



ANALYTICS: THE MOST CRUCIAL TRANSFORMATIONAL LEVER



Akhilesh Ayer, EVP & Head, Research & Analytics

Who would think that a can of orange juice requires anything more than oranges, some preservatives and maybe a 'secret ingredient,' as beverage manufacturers like to term it? Yet, for a leading consumer packaged goods company, it requires an analysis of 1 quintillion decision variables to ensure every gulp of the juice in every bottle across all seasons tastes the same. The company uses a specific algorithm to analyze data points such as expected crop yield, cost pressure and the impact of weather on 600 flavors of oranges.

From a can of orange juice to contact suggestions on LinkedIn, analytics is now becoming the foundation of doing business.

However, though it has been around for decades, various factors in the business landscape are making analytics an inescapable reality. Let's take a closer look at three of these factors — technology, market complexity and the changing behavior of customers.

Disruption, Digital & Data

When I say technology, I am specifically referring to the impact of digital, which has disrupted the thinking in the C-suite. According to a Gartner CEO Survey, 47 percent CEOs have a mandate from

the board to make progress in digital. Fifty-six percent of the CEOs reported increased profits with digital improvements.

Digital, in turn, has led to the generation of humungous amounts of data. For companies, it's imperative to make sense of this data and analyze it along the lines of the 5Vs² — volume, velocity, variety, veracity and value. Insights from the right data can help organizations take accurate decisions in real time.

As a case in point, let's look at how a global retail chain³ applied analytics to increase the sales of a seasonal product among its loyal customers. A customer

https://www.forbes.com/sites/gilpress/2017/04/27/5-top-technologies-for-digital-disruption/#75388efc4898

² https://www.wnsdecisionpoint.com/our-insights/reports/detail/68/leveraging-smart-data-for-business-success

³ https://www.wns.com/insights/case-studies/casestudydetail/483/propensity-modeling-leads-to-accurate-customer-segmentation-boosts-loyalty-sales



segmentation framework and exploratory data analysis on the previous year's transactions and digital data helped differentiate the buyers from non-buyers. The insights were used to develop personalized campaigns, which resulted in a 200 percent increase in the purchase of the product by loyal customers.

Similarly, an algorithm like Digit Distribution Analysis⁴ can help auditors pick the right target for sample auditing without any bias.

In short, the proliferation of digital has paved the way for analytics to be deployed frequently to achieve better outcomes. Artificial Intelligence (AI), cognitive computing and Machine Learning (ML) are all offshoots of this growing demand.

Market Madness

The increasing use of cloud applications and solutions, and the growth of technologies such as Internet of Things has knotted the market in complex regulations and data privacy laws. The Dodd-Frank Act and the recent EU General Data Protection Regulation are just a couple of examples of stringent regulations that have come into⁵ existence in line with the changing business landscape. As we know, companies are leveraging analytics to navigate around the complexities

of such regulations with ease and ensure compliance.

Let me illustrate with an example. Our client, a leading U.S. bank, had to comply with Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Act Stress Test (DFAST). The bank built a sophisticated framework underpinned by advanced analytics to validate the accuracy of its risk models. This helped the bank adhere to CCAR and DFAST norms effortlessly.

All this points to one reality: analytics is becoming a key necessity for tackling market volatility and changing regulatory requirements.

⁴ https://www.wns.com/insights/whitepapers/whitepaperdetail/496/not-so-risky-business-leveraging-analytics-to-fix-blind-spots-in-auditing

⁵ https://www.wns.com/insights/case-studies/casestudydetail/536/co-creation-leads-to-augmented-model-risk-management-function



Digital Age Customers & Personalization

The third aspect — changing customer behavior — is again warranted due to the technological changes in the business environment. Digitally savvy customers expect personalization and higher quality from their brands, while social media plays a significant role in how a brand is perceived. It only takes a couple of negative reviews on Twitter or Facebook to dismantle the carefully crafted image of a brand. Analytics, as we are seeing, is playing an important role in both personalization and curbing negative sentiments.

While segmentation and tiered targeting has been deployed by organizations for many years, advanced analytics has paved the way for more complex segmentation in real time as a result of higher computing power and the increased proliferation of digital. Complex segmentation is what helped one of our clients, a global retail chain, to drive hyperpersonalized promotions to shift from a product-centric marketing strategy to a customer-centric one.

Advanced analytics helped the company gather granular and relevant insights to create personalized and compelling messages.

However, though analytics is making inroads across the value chain, not all organizations are on an equal footing when it comes to analytics maturity.

A WNS DecisionPoint[™] survey⁷ of pharma companies⁸ found that half the companies surveyed are still not using analytics for customer segmentation and targeting, while over 70 percent of them are not using analytics to track and understand patient populations.

