COGNIZANT

"Navigating the Shift" to Next Gen BI & Analytics: *An Insider's Guide to Becoming a Data-Driven Organization*

Cognizant

Cognizant presents the "go-to" library every enterprise leader needs to gain the upper hand in today's digitally intensive, customer-centric, omnichannel business environment

Where Is Your Organization Headed?

You don't have to look back very far to see the lasting disruption today's digital economy has left behind. Borders bookstore, Blockbuster video, Kodak cameras, all replaced by Amazon, Netflix and Instragram respectively. Consider the former the canaries in the coal mine, and the latter your call to arms.

In a world where every computing device – including tablets, phones, gaming consoles and "things," such as cars, televisions and airplanes – are capable of building a cloud of information around people, processes and customers, organizations are challenged to derive meaningful insight.

❙❙ Those who embrace this digital reality, gain market share. Those who don't, fade into oblivion. ❙❙

Cognizant has a term to describe this phenomenon. We call it a Code Halo™. Everyone has one. Every click, swipe, "like," buy, comment, deposit, search and tag produces information that adds to a unique virtual identity; one that businesses can use to re-invent their relationships with customers, partners and employees, and construct effective, new operating models to become more competitive – and relevant.

The concept of the Code Halo, and how understanding and managing it can transform your business, is what we like to help you with. We have included numerous links to thought leadership articles, whitepapers, news and views to help you better grasp the implications of a digital economy, and provide insights into what your organization can do to master it through a combination of process and technology. It isn't difficult to achieve, once you know the landscape.
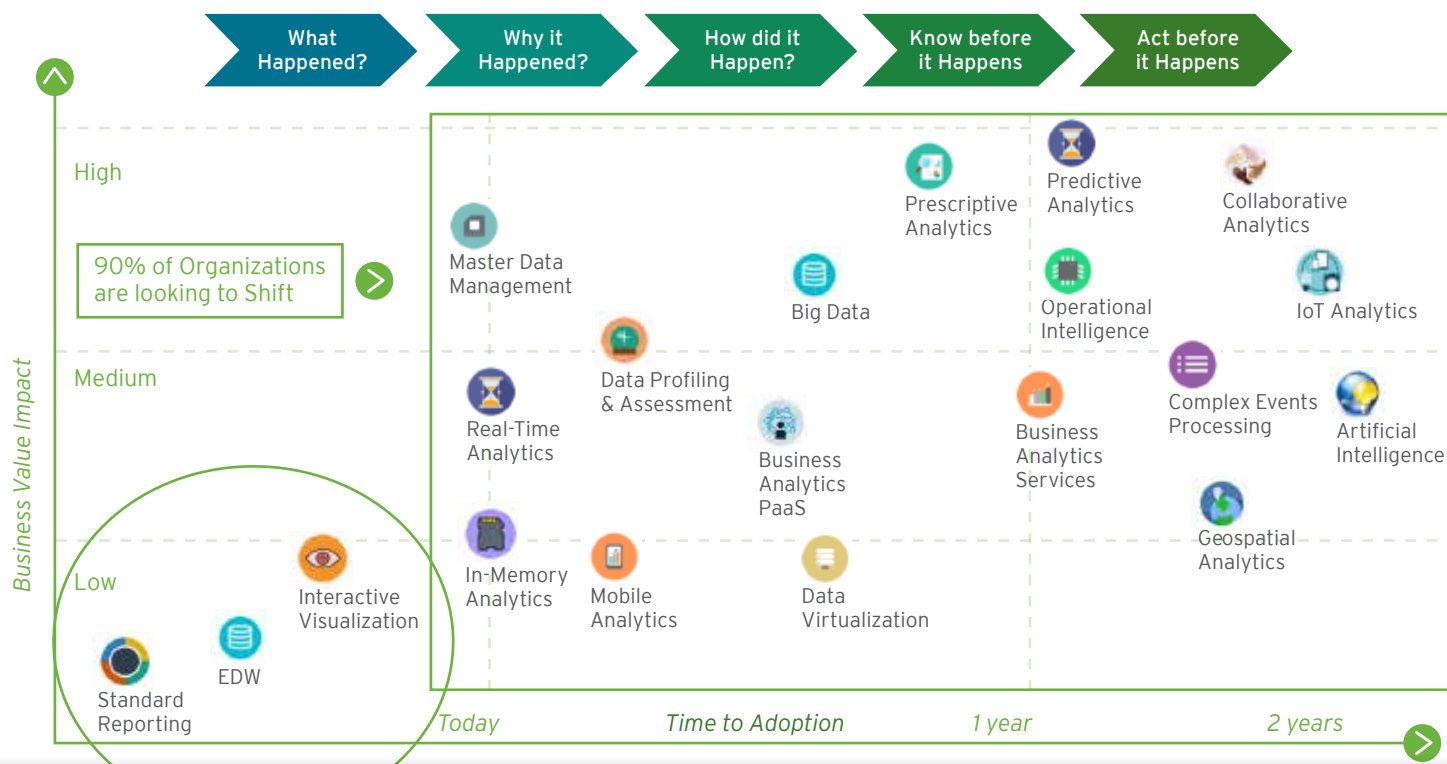
You Are Data Rich, We Can Make You Knowledge Rich!

