



THE DIGITAL TRANSFORMATION PLAYBOOK

UNLEASHING EXPONENTIAL GROWTH IN THE NEW ECONOMY

A  psfk

REPORT IN PARTNERSHIP WITH



INTRODUCTION



Nick Utton
CMO, BMC



Traditional Businesses Must Transform Into Digital Enterprises to Remain Competitive

Traditional businesses are struggling to keep up in an increasingly fast-paced, mobile-first culture, with customers expecting fast, seamless and secure interactions. From retail and health to travel and automotive, industries are adopting digital services and implementing new technologies and processes to streamline their operations, retool their work forces, drive new revenue and increase the bottom line.

Under the direction of C-suite leaders including CEOs, CIOs and new leaders such as Chief Digital Officers (CDOs), IT teams inside of these organizations are being tasked to leverage the best of their existing assets and infrastructure while bringing new innovations into the fold to grow the business. As a result, they are increasingly looking to third-party software solutions to partner their existing systems with a suite of digital tools that add functionality and operational efficiencies. In the face of this digital revolution traditional businesses must expedite their own efforts to transform, or face the prospect of extinction.



Piers Fawkes
Founder, PSFK
Editor-In-Chief,
PSFK.com



BMC partnered with PSFK, a leading think tank, to unearth opportunities, challenges and actionable strategies that traditional companies can leverage as decision makers are considering, beginning or continuing the transition into a digital enterprise. This playbook explores latest industry trends, identifies key opportunities and offers best-in-class approaches to the digital transformation journey.

"Industries of all kinds are being transformed by digital services that bring companies closer to their customers while streamlining and simplifying operations. This shift greatly accelerates innovation -- but also poses new management challenges. Traditional IT management disciplines, while still critical, must be extended to also offer solutions that are designed to make digital business fast, seamless, and optimized from mainframe to mobile to cloud and beyond and ready for the new era of digital business."

BMC "Powering Innovation" White Paper

WHY DIGITAL TRANSFORMATION NOW?

Businesses will need to transform into digital enterprises to thrive, and this transformation will need to be far more profound than merely investing in the latest digital technologies. The World Economic Forum believes that Digital Transformation represents a potential value opportunity of as much as \$100 trillion by 2025 for both industry and society. Many other indicators point to the business critical importance of this strategy.



Companies that become digital enterprises can look forward to a
26 percent increase in profitability
12 percent increase in valuation
9 percent increase in revenue to asset ratio.

The Digital Advantage, Capgemini Consulting, 2015



92 percent of executives are satisfied with the results of big data project outcomes and **89 percent** rate big data as “very” or “extremely” important for their organization.

Big Success With Big Data Report, Accenture, 2014



Digital business currently accounts for **18 percent** of overall revenue, and predicts a jump to **43 percent** by 2020.

Explore the Value and Impact of IoT on Business, Gartner, 2015



75 percent of S&P 500 will be replaced by 2027.

Symposium India, Gartner, 2014



Only **45 percent** of CMOs use prescriptive analytics and only 13 percent currently use cognitive computing.

Redefining Markets Insights from the Global C-suite Study, IBM, 2015



Humans are creating 2.5 quintillion bytes of data every day. The pace is so staggering that **90 percent** of all the data in existence out there was created in the last two years.

IBM Big Data Success Stories, 2013



Since 2000, **52 percent** of companies in the Fortune 500 have either gone bankrupt, been acquired or ceased to exist.

Forbes, Cloud Is The Foundation For Digital Transformation, 2014



Cloud computing alone can lead to IT cost savings of 25 to **50 percent**.

Digital Transformation of Industries White Paper, World Economic Forum, 2016



The top three reasons for embarking on a digital initiative are:

49 percent improved customer satisfaction

44 percent better workforce productivity

41 percent improved customer experience

Exploiting the Software Advantage, Freeform Dynamics, 2015



67 percent of CMO respondents said they intend to reassess their strategic direction due to tech advances disrupting the marketplace.

