Booz | Allen | Hamilton

Viewpoint

NEXT GENERATION RETAILERS

POWER UP YOUR ANALYTICS

EXECUTIVE SUMMARY

An unstable global economy, fraught with geopolitical uncertainty, left many wondering if companies in the Middle East and North Africa (MENA) would struggle to turn a profit in 2016. Yet, just as challenges have come to characterize the region's business landscape, so too have a wealth of technological advances—advances that hold great potential for companies across multiple sectors, with retailers prime amongst them.

In particular, developments in digital commerce and underlying predictive customer analytics promise to deliver significant opportunities to a sector that is forecast to grow by 4.6 percent region-wide next year. If seized, this opportunity could not only offset the economic pressures that retail now faces, but take the sector to new heights. But there is a caveat: to realize this potential, retailers must learn how to successfully navigate the digital space and turn the deluge of public and customer data scattered across their different business units into tangible business results at their fingertips.

The reality is stark: in today's world, retailers underestimate the significance of such data at their peril. Harnessing the predictive power of data allows retailers to boost their customer experience and reduce operational costs—two objectives that are more important than ever, in the face of fierce competition and disruptive operating models in the retail sector.

THE ECONOMIC BACKDROP

IMF estimates point to positive MENA GDP growth of around 3.1 percent this year, rising to 3.5 percent in 2017[1]. Yet, economic challenges linked to record-low oil prices, regional conflicts and the increased threat from terrorism have combined to depress consumer confidence, placing mounting pressure on the retail sector. The negative effects of these macroeconomic challenges are offset however, by a number of factors, which are driving a dynamic market in MENA.

The Arab world's population is expected to reach 460 million by 2025, according to the World Economic Forum[2], while tourism also continues to grow—as does its economic impact. The World Travel and Tourism Council reports that the GDP contribution from travel and tourism is forecast to reach US$328 billion in the Middle East by 2025, up from just under US$210 billion in 2015[3]. For its part, Dubai's Expo 2020 is expected to create 275,000 jobs across the region during the period 2014-2020, with the event predicted to draw 25 million visitors to the United Arab Emirates, according to the organizers[4]. In the wider region, meanwhile, the opening of Iran to foreign investment is expected to unlock significant business opportunities and boost economic growth.

Further adding to the dynamic economic landscape, the GCC is set to invest US$1 trillion in new construction projects by 2030, nearly half of which will be spent on the development of smart cities such as King Abdullah Economic City in Saudi Arabia, Dubai South, and continued development of Abu Dhabi's Masdar City, according to UK built asset consultancy, EC Harris.

1 Regional Economic Outlook, April 2016', International Monetary Fund

2 'World Economic Forum on the Middle East, North Africa and Eurasia: Bridging Regions in Transformation', World Economic Forum, 2012

3 'Travel & Tourism: Economic Impact 2015 - Middle East', World Travel & Tourism Council, 2015

4 'Mega Event Preparations Progress Rapidly as Next Phase of Delivery Ramps Up,' Expo 2020, http://expo2020dubai.ae, 28th April, 2014.

Economic challenges have combined to depress consumer confidence, placing mounting pressure on the retail sector. However, these macroeconomic challenges are offset by a number of factors, which are driving a dynamic market in MENA.

THE RETAILER'S CONUNDRUM

Against this backdrop of economic growth and infrastructure development, MENA's retail industry also finds itself in an era of dynamism and change. While consumers in the region still appear to favor in-store shopping, the digital commerce market is dramatically altering the way shoppers behave, with developments in the US over the past few years providing an indication of things to come for MENA.

The arrival of services such as True Fit and Trunk Club in the US has increased the comfort and convenience of shopping online, taking the personalized experience once only available in brick-and-mortar stores, and making it available through e-commerce. The former is a computer program that crunches large amounts of data to predict the size and fit of garments for each individual consumer, while the latter is a site that employs a stylist to pick out clothes based on customer preferences, before mailing them directly to the shopper.

With technologies now in place to help consumers find the right fit, shopping services such as Amazon Prime, Google Express and Instacart are taking the customer experience further by closing the instant gratification gap between e-commerce and in-store shopping. Then, completing the shopping cycle, payment services such as Apple Wallet, Level Up and PayPal are making non-cash transactions safer and easier than ever.

