ABOUT TERADATA

Teradata empowers companies to achieve high-impact business outcomes. With a portfolio of business analytics solutions, architecture consulting, and industry-leading big data and analytics technology, Teradata unleashes the potential of great companies.

Teradata employs more than 10,000 employees in 43 countries worldwide and has its corporate headquarters in Dayton, Ohio. Its revenues in 2016 amounted to $2.3 billion from about 1,400 customers located in 77 different countries.

www.teradata.com

THE INTERVIEWER

Professor Andrew Stephen conducted the interview in June 2017

ABOUT YASMEEN AHMAD

Yasmeen is a strategic business leader in the area of data and analytics consulting, named one of the top 50 leaders and influencers for driving commercial value from data in 2017 by Information Age, and Data Scientist of the Year 2017 by Computing magazine.

In her current role as Director at Think Big Analytics in Central Europe, UK&I and Russia, Yasmeen has responsibility for Think Big's industry and business consulting, for data science and for data-and-solution engineering teams. They focus on delivering business outcomes to their large global customer base and on exploring the biggest data and analytics. In addition to this, the teams play a key advisory role with customers, providing guidance on their various data and analytics strategies.

Yasmeen holds a PhD in Data Management, Mining and Visualization, carried out at the Wellcome Trust Centre for Gene Regulation & Expression. Her work has been published in several international journals and was recognized by the Sir Tim Hunt Prize for Cell Biology. Yasmeen has written regularly for Forbes and is a speaker at international conferences and events.

Recreating Intimacy
With Connected Consumers

GfK MIR Interview with <u>*Yasmeen Ahmad*</u>*,*
Think Big Analytics Director at <u>*Teradata*</u> *in London, UK*

———

In the good old days shop managers knew their customers personally and were able to tailor offerings to their needs and desires. But how can we create meaningful moments for connected consumers in global markets? Yasmeen Ahmad explains how, in digital times, data fill in. Smart algorithms help generate insights and enable real time action to provide the right product and service to the right customer at the right time. Companies that don't want to be left behind a digital elite need to remain close to their customers across multiple digital touchpoints. Being capable of reading, interpreting and acting upon consumers' traces is a prerequisite.

MIR: Yasmeen, you work for Teradata, which is one of the largest enterprise software companies in the world, and you support some of the largest companies in Europe and around the world. Based on what you're seeing, what are the biggest challenges that marketers are facing right now?

YASMEEN AHMAD: Marketers today are being challenged by the quickly evolving changes driven by digitalization. Today, digitalization has created more channels, providing additional opportunities for customers and businesses to interact. It has also increased the availability of existing and new data-driven products and services. Digitalization has placed power into the hands of the customer. Traditional businesses are faced with customer relationships breaking down as expectations change.

MIR: You mention shifting expectations on the customer side. What impact do they have on companies and their ways of doing business?

YASMEEN AHMAD: Products and services are now a commodity: Any competitor business in an industry can replicate a product or service within six months of launch. This makes the customer experience even more crucial, as it drives loyalty. As marketers try to keep up with the pace of change, they are moving away from pushing the product to creating meaningful moments. In local economies, this was previously simple to do, as the branch manager or store assistant had in-depth knowledge of their customers and communities. However, as we have moved into global data economies, marketers must use data to try to recreate customer intimacy.

MIR: This notion of using global data to recreate a sense of customer intimacy is an interesting idea. To get to know their customers, marketers need to become more aware of the data generated by being "always on." What are some of the key challenges in creating an intimate customer relationship with digital customers?

YASMEEN AHMAD: Broad segment-based targeting is recognized today as a crude approach to pushing possibly relevant product- and service-related messaging. People are inundated with irrelevant offers to the point that marketing has little to no value. Increasing the relevancy and potential success of marketing touchpoints requires marketers to anticipate and respond to customer needs. To do this, marketers are increasingly relying on analytical models that can predict customer behaviors through intentions captured in their interactions. Capitalizing on granular datasets, such as clickstream and social media, requires access to advanced analytical techniques and tools. Collecting interactions from page visits, clicks, hovers and form entries on a website and translating this into actionable customer insight is a major hurdle to overcome.

MIR: How can companies get actionable insights from so many different datasets?

YASMEEN AHMAD: Having a holistic view of the customer is essential to being able to monitor, manage and optimize the customer experience. To enable a seamless, joined-up experience across channels, marketers are required to map customer journeys by integrating data. The ability to bring this data together and link a customer's transactions and interactions is key to decoding a customer's journey and experience. Many businesses are still struggling with being truly customer centric because they have data spread across silos, both internal and external to the organization. Business silos working in isolation are only able to solve narrow business questions. For a wider impact, marketing teams must work collaboratively across the enterprise to integrate channel, product, customer and marketing data. This is not a trivial task as the customer's data ecosystems become more complex with various technologies both on premise and in the cloud.