As an established thought-leader in the area of digital, omnichannel customer engagement, Cognizant presents an alternative to corporate obsolescence based on the recognition that customer relevance is vital to survival in a digital world.

To stay ahead of the curve, your enterprise must leverage digital technologies intelligently to deliver omnichannel experiences that increase customer intimacy. In other words, you need to begin embracing an integrated, social, mobile, analytics and cloud (SMAC) solution that unlocks the combination to drive lasting business value.

Let Us Help You Navigate the Shift

Getting to a functional state of digital effectiveness, where you at last possess the computing power and processes required to read into the Code Halos surrounding your enterprise and pluck the right information at the right time, will require a searching look at your enterprise technology. In our experience, guiding tier one global organizations from basic digital reporting and visualization to becoming a truly nimble and engaged digital player of relevance, we have found that 90 percent of organizations lack the key ingredients to stand atop today's omnichannel, competitive arena. In fact, only nine percent of CIOs we surveyed said they had all the skills necessary to succeed. The following chart shows the gap in readiness:

Chart showing Business Value Impact vs Time to Adoption:

Stages: What Happened? → Why it Happened? → How did it Happen? → Know before it Happens → Act before it Happens

90% of Organizations are looking to Shift

High / Medium / Low — Business Value Impact

Elements plotted: Prescriptive Analytics, Predictive Analytics, Collaborative Analytics, Master Data Management, Big Data, Operational Intelligence, IoT Analytics, Data Profiling & Assessment, Complex Events Processing, Artificial Intelligence, Real-Time Analytics, Business Analytics PaaS, Business Analytics Services, Geospatial Analytics, In-Memory Analytics, Mobile Analytics, Data Virtualization, Interactive Visualization, Standard Reporting, EDW

Time to Adoption: Today — 1 year — 2 years

Creating a competitive, data-driven organization can seem overwhelming at first glance. However, the first step in navigating the shift is knowing the facts. The following links will provide many of the details you need to fully understand the big picture, and begin to visualize a solution that drives results.

Five Digital Truths Every Executive Must Understand

Code Halos – the digital footprints left by people, organizations and things – are the future. To make the most of the insights they can uncover, however, organizations need to embrace five key truths. This executive perspective supplies the big picture.

Decomposing the Internet of things: A $14.4 Trillion Opportunity

The Internet of Things (IoT) is turning out to be bigger than the Internet itself. And, with size comes the promise of improved asset utilization, process efficiency, productivity, cost savings and of course, revenues. Enable a Strategy to harness the valuable information from IoT and convert it into business benefits.

Internet Of Things To Analytics Of Everything

Smart technologies are finding their way into everyday things, from toothbrushes, to tennis rackets to beverage containers. The resulting opportunities for product companies are seemingly endless, from game changing innovation, to new levels of efficiency in product development, manufacturing, marketing, sales and the customer experience. Leverage Smart Products to Innovate next gen products

The Rise of the Smart Product Economy

Six Key Areas Where Data-Driven Organizations Can Win Big

In our history of working with leading organizations around the world, Cognizant has identified six areas of business where digital intensity is creating marked opportunities for data-driven organizations to succeed. As you ponder the transition from basic reporting and visualization to a more robust, proactive business intelligence platform, zoom in on these key areas of operation to achieve a faster and greater bottom line impact.