THE CHANGING RETAIL LANDSCAPE IN THE MENA.

E-commerce in MENA grew by 21% Y-o-Y from 2011 to 2015, and is expected to triple to reach USD 7.5bn in 2020 in UAE, KSA and Egypt, according to Euromonitor

Stagnation in Brick & Mortar footfall due to advent of retail alternatives. Malls footfall increased by only 2% between 2014 and 2015 in UAE and KSA according to MECSC

66% of MENA consumers use internet to research products and services before visiting stores according to a Wamda research

The benefits of such services are yet to be fully embraced—and indeed available—in the region. However, research indicates that 43 percent of Middle Eastern consumers report making purchases online at least once a month, while statistics from Euromonitor International indicate that e-commerce as a whole grew 21 percent in MENA between 2011 and 2015. At the wider global level, meanwhile, for the first time ever, consumers are purchasing more online than they do in physical retail premises such as department stores.

This rise in appetite for e-commerce constitutes a huge advancement in the world of retail, yet it also serves to intensify pressure on retailers—and that pressure is made all the more greater by a number of related challenges.

The first of these lies in the sheer complexity of customer behavior. Understanding it can in fact be almost impossible for physical-only stores, whose ability to track traffic and log purchasing history is severely limited. However, what at first might seem a chaotic picture with few tangible waypoints, can be readily organized with the right technology. Digital platforms can provide detailed insights into customer behavior and enable retailers to cut through the surface complexity and tap a rich pool of data. This in turn allows digital-savvy retailers to personalize their offering and earn themselves a competitive edge.

The second challenge that retailers must invariably face is purely behavioral in nature. It is crystal clear that footfall is stagnating for businesses operating brick-and-mortar-only models. According to Shoptracker, strong competition from online retailers saw holiday traffic to mall tenants halved in 2013, compared to 2010, and those customers who did shop at malls visited, on average, just three stores in 2014, compared with an average of five in 2007.

The third challenge and area of interest relates to customer expectations, or more precisely, the effect that online shopping has on them. The emergence of online giants such as eBay, Amazon and Alibaba has created an expectation of excellent and instantaneous service when shopping online. Whereas once, shopping online might have been considered unconventional, perhaps even risky, investment driven by the big players in this field has raised standards to the point that it has become second nature to expect reliable, speedy service to rival the best physical retailers.

Cost pressure is the fourth, and most tangible, challenge that must be addressed. Increased real estate and labor costs are driving businesses to seek a profitable mix of traditional and digital sales channels. The onus is therefore increasingly on the retailers to embark on digital programs to ensure that outlets remain both relevant and profitable, so that the industry as a whole can thrive.

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Here, the target is to provide customers with a seamless, omnichannel shopping experience that will, in turn, create new revenue streams beyond the shop floor.

The monstrous datasets that follow each of us around, like digital shadows, as we navigate our way through the online world, represent the single biggest opportunity for retailers to improve this seamless experience across channels. By leveraging the value of both internal (Customer profiles, footfall, transactions, etc.) and external (Customer social profile, traffic, weather, macro economic, etc.) data, retailers can tailor their offering to drive sales, while at the same time optimizing their return on investment.

Walmart serves as a case in point. The American multinational retailer collects an average of around 400 terabytes of unstructured data from one million customers every minute. It also receives around 300,000 mentions on social media per week. Added to this is the plethora of in-store transactional data and shared data from partners and other retailers, along with external online and offline data on customer behavior.

Turning it to their advantage, Walmart's global customer insights and analytics department uses this vast pool of data to better understand evolving customer tastes and optimize customer experience across all access channels. By leveraging the power of data analytics, the company's efforts in extracting and acting upon important insights, have resulted in a significant increase in e-commerce sales.

In another case, U.S. retailer, Macy's, managed to increase its store sales by 10 percent in recent years after deploying a customer analytics solution that helped it better understand customer buying behavior and sharpen its promotions.

