your audience. This can be especially important as the generational divide widens over technology and preferred communication preferences, and technology can enable interactivity and two-way conversations with customers.

“You’ve got a whole generation of customers who don’t really know about anything that doesn’t swipe because they’ve grown up using tablets and mobile phones and communicating through that,” explains Dr. Gerhard Heide, Pitney Bowes’ director, global marketing strategy. “And, at the same time, [other people prefer] letters or emails. So it’s about finding the right mix, and making sure that you can compete in this world where you have many more talents and many more touchpoints—but all of these are melting together.”

However, Heide cautions that sending information via a new channel requires more than simply digitizing it. Think about how unwieldy it is to view a PDF copy of a phone bill on a mobile screen that requires pinching and zooming to navigate it. Digital transformation requires a rethinking of the process, in a way that best serves the customer in the channel they are using. In the PDF example, that might mean prioritizing the important information—how much is owed, what the usage and due dates are, perhaps—and making interaction, such as paying the bill, frictionless. For an illustration of how some businesses are using interactive, personalized videos to reduce friction in communications around complex topics, see our interview with Rapt Media, on page 16.

“If you’re not delighting your customers and engaging them in the mediums that they want to be engaged in, then you’ll wind up losing those customers,” adds Christopher Hall, VP of product management, customer engagement solutions at Pitney Bowes. “Businesses are now being forced to change how they conduct business to work with millennials or Gen Y or Gen X, because their expectations and the platforms they choose to use are different. And so they either adapt to new platforms or they perish.”

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—Dr. Gerhard Heide
Director,
Global Marketing Strategy,
Pitney Bowes



Part 2

PERSPECTIVES ON DIGITAL CUSTOMER ENGAGEMENT TRANSFORMATION



LONDON BOROUGH OF CAMDEN: A DATA-DRIVEN TRANSFORMATION

Home to around 220,000 people, the London Borough of Camden is a diverse inner-city district nestled in central London, perhaps most famous for Camden Market, Hampstead Heath and as the old stomping grounds of author Charles Dickens. We spoke to **Councilor Theo Blackwell**, the cabinet member for finance, technology and growth, and the local council member for Camden, who led the borough's digital transformation efforts, along with interim CIO **Omid Shiraji**, who is helping lead the next iteration of the council's plan.

Today, like local government bodies across the U.K., Camden Council is grappling with an extended period of austerity-driven budget cuts from central government and the pressures of continuing to deliver services with less money available. Blackwell explains it: "We can't just decide not to do business or do operations in part of our borough with customers that cost us too much. Our universal service obligations mean we've got to provide it for everyone." These kinds of considerations and pressures have led many councils to review how they can more effectively work and where costs can be reduced without impacting critical resident services, leading to a reliance upon self-service and other digital services.

With an effort spearheaded by Blackwell, who was effectively able to bring together executive and political will to drive a digital vision, Camden has been able to successfully navigate these challenges through an approach that is centered on a wide-ranging digital transformation. While Blackwell says the council was always a progressive, purpose-driven organization open to change, the turning point that set the stage for digital transformation came with the implementation of an outcomes-based budget instead of a more traditional

inputs-focused budget. "That led to the beginning of a big cultural shift here that didn't see finances each year as department spending, but saw them as investment toward those outcomes," says Blackwell. "That was a behavioral change that fundamentally led to the reform of how we do things here." The budgeting shift got workers collaborating across functions instead of within them, helping to integrate silos.

Digital transformation has been important in two broad ways, says Blackwell. One is that, through acquiring the right technology, the council has been able to do things it previously wanted to do but wasn't able to. The second is that it allowed the organization to shift culturally to thinking about how to deliver services better, how to be more adaptable and transparent. "Those things are what digital technology enables you to do, but you also need to be in the mindset to do those things in the first place," he says.

Among Camden's first steps was the decision in 2012 to move high-volume transactional services online and create a central contact hub to provide services for residents and businesses.