• **Improve Customer Experience:** Using customer input, preferences and feedback, in real-time, to promote buying, cross-selling, up-selling and long-term brand loyalty.
• **Transform Financial Management:** Leveraging SAP HANA's data platform for large-scale investment analysis, streamlined M&A integrations and overall better decision-making.
• **Accelerate Supply Chain Management:** Using predictive analytics to improve forecasts, support just-in-time order management and reduce inventory cost.
• **Augment Employee Productivity:** Extend the edges of enterprise to connect with employees, boost morale and enhance employee retention.
• **Sales Force Enablement:** Provide On the Go Analytics and Information to your Field Sales to enable them Sell in the Digital Age
• **Optimize Asset Utilization:** Extend the life of capital assets and lower total cost of ownership through preventive maintenance and quality control.

Social Analytics to Socialite Analytics

Building Omnichannel Analytics Enhances customer buying process grounded in real-time customer profiling can have a major impact on how your customers engage with your brand and enhance your competitive position. The content presented below will offer you insights and direction as you map your course to a more meaningful customer engagement model.

Putting the Experience in Digital Customer Experience

As we enter the digital era, most business leaders understand that the "digital customer experience" is the key to engaging with customers and growing revenues. However, according to our recent research, the vast majority of businesses have a long way to go when it comes to getting it right. putting your customer data to work can have a heavy impact on your top line

Achieving Social Transformation: From Marketing Myopia to Social Nirvana

All the hype around social media notwithstanding, the dispiriting fact is that research shows that as few as three percent of companies harness the power of social media across their organizations. Sadly, most companies confine social only to their marketing functions. Achieve "social nirvana" through a true, end-to-end social media enterprise.

The Latest Thinking on Customer Centricity

Today, with the extensive digital footprints that surround consumers' online behavior, companies can not only view past demand, but also use insight from data to predict future preferences. Customers expect companies to distill these reams of data about them into continuing pleasant interactions, fixing past distasteful ones and inspiring future delight. We provide our perspectives sharing deep insights regarding the cultural shift, digital initiatives and pathways to enhancing your organization's customer point-of-view.

Six Strategies for Reshaping Customer Experience Processes in the Digital Era

Using six powerful strategies, digitally savvy companies can reimagine customer support processes and create unprecedented levels of new business value by significantly elevating the customer experience. Redefine processes through delivering "moments of magic."

Omnichannel Retailing: Notes from the Field

Omnichannel retailing is no longer optional. Customers expect to be able to shop seamlessly across channels. Done right, it results in higher footfalls and sales for retailers, as well. We examined retailers that seem to have gotten omnichannel right and learned from their experiences.

> **Omnichannel retailing is no longer optional. Customers expect to be able to shop seamlessly across channels.**

Accelerate your supply chain management by going from the basic business directives of reducing inventory cost through just-in-time ordering, to more predictive and proactive "smart" inventory management and automated ordering systems.

Supply Chains That Deliver

The end goal of any supply chain is to be "capable to deliver"—with everyone working together to get the right product, to the right place at the right time. This requires a dramatic reduction in the number of supply chain manual "touches," to speed time to market through careful orchestration of just-in-time component delivery and product pickup. Our thought leaders share their insights in a series of downloadable whitepapers that slice and dice the core issues.

Manufacturers, Retailers Look to Adaptive Supply Chains to Increase Revenue, Cap Costs, Boost Productivity

❝ The end goal of any supply chain is to be 'capable to deliver'—with everyone working together to get the right product, to the right place at the right time. ❞

Changing market dynamics and emerging technologies enable players across the consumer goods value chain to revisit their supply chain strategies to propel growth and gain operational efficiencies. Watch out for the various technological developments and trends impacting supply chain strategies, and offers a view toward reinventing, rewiring and rethinking a more adaptive supply chain solution.