MIR: You mentioned the different teams and various technologies that need to work hand in hand. Two more challenges to master?

>>
Digitalization has placed power into the hands of the customer.
<<
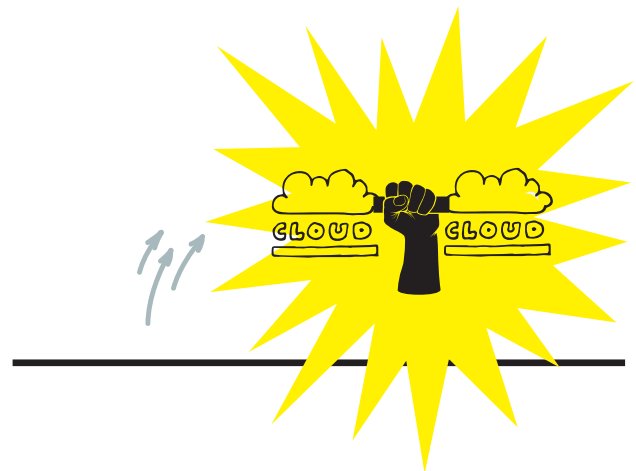
YASMEEN AHMAD: Indeed. Businesses must invest in building data and analytics teams that are able to wrangle and prepare data, analyze datasets, visualize outputs and communicate results to business users while working in tandem to iterate findings. As the number of analysts, data scientists and data engineers grow, businesses must also consider how to structure teams and how to keep their skillsets refreshed. As new tools and technologies continue to evolve, training for teams will be imperative to unlocking the full potential of this capability.

MIR: With respect to technology, speed seems to be an increasing challenge. Everything is happening in "real time". How can companies build real-time capabilities?

YASMEEN AHMAD: To ensure that a customer receives the right message at the right time, marketing companies must adopt new technologies. Marketers need the ability to do fast data capture that tracks customers on their website and mobile platforms while consuming content, registering online, starting applications and more. Tracking this activity in real time allows recognition of the right time to connect with a customer and interrupt their journey with a relevant, timely message. Identifying and deploying real-time capabilities is a challenge due to the many point solutions on the market today. Integrating these solutions into an existing complex environment takes much coordination, time and effort.

MIR: Do you see much variation in these challenges by industry?

YASMEEN AHMAD: Marketing challenges have traditionally impacted on different industries in a variety of ways. Industries such as financial services have been able to tackle some of the challenges more quickly and effectively due to their strong relationship with customers. They have long had the ability to track customer transactions through their bank accounts and online activity through online banking tools. Due to regulations, this data has been collected for many years and provides a rich source to be analyzed. Other industries, such as retail, have had to start their data collection journey and get to know the many customers they have interacted with on a frequent, sometimes daily, basis. This provides certain industries with an advantage in terms of maturing their data and analytic capabilities faster than others.

MIR: How about differences by geography – or is this a global thing?

YASMEEN AHMAD: The biggest gap today in maturity is neither industry specific nor regional: The digital elites act globally and have created a league of their own. The pace and rate of change driven by these companies is unprecedented, and they have been able to successfully unseat some of the biggest well-known global brands. We see these digital elites not only using data and analytics but also monetizing to create new business models across industries: travel (Uber), hotels (Airbnb), content providers (Facebook) – and the list goes on. These companies embody a culture of innovation and creativity. They are not hindered by legacy systems in a way that traditional companies are. The adoption and penetration of new tools, technologies and techniques are faster due to the staff they hire, contributing to a young workforce that is hungry to learn and adapt.

MIR: Are there lessons to be learned in some industries that can be applied to others?

YASMEEN AHMAD: Absolutely. In every industry there are key areas of specialization that other industries can benefit from. For example, telecommunications companies are experts in network analytics to detect households and relationships between family and friends using call detail records. Retailers have created sophisticated market-basket analytic techniques to find interesting associations between products, overlaid

with price and promotional changes. Manufacturing companies excel in optimizing supply chains. Each industry has areas of specialism that are core to the industry and have been developed as a capability over many years. Businesses can look to other industries for lessons to be learned and techniques to be adopted to accelerate business data and analytic maturity.

MIR: So far we've talked a lot about the scientific, data-driven side of marketing to connected consumers. Will the marketing managers of the future all have to be data scientists?