In 2013 the council created the Camden Residents Index, integrating data from around 16 different council systems to provide “the golden record,” as Camden’s interim CIO, Omid Shiraji, puts it—a single view. The index is used for everything from combating housing fraud to emergency planning, but also as a building block for providing more personalized services for residents. In 2016 the council invested in an open data platform, in beta until March 2017. “This was fantastic, because it allowed us, for the very first time, to bring together data that was locked up in various systems, clean it, improve the quality and provide it out to the public to be able to leverage it for a whole range of different purposes,” says Shiraji.

The platform, known as Open Data Camden, has had several positive outcomes, from spurring business growth based on its data to reducing the burden on staff from Freedom of Information requests, to automating notification of planning applications to go directly to affected residents instead of by mail. Analytics performed recently found that per capita usage of Camden’s data was nine times the rate of the wider London data store. Savings from digitizing of planning notifications alone saved as much as it would cost to fund a neighborhood library, says Blackwell.

Other efforts have seen HR and finance processes start to be moved to the cloud, and healthcare and social care records integrated, meaning better-informed social workers and healthcare providers. “It’s again using data in a really transformative way for citizens by bringing together different data sources across public services providers,” says Shiraji.

Camden is using data to understand where it can act early to prevent acute need later, effectively serving its constituents better while also reducing cost. In one case study, Camden was able to link the incidence and frequency of certain kinds of domestic door repairs in council-owned housing to indicators of domestic violence. That meant the council could start asking questions about how the

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Cabinet Member for Finance,
Technology and Growth,
London Borough of Camden

situation could have been flagged earlier and where preventive interventions might have been made—a capability the council puts down to the single view of data it has been able to build. “Then you can start to actually restructure services to use that data to deliver different and earlier types of intervention,” Shiraji says.

“We are now developing the next iteration of our Camden plan, and we’re organizationally mature enough that digital actually isn’t a separate thing anymore,” he adds. “As a CIO, it’s a rare and privileged position where your organization says, ‘We don’t need a separate digital strategy, it’s going to be woven into the development of our corporate strategy.’”

IDC AND DIGITAL TRANSFORMATION MATURITY

Shawn Fitzgerald is the research director for market research firm IDC's worldwide digital transformation strategies practice. He spoke with us about some of the findings from IDC's research into business maturity with digital transformation. The following has been edited for length and clarity.

IDC has conducted a lot of research into the maturity levels of businesses around digital transformation. Where in that framework do most businesses fall?

It varies by industry, but in aggregate, when we look at total digital transformation maturity, about 67% of organizations are really exploring and trying to figure out their path forward with this—but they haven't really gotten it to the point where it's managed, mastered or fully optimized, [meaning they haven't] digitally transformed themselves fully.⁵

What are some of the obstacles to greater or more effective adoption?

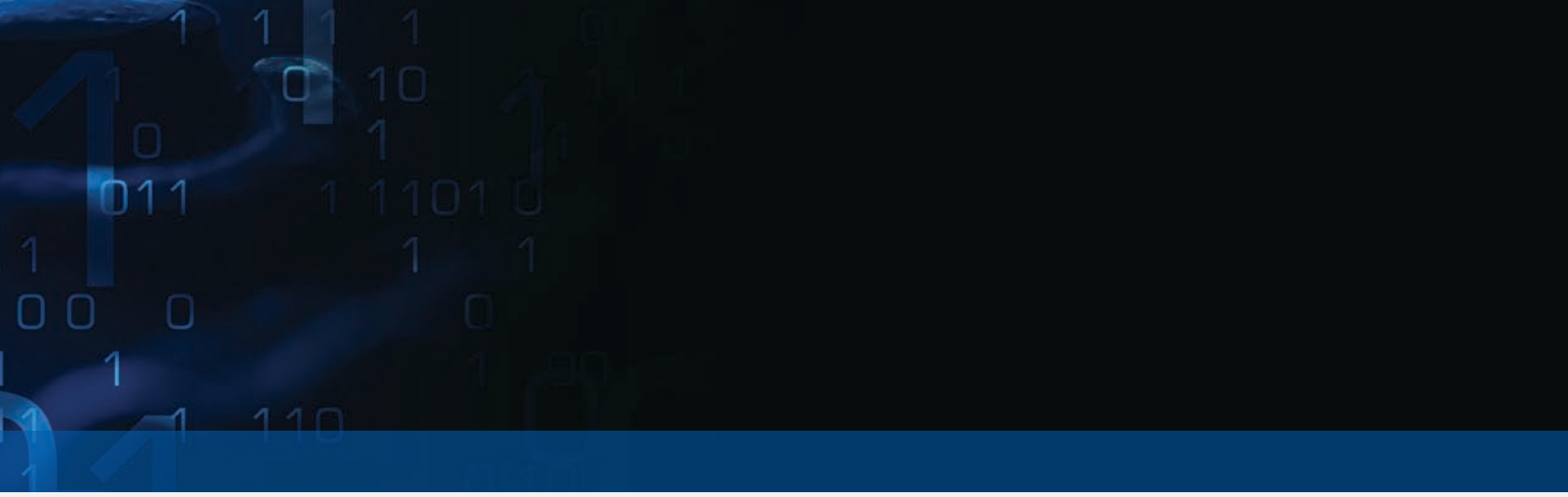
Like any kind of maturity life cycle, we're seeing the early-stage forming of what will be a big wave. Companies and entire industries will have fundamentally different technologically transformed business models and processes over time. Most organizations and people are at the left-hand edge of DX in terms of awareness, education, and certainly how organizations need to shift behavior and move toward becoming a digital organization with a cohesive DX business strategy.