Informed Manufacturing: Reaching for New Horizons

Although still in its infancy, informed manufacturing – making the right data available in the right format at the right time – is progressing across industry sectors. Nonetheless, this primary study confirms that conflicting priorities prevent many companies from fully embracing this transformative model. Think about what barriers may be standing in your way and some practical actions to take to achieve a breakthrough.

POS Data Quality: Overcoming a Lingering Retail Nightmare

By embracing a holistic and repeatable framework, retailers can first pilot and then remediate data quality issues incrementally, overcoming the planning challenges created by heterogeneous POS systems. Our 20-20 Insight takes you step by step through the remediation process, leading to effective and efficient POS partner ecosystem.

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Obtain valuable insights on transforming your financial management approach, widening the view from consistent enterprise-wide financial reporting to the more robust financial prediction models and early warning systems you need to maintain the health and stability of your organization.

Revitalizing Finance

To drive improved business outcomes, the role of the CFO must evolve beyond traditional control and accounting to propel change that focuses on creating organizational value. Understand the primary changes necessary to effect the desired outcomes and how digital strategies can impact the operating model.

Revitalizing Finance to Drive Performance Improvements Across the Organization

The CFO role is changing from a focus on traditional fiduciary controls and accounting, to emphasizing initiatives that drive business outcomes and create organizational value. Discover how data and analytics can empower CFOs to drive greater business performance.

The Role of IT in Supporting Mergers and Acquisitions

Involving IT teams early and often during mergers and acquisitions (M&A) can help enterprises realize more value from the operational and market synergies that bring businesses together. Cognizant 20-20 Insight offers illustrations and perspectives on how IT leaders can contribute greater value to M&As when engaged in the process up front.

❚❚ Discover how data and analytics can empower CFOs to drive greater business performance. ❚❚

There is a higher ground in the area of employee productivity, where workforce scheduling and increased retention rates leave off, and real-time employee mood analysis and stress management kick in for unprecedented gains. Start today by enabling the future of work for your employees.

Enabling the Future of Work

Want to remake your business, but not sure where to start? Embracing these eight hyper-critical principles will get your organization's transformational juices flowing. See how next-generation CIOs have become change agents in reshaping the global virtual workplace.

Six Strategies for Reshaping Customer Experience Processes in the Digital Era

Evolving your customer support desk into a listening post requires that frontline employees possess the tools, training and metrics they need to deliver positive, memorable customer experiences. A high morale employee will provide enable higher customer satisfaction.

Why Your Best Salesperson May Be a Customer Support Rep

With rich data, powerful analytics and integrated toolsets, support organizations in the communications and technology industry can achieve a real-time understanding of customer challenges, enabling them to convert lackluster troubleshooting exercises into rewarding experiences, and transform dissatisfied customers into enthusiastic brand ambassadors. Our 20-20 Insight spells out the transformation framework to get you there.

Adaptive Learning: How Publishers Can Transform the Learning Experience

By understanding the full range of adaptive learning models and strategies, educational publishers and institutions can more effectively deliver enhanced digital learning to students, while expanding their product portfoliosAdopt various flavors of adaptive learning and Cognizant's framework toward achieving a better experience for added revenue potential.

> Look deep into your asset management process and equip you to improve your organizational insight through a data-driven business model.

Navigating the shift to improved asset utilization requires a move from simple asset monitoring and performance measurement to "smart" asset management and proactive preventive maintenance. Look deep into your asset management process and equip you to improve your organizational insight through a data-driven business model.

Designing for Manufacturing's "Internet of Things"

The deeper meshing of virtual and physical machines offers the potential to truly transform the manufacturing value chain from suppliers through customers, and at every touch point along the way. Boost revenue and increase productivity using connected devices in a digital world.

Asset Information: Addressing 21st Century Challenges

Regulatory challenges and the Internet of Things are unleashing a tsunami of data that is rich in process-optimization insights. Using this new information, asset-intensive companies can reduce costs, improve operational uptime and enhance worker safety. Our 20-20 Insight explains the journey using real world examples to mark the way.

Safeguarding Bank Assets with an Early Warning System

To alleviate the risks of non-performing loans, banks must build an effective early warning system to protect their assets and reduce the impact of payment delinquency. This insight provides a business case and identifies the key indicators and preventive measures needed to achieve success.