YASMEEN AHMAD: Analyzing data on its own creates insight but does not create value: It is the implementation of insights and actions that do. Analytical and data science teams may help marketers to discover new insights. This also requires that traditional marketing teams build a level of data literacy to enable the translation of insights into actions. Data savviness is essential across enterprises, otherwise data and analytical efforts are left behind closed doors.

›› Analytics can help us deconstruct every aspect of a web page, including the shapes, colors, layout, font and more to generate the most appealing interface that increases response rates. ‹‹
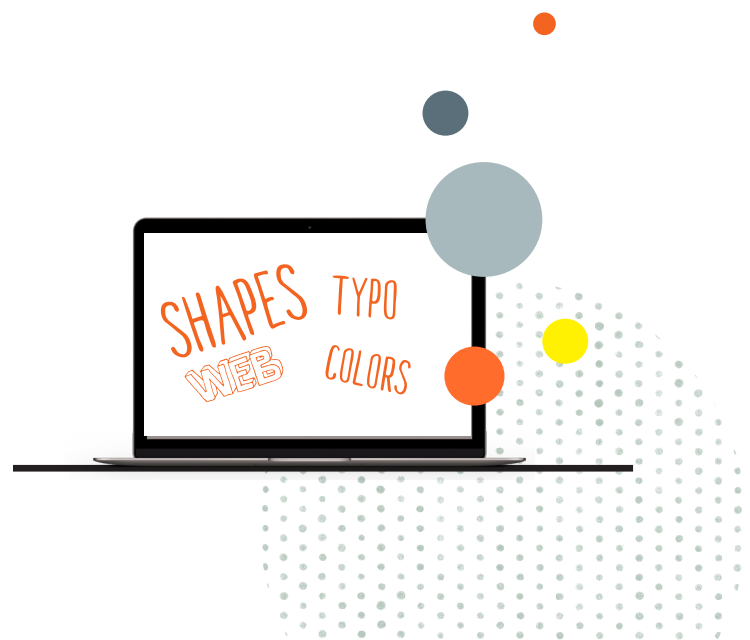
MIR: How about the other side of marketing that is more "the art" than the science? What will be the role of the creatives?

Yasmeen ahmad: Traditional marketing often focuses on creating buyer personas, identifying the characteristics of the target customer audience. This is often based on intuition and research rather than true science. These personas translate to customer segments for broad-based marketing campaigns. However, science can play a pivotal role to move marketers from broad-based campaigns to targeted messages for specific individuals. Today, we have the science that can detect behaviors, identify hidden needs, profile channel preferences and guide marketers to engage a specific customer at a specific time in a meaningful interaction. Yet, it is still the creative aesthetic, memorable design and carefully thought-out copywriting that connect with customers. Science can help us optimize budgets to engage customers to increase loyalty and drive high value behaviors.

MIR: How can marketers blend the science of analytics-based, data-driven decision making with the art of branding, creative communications and strategy?

Yasmeen ahmad: As we deploy campaigns and creative to customers, it is art that allows us to tweak the content and improve it over time. However, science also plays a role here. Traditional A/B testing can now be scaled to unparalleled levels. Analytics can help us deconstruct every aspect of a web page, including the shapes, colors, layout, font and more to generate the most appealing interface that increases interaction and the call-to-action response rates. Marketers are increasingly understanding of the fact that activities must be driven through a blend of art and science. Creativity can lead to a perfect narrative and imagery, but it is the data that can forecast demand, driving sales leads, opportunities and, ultimately, value.

MIR: What does the future hold in the field of marketing and customer analytics? We already are seeing advanced machine learning approaches being used, so what's next? More artificial intelligence? Something else?

Yasmeen ahmad: The hype around Artificial Intelligence (AI), deep learning, machine learning and other analytical techniques has reached a peak in 2017. Marketing and customer analytics have used AI and machine learning techniques in the past, but the error rates and accuracy of models were not always perfect. As digitalization and big data have increased the detail of data and volumes available, machine learning and AI approaches have vastly improved in accuracy and precision. Relying today on algorithms is not only acceptable but can lead to superior performance compared to human decision making.

MIR: Will the hype around these techniques and tools continue? How far can this go?