In terms of DX adoption, the world is changing so rapidly, and the pace of change is really accelerating. If your organization is running on the business track at two miles an hour and digital transformation is occurring in your competitive markets at 10 miles an hour, you're going to get lapped. We see and speak with a lot of companies that are struggling with their strategies, how best to organize, execute and get their organizations up to pace with the market.

What are the common factors between organizations that succeed at digital transformation and between those that fail?

Why people succeed or struggle depends largely on both having a strategy and being able to effectively execute it. Is it being led at the enterprise level? Do you have executive sponsorship and a sense of urgency? Then you need to say, "Okay, are we willing and able to make the right investments on the IT side to be able to create scale, speed and agility on third-platform frameworks and technologies?"

⁵ Findling, S., et al. *IDC MaturityScope Benchmark*.



Then you've got the bigger issue, which is always the hardest, I think, but the whole change management aspect of organizations: people. One of the things that our research and expertise consistently show is that shifting people and how they need to operate differently are where some of the big challenges are coming from, as more and more companies try to digitally transform.

What are some of the technology trends that you foresee affecting digital transformation and data over the next few years?

As [IDC] looks across the world of digital transformation and organizations, we see by 2019, 40% of digital transformation initiatives will be supported by cognitive and AI abilities, which will provide critical, on-time insights for new operating and monetization models. We think also that in 2019 demand for digital-related services will account for more than 70% of all external services growth and 40% of total worldwide services spending.⁶

Those are remarkable shifts across industries. And, again, data is at the core of DX insight. We have these tremendous big-data analytical and cognitive/AI capabilities; those are really powerful engines for data-driven insights. We have the cloud, which enables hyper-connectivity, but if we don't have data, we don't have any fuel to run it and create the benefits for customers, markets and our own organizations.



⁶ Parker, R., et al. *IDC FutureScape: 2017 Predictions*.

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IDC

RAPT MEDIA: FACILITATING TWO-WAY CONVERSATIONS WITH VIDEO

One result of digital transformation is that organizations can better use data to engage in two-way, personalized conversations with their audience. With video, personalization and interactivity allow for deeper engagement and self-service, especially around explaining bills or walking employees through complex health and benefits information and decisions. Rapt Media, a Pitney Bowes partner, has developed a template-based approach to interactive, personalized video. We spoke to the CEO and founder, **Erika Trautman**, and **Jennifer Burak**, VP of marketing, about the potential for two-way conversations within a digitally transformed organization. The following transcript has been edited for length and clarity.

Video is already the big story of content marketing, and it accounts for a big chunk of internet traffic on mobile and desktops. What's the story around interactive, personalized video for enterprises and in digital transformation?