Using Predictive Analytics to Optimize Asset Maintenance in the Utilities Industry

By working proactively to collect and distill digital information, transmission and distribution utilities can enhance customer satisfaction, reduce total cost of ownership, optimize the field force and improve compliance. Our 20-20 Insight covers the case for predictive asset analytics and charts the anatomy of more effective asset management solution.

The Internet of Things in Contract Manufacturing: Impact and Applications

Original design manufacturers and electronic manufacturing services vendors need to transform their operations and maintenance mechanisms to meet the changing needs of the Internet of Things. Develop a proactive maintenance model and provides other key links to documents expanding your view of the topic.
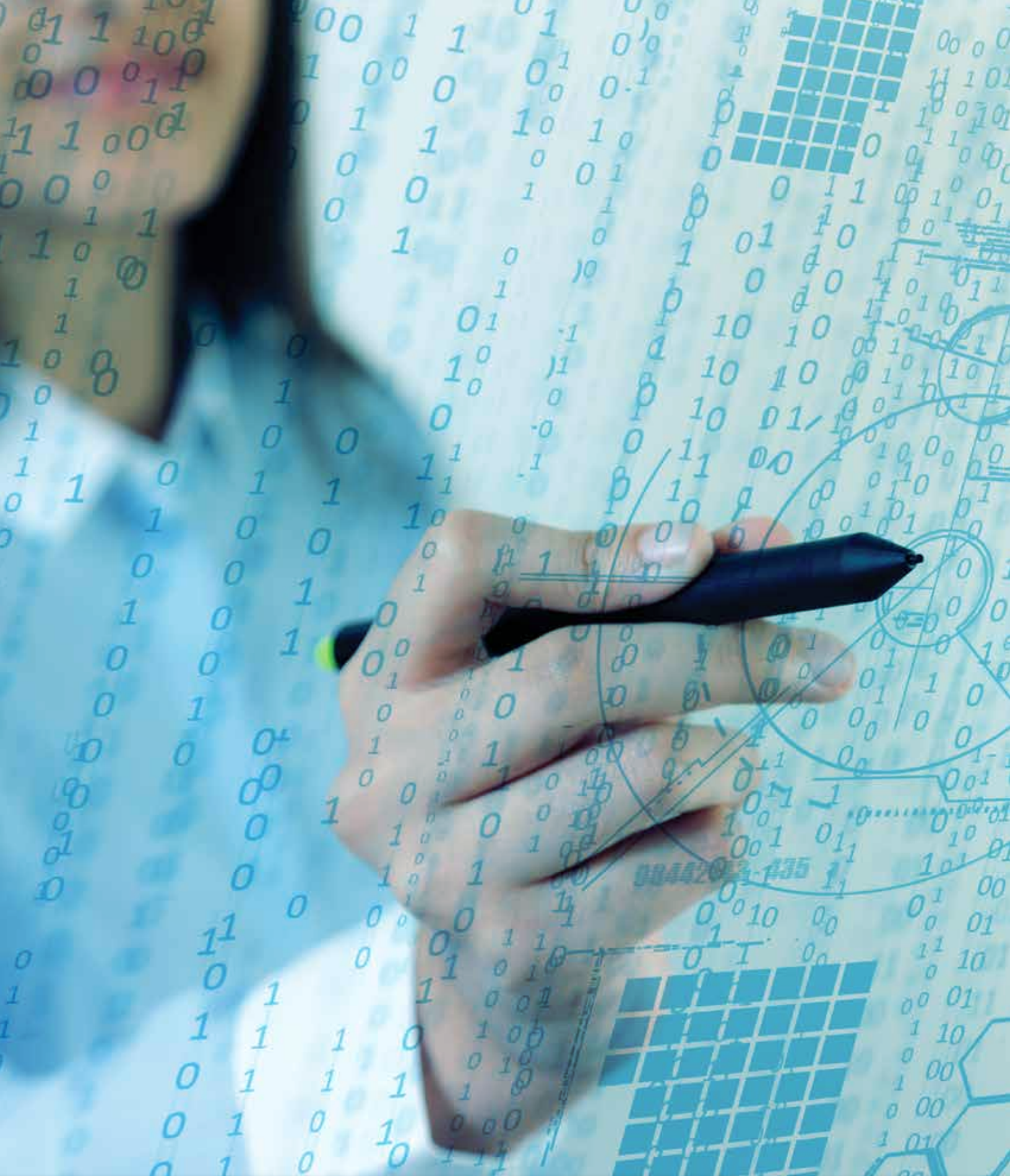
SalesForce is an extremely powerful and flexible customer relationship management tool that can anchor your digital customer experience and enable dramatic results. We enlist our ideas, insights and case studies designed to ramp up your understanding of data-driven marketing and build your SalesForce asset into a game-changing, relationship-building engine.