Yasmeen ahmad: We will see continued uptake of these techniques as businesses gain the skills and toolsets to access AI and machine learning. This uptake will become essential as businesses try to keep up-to-date with data, streaming in real time. Not only will we see the prevalence of these techniques increase, but they will open the doors to automation across the enterprise. As we begin to take interest in predicting more behaviors, needs and characteristics of customers per time of day, we will require tens of models per customer running frequently to track and update customer profile information and allow a relevant dialogue with customers. We already see this prevalently in ad-based targeting agencies that deliver real-time ads to customers in fewer than 15 milliseconds after tracking online behavior that is used to target personalized ads.

MIR: Who will be capable of handling these analyses and models?

Yasmeen ahmad: To enable this scale of automation we will see the rise of automated model factories that can monitor, manage and update models without analyst intervention. These self-adapting models will support billions of interactions taking place. In addition, these automated model factories will allow marketing teams to have challenger models in play that are continuously A/B testing various approaches.

MIR: We started by considering some of the big challenges marketers are facing in the age of the connected consumer. Let's end by thinking about the biggest opportunities for marketers in the coming years.

Yasmeen ahmad: Marketers have a tremendous opportunity to become much more relevant in customer journeys, rather than disruptive or intrusive. By delivering messages, offers and services in a timely, relevant fashion, marketers can move from a push to a pull model where customers are invited to engage as they are presented with relevant content that resonates with a need. With the advancement in granular

>>
Businesses can look to other industries for
lessons to be learned and techniques to be
adopted to accelerate business data and
analytic maturity.

<<
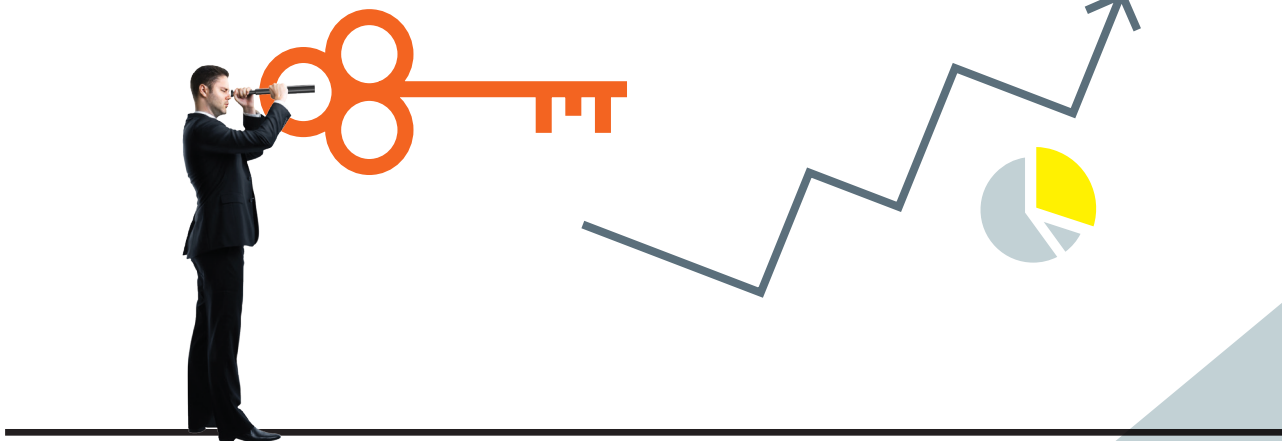
data collection, analytical techniques such as AI and machine learning, as well as real-time interaction capabilities, marketers will have the perfect scenario to reach the right person with a personal message at the right time. Using data at scale, businesses can bring back the customer intimacy that has been lost as we have grown into global economies.

MIR: These are mostly the benefits for the connected consumers. What's in it for the companies?

YASMEEN AHMAD: Marketers have constantly struggled to identify the effectiveness of their marketing budget spend. Year-on-year, marketing teams find themselves increasing spend on SEO, display retargeting, referral sites and a myriad of other marketing channels, campaigns and content. As marketing content interacts with a customer on a journey, each touchpoint has a potential influence on a customer, driving them towards a positive outcome. Sophisticated data analysis will support an understanding of which content has the greatest return on investment across a diverse range of customer touchpoints. Also, companies will have better opportunities to monetize data to create new products and services to compete and differentiate against the market.

MIR: Any final advice?

YASMEEN AHMAD: Businesses must embrace and invest to build up their capabilities in this area so as not to be left behind by the digital elites. To be successful in the age of connected consumers and global digital markets, marketers need to be focused on customer experience and loyalty, which can only be understood and nurtured through a data and analytics strategy that drives decision making across the entire enterprise.

MIR: Yasmeen, thank you for these fascinating insights. Clearly there's a lot of advanced work happening on the data and analytics side of customer management, and it is exciting to hear your vision of the future of marketing.

/.