Hence, while AI, cognitive computing and ML are all gaining traction, the mainstreaming of analytics still remains spotty. So, what are the factors preventing companies from leveraging the full potential of analytics? In my viewpoint, the following are some of the reasons:

- Analytics not being driven by the top leadership
- Business outcomes to be driven by analytics not defined clearly
- Analytics projects seen as ancillary and not a core way of

doing things

- Businesses allocating discretionary budgets to drawing insights instead of mainstreaming analytics
- Insights not being made available to decision-makers, leading to intuition-based decision-making instead of insight-based decision-making

Most organizations also ignore the prospect of monetizing the huge volumes of data they generate. By mainstreaming analytics, companies can leverage their data and grow their business, but all this depends on four key levers.

Lever 1: Making Analytics a CXO Agenda

A direct CXO commitment is critical to analytics becoming an integral part of doing business. A clear mandate from the C-suite can ensure that all units make analytics core to their functions.

The key is to create a specialized role such as head of data / analytics, held by someone who understands both the aspects of

⁶ https://www.wns.com/insights/case-studies/casestudydetail/481/can-strategic-customer-segmentation-drive-personalized-marketing-promotions

⁷ https://www.wnsdecisionpoint.com/

 $^{^{8} \} https://www.wnsdecisionpoint.com/our-insights/reports/detail/46/bending-the-buyer-power-curve-downwards$

data and analytics, to help mainstream analytics. My recommendation is that a core team should be established by the leadership to help champion the adoption of analytics across the organization since other CXOs, such as Chief Information Officers, are often critical of the success of the analytics agenda. A good way to start is to assess the current state, and create a roadmap and strategy for the adoption of analytics, leadership, organizational structure and operating model.

Lever 2: Ownership by Function Heads

While the CXO agenda sets the pace, it is equally important for all functional leaders to adopt analytics as a core part of their approach to drive the outcomes they desire.

For instance, let's consider the goal of reducing frauds by the claims function of an insurance company. It's a proven fact that analytics can yield actionable insights. However, these insights can be effective only if analytics is an integral component across the claims

function, including the investigation process.

Since the eventual goal for all insurance companies is to improve customer experience, making analytics an organic part of the claims function is a first step in this direction.

My own experience with a global Property and Casualty (P&C) insurance company is a case in point. The adoption of drone imagery analytics to re-define the insurer's claims process was possible only because the function head — in this case, the chief digital and claims officer — took the ownership to drive this initiative.

The case for ownership by function heads to help mainstream analytics is strong. A WNS DecisionPoint™ survey of P&C insurers¹⁰ in the U.S. found that companies using big data analytics in the claims cycle reported higher benefits such as 40 percent improvement in the average referral time and 50 percent more average referrals. To derive such benefits and make analytics a part of the entire value chain, the involvement of functional heads is thus essential.

Lever 3: Operationalizing Analytics

The third lever centers on the analytics of analytics. Simply put, it means ensuring that the analytics experts in the organization become a part of the decision-making construct. This is how companies can operationalize analytics.

Let me illustrate how operationalizing analytics works with this example of a global hotel chain. The hotel chain was looking to increase bookings through its direct channels. A sophisticated analytics model was deployed to analyze the behavior of customers with the highest propensity to book directly and predict their future demand. The model analyzed data from a variety of sources considering 200 variables.

The insights were operationalized across room inventory management, promotional offers and customer communications. The solution resulted in USD 5 Million incremental revenue and USD 773,000 savings in

⁹ https://www.wns.com/insights/videos/video-detail/583/drone-imagery-analytics--re-shaping-claims-assessments-for-pc-insurers

¹⁰ https://www.wns.com/insights/blogs/blogdetail/357/has-big-data-analytics-helped-insurers-prune-their-losses-from-false-claims

[&]quot; https://www.wns.com/insights/case-studies/casestudydetail/479/hotel-chain-leverages-analytics-to-achieve-28-revenue-growth-through-direct-channel-sales-strategy

commission payouts to distribution channels.

Operationalizing analytics means companies make it a part of their DNA — and core to all the decision-making process. Instead of relying on judgement-based decisions, they use data science and data analysis, and the rigor of analytical models to solve all complex business challenges. It means ensuring that the analytical engine and insights are operationalized as part of the functional decision-making, technology systems and business processes.

Lever 4: Embedded Analytics in a Digital Ecosystem

In my view, embedded analytics is all about looking at the entire operations and the end outcomes from the process. For example, in the claims process of an insurance company, embedded analytics can bring about four significant outcomes — reduce claims handling time, eliminate fraud, reduce liability costs and improve customer experience. The significant savings achieved from

multiple analytics interventions across the value chain can be channeled back as investments to strengthen the company's analytics practice. The company thus leverages the true value of embedded analytics in an increasingly digital landscape.