ET: Well, the story of video is actually a good analogy for the story of digital transformation in general. If you think about the origins of digital video, filmmaking and broadcast were very much one-size-fits-all, uni-directional communication. It was called mass media because everyone got the same experience. The advent of HTML5 video paved the way for true transformation, [providing] building blocks that enabled data-infused, interactive video tech. What interactive, personalized video does that broadcast video and most online video didn't do is it really becomes a two-way conversation, where the data that the video is able to deliver to the end viewer is much deeper, much more relevant, more powerful because it's driven by our understanding of the viewer. Simultaneously, the viewer is able to make choices within the video, self-customizing his or her own experience. And when the

viewers interact, they offer up a little bit of information about themselves, providing insight back to the company that created the video.

What we find happens is that the return on the investment for that video is an order of magnitude higher for both parties. The viewers get content that is relevant and specific to them in a much more efficient manner. There's a little bit of a gratitude effect—there's research behind that—that binds the person to the experience. And, at the same time, the company creating the video benefits, because the viewer takes an action that is valuable to the company while also helping that company gain a deeper understanding of who their consumer is. They get data that allows them to make decisions about how to serve that stakeholder better and more effectively, and the value equation is much deeper.

JB: A lot of interactive video technologies out there are basically linear video augmented with hot spots. So you go through a video and you're clicking out to additional information. I'd say the vast majority, that's what they



consist of. That's not digital transformation; you're basically taking the same experience and it's not transformed, it's just enhanced. But branching interactive video is a hybrid. It's part video production, part user experience—and that's really important. It's like the web. It's navigable video, it's a user experience.

How integral are quality data and data management for an effort like this?

ET: There's no greater turnoff than being auto-marketed something, or auto-messaged something, that's based on really bad data; quality data really matters. There are two ways to think about data. There's the data we think we know about you at the start—what the database tells us about who you are, where you are, what we think you're going to like—and then there's what we can ask you through the experience that can then enhance our data. I would say, to the degree that a company isn't 100% certain that it's got good data, it's probably better to ask the viewer than to assume. And then there are certain user experiences where it doesn't matter what your digital fingerprint is; there's no way we're going to be able to predict to 100% accuracy what you're looking for. In a circumstance like that, you don't want to make the mistake of relying on assumptions; you need to parse the data that you know is going to be true, no matter what, from assumptions that might not be true for that person in that specific moment. The takeaway is to make sure that data is accurate and reliable, and to use that data to add value to the consumer. If your use of data is invasive, gimmicky or wrong, it will backfire. When in doubt, let your customer make the choices.

How does data inform metrics?

ET: One of the challenges of digital transformation is understanding which analytics measure what and what those measurements mean. For example, view count is often cited as a very standard metric to determine the success of a video. But view count really only measures your distribution strategy. It tells you nothing about how engaging the content was, let alone whether the content



“**Ultimately, successful video strategies require smart distribution, engaging content and a positive impact on behavior, so all three of those metrics matter.”**

—Erika Trautman
CEO, Rapt Media

succeeded in driving ROI. Viewing time will tell you how engaging the content was but tells you very little about whether the video is positively impacting the business.

What interactivity and personalization are really good at is driving behavior. And this is important, because tracking interactions is a metric that gets to the heart of whether you are succeeding in achieving your business goals. Ultimately, successful video strategies require smart distribution, engaging content and a positive impact on behavior, so all three of those metrics matter. If, say, you have great viewing times and high interactions but low view count, you should work on your distribution strategy. The overarching point is, in order to become good at digital transformation, companies need to think deeply about data and pay attention to what their metrics are telling them about strategy. That way, they can use metrics to get smarter at each step.

ACCENTURE: “THE WEB OF EXPERIENCE”

Accenture, a Pitney Bowes partner, works with companies to address the diverse set of challenges that digital presents, says **Donna Tuths**, the company’s global digital content lead, in an emailed interview: “The advent of digital technology has impacted all aspects of the organization, from infrastructure and talent to products and services. These impacts have both light and dark sides, at times representing changes that can fundamentally create new markets for new products overnight, while representing challenges to existing resources and ways of doing things.” The following is edited for length and clarity.