Redefining Markets Insights from the Global C-suite Study, IBM, 2015



83 percent of large companies are reorganizing, or plan to in 2016.
92 percent of business leaders defined “redesigning the organization itself” as a critical priority in 2016.

Global Human Capital Trends, Deloitte, 2016



The advanced analytics market will grow **14 percent**, to \$1.5 billion, in 2016.

Advanced Analytics Report, Gartner Inc., 2016



Just **27 percent** of C-level executives said they think their company makes “highly effective use of data,” while **32 percent** said access to all that data has made things worse for decision-making.

Joining The Dots; Decision Making For a New Area, American Institute of CPAs, 2016



Annually, big data will reduce computing costs for companies by **33 percent**, storage costs by **38 percent**, and bandwidth costs by **27 percent**.

Internet Trends Report, KPCB, 2015



25 percent of businesses will lose competitive ranking due to digital incompetence.

IT Workforce Trends Survey, Gartner, 2013

4 OPPORTUNITIES FOR DIGITAL TRANSFORMATION

Opportunities that organizations should be aware of, along with strategies on how to deal with the common pitfalls of digital transformation.

1

Rapid Application Innovation

Modern corporations need to be able to react quickly to market changes and exploit opportunities, as consumer and business needs evolve and technologies shift. In order to keep up, organizations are adopting continuous development cycles that inspire incremental improvements, and balance speed with quality, ensuring greater agility.

Strategies

Cross-Team Collaboration
p. 11

Agile Development
p. 14

2

Big Data For Improved Insight

Information is a competitive advantage in today's marketplace, but only if companies can make sense of it. With access to more data about their customers, their competition and their internal operations than ever before, companies need the right tools and processes in place to translate this data into actionable insights.

Strategies

Customer Analytics
p. 19

Operational Audits
p. 23

3

Enabling The Next Generation Workplace

Work is no longer time or location-based, but instead is an activity that can take place anytime and anywhere. In order to improve productivity and benefits for customers as well as attract and retain the best talent, organizations must create the culture and conditions that enable this new style of working, empowering their employees to effectively navigate their organizations and careers, and be productive from wherever they choose to work.

Strategies

Employee Empowerment
p. 27

Workforce Mobilization
p. 31

4

Security At The Speed Of Business

As companies accelerate their rate of innovation and offer greater access to more employees, vendors, clients and customers, they run the risk of overlooking critical security flaws and exposing sensitive data. As a result it has become critical for organizations to streamline their security processes to ensure that all systems are challenged, tested and upgraded on an ongoing basis.

Strategies

Proactive Security Systems
p. 35

Automated Efficiencies
p. 38

OPPORTUNITY 1.

RAPID APPLICATION INNOVATION

Modern corporations need to be able to react quickly to changes in the market as consumer and business needs evolve and technologies shift and to exploit new business opportunities and gain first-mover advantage. In order to keep up, the agility of continuous development and rollout has replaced traditional development cycles that rely on extended data gathering, design, and building phases, with pre-planned updates, tests and launches that take place over months or years. This new model of incremental improvement balances speed with quality, allowing companies to rollback unsuccessful updates without impacting the ongoing operation of critical services and systems. In order to build these more nimble processes into their organizations, companies must enable better collaboration across teams, integration with legacy systems and real-time monitoring of the performance of these initiatives.

DIGITAL TRANSFORMATION STRATEGIES

- » **Cross-Team Collaboration**
Streamline internal communication and project management tools to enable teams to effectively share knowledge, feedback and resources.
- » **Agile Development**
Adopt nimble processes that prioritize continual updates and refinements to products and platforms over pre-planned overhauls.