But embedding analytics requires more than just analytics capabilities. It requires industry knowledge and end-to-end process understanding. Consulting firms and boutique analytics companies cannot wield their influence across the value chain of a particular process. In my opinion, third-party service providers — with the required industry knowledge, analytics capabilities and the ability to manage end-to-end processes bring in the necessary competence to embed analytics in the entire operations. These companies understand how the process is set up and can identify the key areas where analytics should be embedded in the value chain for effective outcomes.

Let me again illustrate with the example of a claims process.

When a claims handler is processing an application, a third-

party service provider understands that an algorithm embedded on the screen will make the person more effective. However, a consulting firm or a boutique analytics player is likely to miss this opportunity. Thus, the third-party service provider can bring in incremental value and help achieve the desirable outcomes.

My experience with a North
American energy provider is a
classic example of how embedded
analytics works. The company had
lots of bad debt. We analyzed the
energy provider's data and
segmented the customers who
paid their bills on time and those
who were in vulnerable situations.
This meant that the company's
resources could focus on
vulnerable customers instead of
making calls to all customers.

Our data analysis showed that the company could reduce bad debt by embedding analytics in the right places in the collections process. But it required us to handle the complete process of carrying out the analytics as well managing the entire collections process. The result? Without additional costs, the company reduced its bad debt significantly.



Organization Structure for Analytics

While the four levers described above form the pillars for mainstreaming analytics along with the right operating model, I would like to highlight two operating models that companies can leverage to integrate analytics into their value chain — the hub-and-spoke model and the Center of Excellence (CoE) approach.

A hub-and-spoke model allows a scalable analytics function to be built and a central analytics practice to be established. Let me illustrate with an example. A global insurer with operations across the globe had a few tactical analytics in place. To mainstream analytics, a hub-and-spoke model was deployed. A centralized team of data scientists that could address all analytics-related questions in a consistent manner became the hub. Various teams of the insurer, located globally, acted as the spoke.

This project was built on all the four pillars of mainstreaming

analytics discussed earlier. It was sponsored by the insurer's global chief operating officer. A joint project management office was established to provide governance, and a dedicated global program director was responsible for tracking the analytics benefit from the engagement.

The project established a central analytics practice to be adopted across the organization. The mainstreaming of analytics delivered specific results in terms of millions of dollars in benefits through multiple projects completed jointly across claims, sales, underwriting and customer analytics.

A CoE approach helps companies address industry challenges and customer-specific problems. From data gathering to segmentation to cleansing to building models, the CoE becomes a unit of analytical experts and cutting-edge solutions that can deliver value across all functions.

Let me illustrate the CoE approach with an example. A leading U.S. bank¹² was struggling due to the lack of a centralized governance and reporting structure. This became a roadblock in assessing loan proposals. A CoE was established to set up criteria-based standard operating procedures, centralized practices, metrics and rating methodologies, and to integrate analytics into the core process. Measurable benefits realized, among others, was credit decision cycle time reducing from 10-12 days to five days resulting in 6-8 percent increase in loan uptake.

Companies can use one of the two operating models described above or leverage a model that suits the business, but it's important to focus on the operating model to ensure the business' needs are addressed.

In my opinion, analytics is the most important transformational lever. By making it part of the overall initiative, companies will benefit from the tangible differences that analytics can deliver across operations that impact both internal (employees) and external stakeholders (clients, end-customers)

¹² https://www.wns.com/insights/case-studies/casestudydetail/535/co-creation-helps-in-reducing-bad-loans-and--improving-compliance



Despite clear signs that analytics will become the anchor for organizations amidst business turmoil, companies have lots of ground to cover before mainstreaming analytics. They have to approach this goal with a sense of urgency and the support of the right partners with analytics expertise, industry knowledge and operational experience.

The recent failure of retail chain Toys "R" Us is yet another reminder of the unforgiving nature of the business environment. Perhaps, if Toys "R" Us had evolved and applied analytics-driven technologies to manage customers and business, it might have made different kind of headlines. This is just one school of thought that makes the case for analytics.

The bottom line is that a new paradox has risen. That in this world where all status quo is being disrupted, analytics is the new status quo.



About WNS

WNS (Holdings) Limited (NYSE: WNS) is a leading global Business Process Management (BPM) company. WNS offers business value to 350+ global clients by combining operational excellence with deep domain expertise in key industry verticals, including banking and financial services, consulting and professional services, healthcare, insurance, manufacturing, media and entertainment, retail and consumer packaged goods, telecommunications and diversified businesses, shipping and logistics, travel and leisure, and utilities and energy. WNS delivers an entire spectrum of business process management services such as customer care, finance and accounting, human resource solutions, research and analytics, technology solutions, and industry-specific back-office and front-office processes. WNS has delivery centers worldwide, including China, Costa Rica, India, the Philippines, Poland, Romania, South Africa, Sri Lanka, Turkey, U.K. and U.S.