Given that technology is just one part of digital transformation, in many cases, when should technology vendors be brought on board?

They should be brought in early in the journey, as they help our clients to understand the “art of the possible,” and because it helps in ensuring that strategies can be effectively translated into results and impact.

What are some of the biggest challenges around technology and data at the outset of a digital transformation effort?

Probably that too often these conversations either sit with the CFO or with the CIO because they are being driven by cost pressures or the need to replace aging infrastructure. I think the future will lie in having the digital imperative sponsored at the CEO level in order to prevent siloed thinking, ensure buy-in and embrace change at pace.

How does a good technology vendor help solve some of the above challenges?

It’s simple: Fundamentally, they need to think of themselves as transformation partners. They need to move beyond answering the mail and push to understand the broad picture involved in these initiatives.

What’s the role of data and analytics in digital transformation, and how critical is it to some of the end goals, such as omnichannel and IoT?

My view is, perhaps, controversial. It’s that analytics have now advanced beyond our ability to leverage their power. We can do real-time bidding, for example, but we cannot yet version those offers effectively in real time to take advantage of the intelligence. I think content has the potential to be a limiter unless we start focusing there.

How will digital transformation affect the ways that brands communicate with customers across channels, devices, locations, etc.?

We have a simple way of thinking about this: In a virtual world, brands touch their customers at many points, and these points are multiplying rapidly. Taken together, this now constitutes a massive “web of experience” that companies need to reimagine, define, manage and harness in order to create customer delight and loyalty, and drive purchase behavior and retention.



POINTSOURCE: PERSONALIZATION AND CONTEXT IN DIGITAL TRANSFORMATION

PointSource is a digital transformation firm based in North Carolina and a Pitney Bowes partner. The company works with organizations, particularly those in the insurance, retail and logistics industries, to build user-focused solutions that unlock the power of digital. We spoke with **Stephanie Trunzo**, PointSource's COO and chief digital officer. The following has been edited for clarity and length.

There are a lot of businesses that weren't "born digital" and have been slow to adapt to the digital world. How disruptive is digital for those kinds of organizations?

It is disruptive to the point of making them obsolete. It's not optional that companies who weren't born digital need to embrace digital and look at how they start leveraging it as part of their business.

What can organizations expect from a digital transformation process?

I like to typically talk with our clients about two different things that digital transformation can bring you. One is enhancing or improving the existing ways that you already work with your users, and the second is introducing new ways of interacting that didn't exist, or couldn't have existed before. When you think about insurance, for example, digital transformation usually starts with looking at processes that already exist and finding ways to make them more efficient, like making a quoting process faster, because you can enrich it with data. Maybe you can predict some of that data and produce a better quote and deliver it faster, without having to cause the friction of requesting that information.

So that's improving a process that might already exist, whereas introducing a new interaction for insurance would be creating some value-add around content, perhaps, that didn't exist before, and ways of interacting with potential customers. Can you capture a market by producing an [Amazon] Alexa skill that shares information about the weather? So that's allowing [clients] to have a new way of interacting that could add value to their brand as a result of digital transformation.

What are some of the common challenges organizations come up against with digital transformation?

Far and away the biggest challenge, and the biggest inhibitor, is past success. When there's a successful company that had been in the forefront of adoption and innovation—Blockbuster or Kodak, for example—it's quite easy to stop looking at what's next, or stop looking at how you continue to evolve.

Q&A

And there's risk aversion. If things are working, if they're not broken, why fix them? So there's a lot of hesitancy within the organization. We had a CEO who said to us that they are now "emotionally ready and committed" to digital transformation, even though they've known in their heads for quite some time that they needed to do it. I think that's one of the biggest challenges, just getting people to accept that although they've succeeded and have been succeeding, that if they wait too long, it will be too late.