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CUSTOMER ANALYTICS– MINING FOR DIAMONDS

Certain regions in MENA are known for their high concentrations of natural resources. However, the ocean of data fed by growing Internet and smartphone penetration, promises a wealth of opportunity to match that of any oil field or precious material mine.

The Mobile Economy Middle East and North Africa 2016 report from the GSMA[5] claims that smartphone connections across the Arab world will see the second fastest growth in smartphone adoption of any region over the next few years, bringing smartphone adoption to 65% by 2020, largely closing the gap on the global average.The same report includes research from Ericsson, which forecasts that mobile data traffic will grow seven-fold between 2015 and 2020 across MENA, reaching 1.7 ExaBytes per month by 2020.

The significance of this data boom to the retail industry is immense. In fact, customer data is the single most important resource for retailers to tap in search of growth and increased understanding of their customer. Analytics can be used to inform strategy about customer stickiness, loyalty and relationship. Perhaps most importantly though, such analytics can be used to create value for the customers themselves, improving their journey and helping retailers exceed expectations.

This shift from asking what customer analytics can do for the retailer, to what it can do for customers is crucial in retaining and fueling engagement. If properly leveraged, data can provide both actionable insights for retailers, as well as significant value for consumers by enabling the provision of smarter services and a seamless customer experience.

For instance, Macy's leverages its data on online and offline customer behavior—from visit frequencies, to sales and style preferences—to create a personalized experience including customized incentives at checkouts. The retailer also launched My Macy's, a platform that creates personalized recommendations and promotions based on customer preferences and purchase behavior. Similarly, Walmart's big data algorithms analyze credit card purchases to provide personalized recommendations to customers based on their purchase history. In addition, Walmart's Shopycat service uses information on the interests of a customer's Facebook friends to recommend gift ideas available at Walmart stores and other sites, hence enhancing customer experience (while also pleasing the customer's friend in the process).

In addition to satisfying and retaining customers, if harnessed well, customer analytics promises to create business efficiencies and generate new and almost limitless opportunities that support economic growth. Grasping these opportunities, however, is contingent upon restructuring the corporate mindset and nurturing a generation of data-driven retailers, with customer analytics integral to their business model ecosystem.

Already, many leading retailers have modified their structures and strategies, incorporating customer analytics as a key enabler rather than a supporting capability. Majid Al Futtaim, the leading shopping mall, retail and leisure pioneer across MENA, has launched a comprehensive exercise to infuse data analytics into its business processes with the aim of transforming the organization's business model into data-driven decision making.

5 'The Mobile Economy Middle East and North Africa 2016', GSMA, 2016.

Majid Al Futtaim's data analytics strategy relies on developing a single view of the customer or a "Golden Customer Record" across its 13 business units. This allows the company to both understand and predict customer behavior and, as such, laser focus its marketing campaigns, and by proxy, positively impact customer experience and satisfaction. As a consequence of this, Majid Al Futtaim has been able to build a database and profile over three million unique and reachable customers, and expects significant revenue uplifts from resulting customer analytics insights across all its business units.

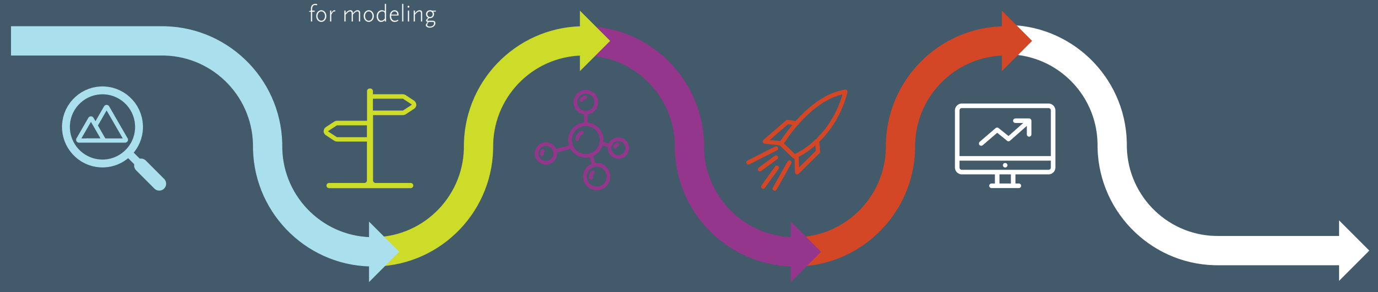
On the wider global stage, international shopping center company, Westfield, has created a big data analytics unit headed by a chief data and analytics officer to inform the company's strategy. Similarly, Walmart's information systems division has established an analytics center of excellence to handle marketing and operational analytics projects, as well as to coordinate analytics-related partnerships and capability build-up.