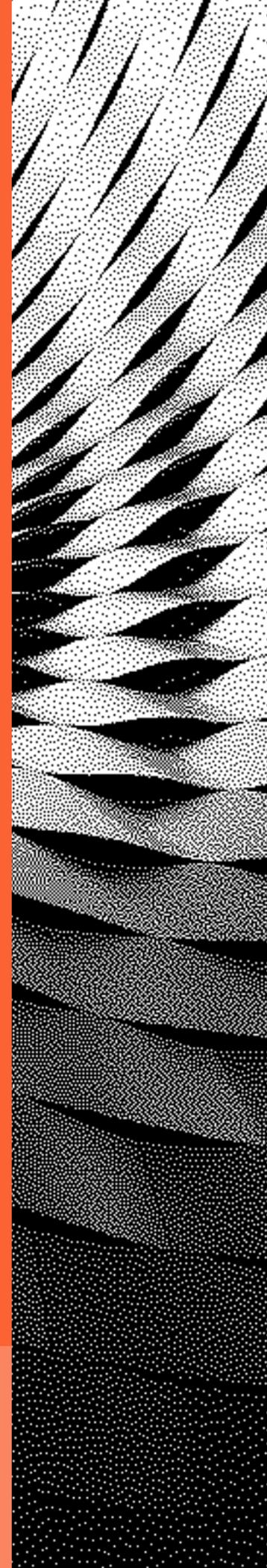
KEY CHALLENGES

- » Integrating new applications and platforms into legacy systems and mainframes.
- » Overcoming inflexible approaches to system updates and improvements.
- » Balancing speed of release and quality of product.
- » Streamlining collaboration across siloed teams.
- » Reconciling different success metrics for each department.
- » Ensuring the continuous operation of critical systems during updates.
- » Rolling back faulty launches seamlessly without impacting experience.



"Whether they are aware of it or not, every company is now a software business. The gap between business and IT no longer exists — and the organizations that will thrive in the digital economy will place the highest priority on cross-team collaboration and agile development not only to react quickly to changing customer needs but also to anticipate and shape them."

Herb Van Hook, VP & CTO, BMC



WHY RAPID APPLICATION INNOVATION MATTERS



72 percent of C-level executives say that delays in getting information to the right people have torpedoed “at least one” major effort.

Joining The Dots, The American Institute of CPAs, 2016



Following the traditional methodology of a systems development life cycle has negative impacts.

60 percent of large systems projects have significant cost overruns.

75 percent of completed systems are in need of constant maintenance.

60 percent to 80 percent of errors originate in the user requirements and functional specifications.

Systems Development Methodology, University of Missouri



Agile systems have

67 percent faster application development than traditional software delivery,

80 percent lesser coding required compared to traditional software development,

75 percent lower maintenance costs than traditional software life cycle.

Survey, WaveMaker RAD, 2016



Rapid Application development has proven to be an effective tool in searching for and correcting problems during systems analysis and improving design quality while also reducing the overall life cycle costs by **20 percent**.

Systems Development Methodology, University of Missouri



65 percent of the IT budget in a company is spent on the maintenance of already existing systems. Updating these traditionally developed software systems is a very tedious and time-consuming process.

2014 Forecast survey, Computerworld

IT REVOLUTION

Agile development operations lead to:

200x faster deployment lead times,

30x more frequent deployments,

60x higher change success rates,

168x faster mean time to restore service,

2x more likely to exceed productivity, market share, and profitability goals,

50 percent higher market capitalization growth over three years.

Measure Efficiency, Effectiveness, and Culture To Optimize DevOps Transformation, DevOps Enterprise Forum, 2015



A UK study showed that waterfall-style scope management was the single largest contributing factor for failure, being cited in **82 percent** of the projects as the number one problem.

High Performance Architecture and Grid Computing, 2011



Office workers spend an average of **28 hours** a week writing emails, searching for information and collaborating internally. Improved communication and collaboration through social technologies could raise productivity levels as much as by **20-25 percent**.

The Social Economy, McKinsey, 2012



39 percent of employees believe that people in their own organization don't collaborate enough.

Communicating in the Modern Workplace, Queen's Uni. of Charlotte, 2015



38 percent of employee time is lost duplicating work, and **58 percent** of people waste an hour a day looking for information. This doesn't mean just lost time, it also means lost money.

Survey, Yammer, 2014

01.

CROSS-TEAM COLLABORATION

The success of large scale businesses depends on aligning multiple stakeholders that are spread across an array of departments and geographies. Collaboration between internal teams with different priorities and performance measures can prove difficult but is critical to achieve for any organization looking to enable a faster rate of innovation. To overcome this, new platforms are combining chat-based communication, visual interfaces and automated project management tools to enable greater transparency, oversight and feedback throughout the entire development, testing and launch cycle.