How Marketing Analytics Help Home and Auto Insurers Skirt The Ad War

To win the multimedia ad battle for the hearts and pocketbooks of consumers, home and auto insurers will need to embrace an array of marketing analytics tools and techniques to lift returns, sales and the new product design process. Drive these seven key benefits of an enhanced marketing analytics platform and related thinking to drive your next steps.

Mobile Learning: Driving Business Results by Empowering Employees in the Moment

Shrinking markets, high employee turnover and evolving employee demographics are driving the need for learning content that can be consumed exactly when and how it is needed. Modernizing the learning infrastructure and content will be critical to succeeding in a business climate of rapid change. Mobile Learning enablement is important for organizations to constantly motivate and equip the sales team on the latest ideas about the product.

Peering into the Future of Digital Advertising

To cash in on emerging opportunities, organizations need to extract better efficiencies from their online marketing budgets through personalized audience targeting via programmatic real-time bidding, dynamic creative optimization, transactional ads and a wide array of emerging advertising formats. Discover five key digital advertising innovations that can drive greater results from your online marketing initiatives.

Technology Enablers to Get You There
As an SAP user, your organization has a decided advantage in making the leap from basic reporting and visualization to the more advanced next gen business Analytics capabilities. This will enable to boost your brand relevance through a more meaningful customer experience. That advantage is SAP HANA.
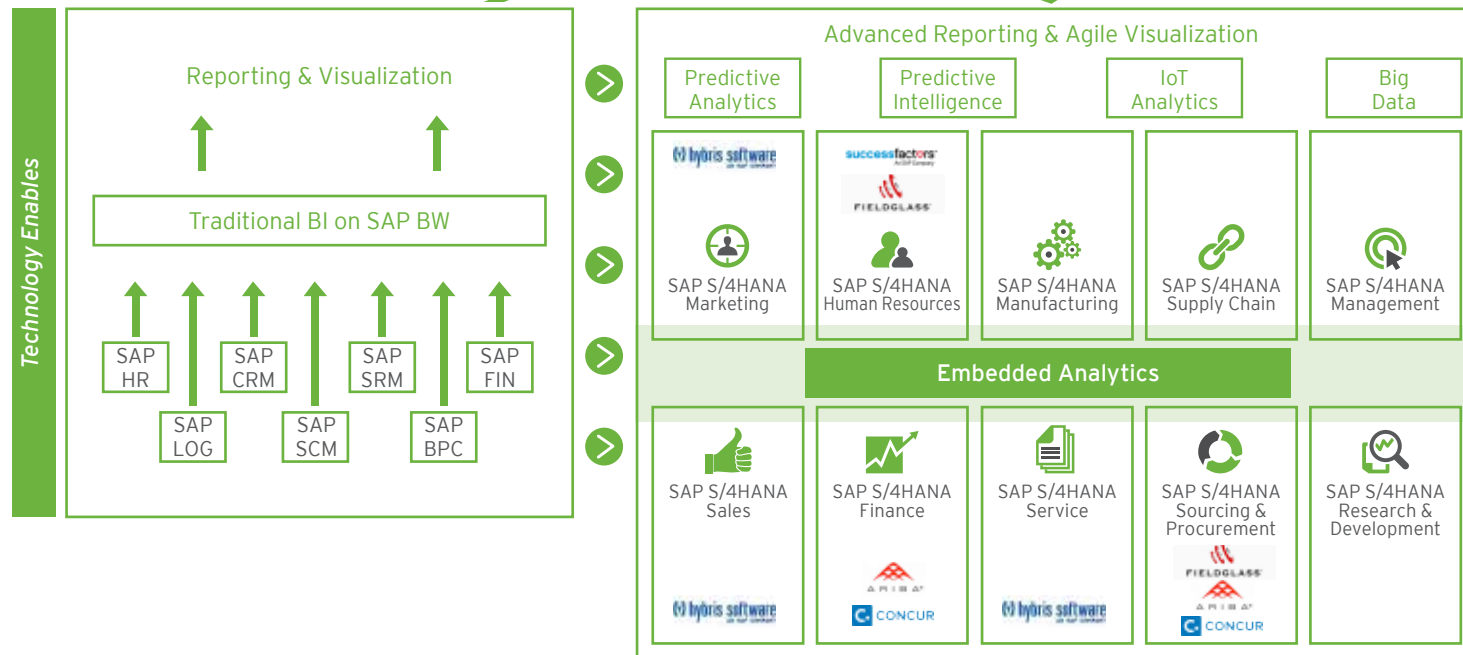
SAP HANA Is At The Epicenter Of This Transformation