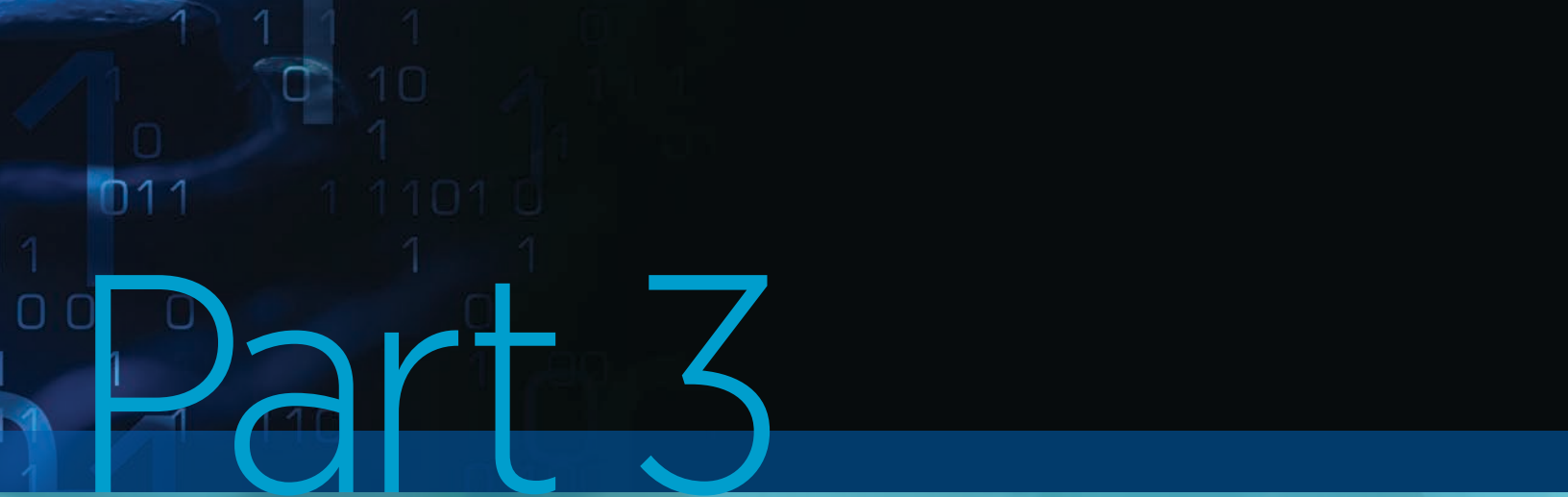
How much will an organization's success at things like omnichannel marketing and the Internet of Things require it to be digitally transformed or adept?

All of those things come down to two things: personalization or context. And these things might seem futuristic or far-fetched, but in reality [the organization] likely already has a lot of the components it needs to start making some progress. Every client has some amount of data already—some proprietary data that could be used for getting smarter about personalizing offers, messaging and context around how they can use data. Then they can evaluate how to enrich their proprietary data with third-party data to get even smarter. So [that involves] the things you were mentioning around IoT and even omnichannel, understanding where people are and what they're doing in context of the environment—which device they're on, what's happening around them, that kind of information. What's driving a lot of the initiatives and the efforts is that people and users are expecting it.



“It’s not optional that companies who weren’t born digital need to embrace digital and look at how they start leveraging it as part of their business.”

—Stephanie Trunzo
COO and
Chief Digital Officer,
PointSource



Part 3

TAKEAWAYS AND ADVICE
FOR BUSINESSES LOOKING TO
INVEST IN THEIR OWN DIGITAL
TRANSFORMATION JOURNEY



As businesses move to invest more in improving digital customer engagement, DX becomes key to achieving those improvements. However, as critical a process as it is, it's not an easy journey. Challenges like informational and operational silos, lack of executive buy-in, legacy software and the rapid pace of technological change can hinder enterprise-wide efforts to transform. So what's important when approaching digital transformation and finding a technology partner to work through it with? Our interviewees weigh in:

● **Commit**

Emotional readiness for change is key, says PointSource's Stephanie Trunzo, referring to a CEO who once told her that digital transformation didn't happen within their organization until leadership was emotionally ready for it. "First make an emotional commitment, and then find someone who knows how to facilitate the conversation."