These developments, led by some of the world's retail giants, belie the complexities involved. Many retailers in MENA and beyond would likely agree that mastering customer analytics is hard; customer interactions are complex and, for all the data and dashboards in the world, it is not easy to fathom how to influence customer behavior in ways that support strategic objectives. Understanding how a customer thinks—a complete cognitive model of the customer—is the Holy Grail for retailers and remains out of reach. Nevertheless, advances in data collection, machine learning, and non-traditional behavioral approaches are raising the bar[6].

Still, as the bar rises, in a context of complex business environments shaped by numerous objectives, parameters, and touch-points, knowing where to start can be tricky for a retailer. This said, most effective customer analytics approaches will share four characteristics: (1) a clear starting point, (2) focus on business objectives, (3) consideration of the decision environment, and (4) utilization of leading-edge data science.

The following approach taken from Booz Allen Hamilton's Viewpoint 'Beyond Customer 360 – Understanding the Decision Environment,' combines the most cutting-edge applications in analytics and data science. It offers a practical framework to connect analytics solutions to retailers' most critical customer-related business objectives, making it easy to deploy solutions across heterogeneous environments.

THE CUSTOMER ANALYTICS DEVELOPMENT LIFECYCLE



As shown in Figure 2, the Customer Analytics Development Lifecycle is a five-step approach to actionable customer analytics solutions.

The lifecycle begins with Decision Identification, a critical first step in identifying the customer decisions that matter most to a retailer's organization, as well as the areas where customer analytics can be most impactful. This is followed by Decision Environment Mapping, which identifies the attributes affecting a customer decision and begins the process of collecting data to create a customer analytics model. The Model Development stage comes next. Here, data scientists—armed with the right customer research questions and data—use machine learning, classification, graph theory, scoring, forecasting models, and other techniques to approximate and predict customer responses. Of course, none of this matters if a model cannot impact a customer's decision, and this is the goal of the Model Deployment stage. Finally, model efficacy and accuracy are continuously improved in the Validation, Monitoring, and Impact step.

This Customer Analytics Lifecycle helps organizations understand their progress vis-à-vis a particular customer decision. What's more impactful, it offers a method that can be both replicated and repeated to ensure that customer analytics investments result in actionable results with real return on investment (ROI).

Source: Beyond Customer 360, Understanding the Decision Environment, Booz Allen Hamilton.

START THE CUSTOMER ANALYTICS JOURNEY

For retailers to truly capitalize on customer analytics, there are six imperatives central to building a sustainable customer analytics capability:

1. **Build the Case for Customer Analytics**
First, a thorough business case must be built to define the value of achieving customer analytics outcomes for the organization. This includes (a) defining clear objectives to ascertain the value of data assets, (b) developing a pragmatic, actionable strategy for developing sustainable customer analytics capabilities and, (c) outlining an acceptable ROI for building customer analytics capabilities across the organization.

2. **Define Customer Analytics Service Offering**
Once the customer analytics business case has been established, it is essential to define a clear customer analytics service offering, such as customer intelligence, customer acquisition, customer upsell/cross-sell and customer churn optimization. This is an important step in delivering high-impact, actionable insights to be used for go-to-market and customer reach.

3. **Build the Right Customer Analytics Capabilities**
Onboarding the right talent is essential to achieving timely rollout of customer analytics strategy. Building the right capabilities can be the difference between exceeding expectations and simply making up the numbers in the digital marketplace. As such, competition is intense to secure the best talent. A cohesive team populated with data architects, data scientists, business analysts and retail industry experts should provide end-to-end expertise and support an actionable strategy.