SAP HANA is an In Memory database management solution that provides business intelligence, in-memory, in real-time, empowering you to reimagine your products and services, improve decisions and seize unprecedented opportunities hidden in the Code Halos surrounding your organization.

It is important to navigate the shift from by adopting the newer solutions on SAP HANA. With the help of Cognizant's SAP Analytics Consulting Services, your journey toward advanced digital mastery can be accomplished with assurance, at a significantly compressed timeframe and total investment.

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"Creating a Data Driven Organization"
for Insight & Foresight

Technology Enables

Reporting & Visualization

Traditional BI on SAP BW

| SAP HR | SAP CRM | SAP SRM | SAP FIN |

| SAP LOG | SAP SCM | SAP BPC |

Advanced Reporting & Agile Visualization

Predictive Analytics	Predictive Intelligence	IoT Analytics	Big Data
hybris software	successfactors / FIELDGLASS			
SAP S/4HANA Marketing	SAP S/4HANA Human Resources	SAP S/4HANA Manufacturing	SAP S/4HANA Supply Chain	SAP S/4HANA Management

Embedded Analytics

SAP S/4HANA Sales	SAP S/4HANA Finance	SAP S/4HANA Service	SAP S/4HANA Sourcing & Procurement	SAP S/4HANA Research & Development
hybris software	ARIBA / CONCUR	hybris software	FIELDGLASS / ARIBA / CONCUR	

From "Being Digital to Becoming a "Digital Being"

Digital transformation requires strong top-down leadership and impeccable technical skills, but high-performing organizations go one step further: They find the wherewithal to acquire, nurture and retain the talent necessary to lead the charge. In this issue of Cognizanti, our annual news journal, we outline the top strategies and tactics it takes to build a digitally minded, forward-thinking IT workforce, capable of supporting a more competitive, progressive, data-driven organization.

Cognizant is Your
Full Service Resource

As you go from "being digital" to becoming a "digital being," the good news is that you won't have to endure the journey alone. Our SAP Analytics Consulting experts have been down this road before and can help you realize a faster return on investment, as you create a more viable, practical digital capability appropriate to the needs of your specific organization.

Our step-by-step process breaks it down into four rational pieces that ensure your end result is everything you expected to be – and then some.

Business Transformation
- Next-Gen Analytics Road Map & Transformation
- Business Case Building & Return on Investment Model
- Business Value Engineering & Cost Benefit Analysis

Environment Modernization
- Platform Simplification
- Landscape Rationalization
- IP Cost Savings

Data Management Services
- Data Integration Services
- Data Stewardship
- Master Data Governance

Centre of Excellence
- Adaptive Analytics CoE Model
- Architecture Council
- Estimation & Delivery Council

Contact Us Today

The way of the digitally savvy, data-driven organization is here to stay, and it will only become more so, as technology creates more personalized and immediate customer experiences. There is literally no time to waste. Take the next step to becoming the relevant brand your customers can believe in. Talk to Cognizant. Visit **www.cognizant.com** or email **SAPDigitalAnalytics@Cognizant.com** for more information today.

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 100 development and delivery centers worldwide and approximately 221,700 employees as of December 31, 2015, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.

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