● **Demonstrated differentiated capabilities**

"It's important that the business have its own strategy or know where to partner to get to the right strategy," says IDC's Shawn Fitzgerald. His advice is to look for partners with a demonstrated differentiated capability, who understand the particulars of your industry and regulatory environment and offer clear scopes, goals and objectives for what success looks like, with a proven record of success. Most important, due to the rapid pace of technological change, Fitzgerald recommends partners that can help your business "run faster and leapfrog any potential deficiencies in your maturity versus your competitors in the marketplace."

● **Look for "strategic pragmatists"**

That's the advice of Accenture's Donna Tuths, who says the best partners have "strong strategy teams coupled with a strong track record in implementing successful change."

● **Trust and fit**

"Technology solutions are long-term commitments and really should look more like a partnership than just a client-vendor relationship," says Rapt Media's Erika Trautman. Assess vendors on their prior success in solving the same kinds of business challenges with others within your industry, their flexibility in adapting to new circumstances, realistic goal-setting and deliverables, and a high level of customer service. Don't be afraid to get referrals.

● **The end-to-end process**

Vendors should be able to address the end-to-end customer journey and the moments that impact customers along that journey in a unified way, recommends Pitney Bowes' Jesse Hoobler. "How do you want that journey to feel to your customer, and what will those moments of truth look like and feel like to them?" he asks. "And are the vendors that you're engaging with able to address those moments of truth in a unified, consistent way to provide the best possible experience for your consumers?"



TECH TRENDS

- **Get data right, and make sure there's a plan**

Getting quality data is “first and fundamental” to digital transformation, says Joe Francica, managing director, location intelligence at Pitney Bowes, in advice that was echoed by many of the interviewees. In similar vein, Dan Adams, VP of data product management at Pitney Bowes, adds that it's important that there's a clear plan from the vendor for data, one that takes into account how all the disparate databases, files and records will be identified and digitized; what the process is to de-duplicate and validate that data; and how it will be integrated into systems going forward.

- **Go deep, then wide**

Digital transformation can be daunting when taken as a whole, but it doesn't need to be tackled all at once. Pitney Bowes' Navin Sharma suggests organizations will do better when they “go deep” in one channel rather than attempting to go across multiple channels right out of the gate. A lot of companies push new channels but without really thinking through issues such as data privacy and agility—“and that's where they get into hot water.”

As complex as digital transformation for customer engagement may be, it can be practically and efficiently achieved by following the road map outlined here. It involves creating a single view of the customer by bringing together data that identifies those customers as well as their behaviors, interests and relationships, contextualizes that information with location, and puts that data to use by creating relevant communications at the right time on the right channel.

To do this, businesses need to work closely with partners who understand the end-to-end process of digital transformation and customer engagement, and who can provide a plan for harnessing a company's data, wherever it resides, and ensuring its quality. Data is fundamental to any digital transformation effort for customer engagement, and getting it right, up front, is critical if businesses are truly committed to engaging with customers in a responsive, hyper-personalized way with seamless communications across all digital touchpoints.

For more information about Pitney Bowes,
the craftsmen of commerce, visit:
pitneybowes.com/us/customer-engagement-marketing.

3 of the tech trends interviewees predicted will affect digital transformation within the next three to five years.

1. ACCELERATION

“Buckle up,” says Accenture's Donna Tuths, the pace of technological change is only going to continue to get faster. And, she adds, “I think we are very much underestimating the impact of the Internet of Things on all aspects of human life, and on our ability to manage the change.”

2. ENTERPRISE PLATFORM CUSTOMER ENGAGEMENT HUBS

“Engagement hubs that can really help with delivering an omnichannel experience in a unified way are going to become much, much more important as we move forward,” says Pitney Bowes' Jesse Hoobler. These hubs will allow enterprises to deliver a real omnichannel experience, seamlessly across multiple touchpoints.

3. FRICTIONLESS PAYMENTS

“Everybody needs to start thinking about making payments frictionless, on demand and simple,” says Point-Source's Stephanie Trunzo. There are ramifications not just for buy buttons online, or converting a quote to a policy, but practical considerations for things like fulfillment and marketing, and how to convert sales directly from new channels, like billboards or a photo someone takes of a sweater they like in passing.

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