4. **Invest in Agile, Scalable Systems**
In order to collect and best use the data collected, businesses should look to develop an integrated, fit-for-purpose, agile and scalable technology ecosystem. This ecosystem should cover the full customer analytics value chain from data collection, analysis and visualization, to customer reach/go-to-market. While best of breed solutions might not be required for a particular retailer; designing the most fit-for-purpose architecture for retailers is essential to successful delivery of objectives.

5. **Establish an Optimal Operating Model**
When implementing a customer analytics capability, retailers must optimize their operating models to account for new governance mechanisms, which should be instilled to leverage economies of scale. It is also important to establish suitable organizational structures to ensure efficient flows of responsibilities, and to develop processes that regulate interactions between the different stakeholders.

6. **Change Corporate Culture**
Technology aside, perhaps the biggest impediment to making the most of customer analytics lies in developing a truly data-driven culture within the organization. To capitalize on the power of customer analytics, organizations need to place innovation, analytics and customer-centricity at the core of their corporate culture. Here, a top-down approach is essential to fully realize the potential of customer analytics.

The scenario highlighted below demonstrates how customer analytics can be used and the data insights leveraged, in an end-to-end fashion, to increase value for both customers and retailers alike. In this particular instance, the client is a holding group that owns and operates a shopping mall—a data-rich environment, whose potential was yet to be fully optimized.

CUSTOMER ANALYTICS IN ACTION

- Our starting point is a mall housing many different companies with varying business agendas and priorities. They possess multiple databases and multiple datasets, each of which is structured differently.
- Now, consider the opportunity. Here we have a goldmine of information on customer preferences not only for one, but for multiple companies.
- Mining the combined data gives the companies a holistic view of the customer, which is far more powerful than the view provided by one dataset alone. The coveted 360 degree view of the customer is in sight.
- This infographic follows our customer, John, through his mall experience:

JOHN'S JOURNEY AT THE MALL

Source: Booz Allen Hamilton.

The above scenario is just one illustrative example of the kind of personalized and predictive services that customer analytics stands to offer to companies of all shapes and sizes. The capabilities of such a system are clear. Perhaps most importantly, they offer the chance to develop a 360-degree view, which allows a customer to be viewed from multiple angles, all of which inform businesses of her or his preference, allowing services to be optimized like never before.

These new possibilities have emerged thanks to the vast data now at retailers' fingertips, and the customer analytics designed to turn it into actionable insight and tangible results. Indeed, as digital technologies continue to proliferate and digital service uptake rises, new resource reserves are being built on customer analytics data across the MENA region.

As a consequence of this rapidly changing landscape, organizations across the public and private sectors are encountering innumerable business challenges, yet an equal number of golden opportunities. Retail customer preferences and habits are changing, both choice and competition are increasing, and groundbreaking correlations are emerging. Each of these advances can be viewed as either an obstacle to success, or an exciting chance for growth—and it is those who adopt the latter view who stand to gain.

The unstable global economy may have raised questions over the ability of MENA companies to make a profit this year, but in the retail sphere, the rapid rise of customer analytics is creating an environment in which retailers can not only survive, but thrive. With the right capabilities, and a carefully implemented digital strategy with customer analytics at its core, both retailers and consumers can reap untapped benefits. The journey is not without challenge, but the scope to reach customers with a laser-focused offering has never been clearer.

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About Booz Allen

Booz Allen Hamilton has been at the forefront of strategy and technology for more than 100 years. Today, the firm provides management and technology consulting and engineering services to leading Fortune 500 corporations, governments, and not-for-profits across the globe. In the Middle East and North Africa (MENA) region, Booz Allen builds on six decades of experience partnering with public and private sector clients to solve their most difficult challenges through a combination of business strategy, digital innovation, data analytics, cybersecurity and resilience, operations, supply chain, organization and culture, engineering and life-cycle project management expertise.

With regional MENA offices in Abu Dhabi, Beirut, Cairo, Doha, Dubai and Riyadh, and international headquarters in McLean, Virginia, the firm employs more than 22,600 people globally, and had revenue of $5.41 billion for the 12 months ended March 31, 2016. To learn more, visit mena.boozallen.com. (NYSE: BAH)