WHY THIS IS IMPORTANT

- » Minimizes redundancies and operational inefficiencies.
- » Empowers employees to share knowledge and resources across teams and projects.
- » Integrates communication and feedback into natural workflow.
- » Brings greater context and transparency to the entire organization.
- » Helps align resources and goals across departments and teams.

PRO TIPS

By BMC

- 1 Ensure team members can seamlessly collaborate across all platforms and devices.
- 2 Seek collaboration technologies that are well integrated into team processes and existing team tools.
- 3 Best in class collaboration solutions encourage and enable knowledge creation and capture.

KEY QUESTIONS TO CONSIDER

- » What is the plan for transitioning and onboarding employees to a new platform?
- » How is responsibility assigned to projects that span teams?
- » What aspects of project management can be automated?
- » How is the status of projects reported and outputted?
- » What is the right balance between digital and face-to-face collaboration?
- » How are learnings more widely shared across an organization?

CASE STUDIES

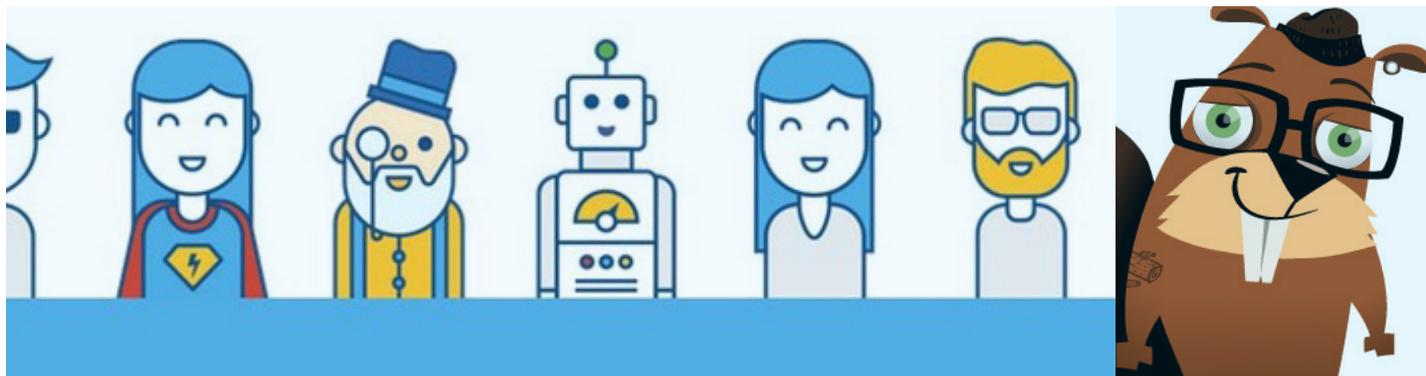


Deutsche Telekom

Globally Integrated Collaboration Platform Facilitates Efficient Communication

Telecom company Deutsche Telekom adopted a digital collaboration platform to streamline internal collaboration among its global employees. Previously, its workforce communication was disjointed due to a global array of legacy IT systems. However, since implementing its new internal collaboration software, the company has seen an increase in both internal communication and efficiency. In fact, Deutsche Telekom reports that it has seen a 70 percent reduction in the number of staff hours required to publish content which translated to \$3 million in savings per year. The company will continue to streamline its communications technology in order to capture similar cost-cutting and collaboration benefits.

telekom.com/home



Loggly x HipChat

Real-Time Analysis And Alerts Help Developers Stay Ahead Of Technical Errors

Data analytics company Loggly created an integration for group chat platform Hipchat to help developers keep tabs on errors and events through automatic alerts. Alerts can be set for Hipchat's primarily developer and DevOps users for occurrences like specific errors, spikes in the frequency of a particular type of event and average numeric values such as response times exceeding thresholds. This integration helps developers stay ahead of operational problems to bring time-sensitive information into users' existing collaboration processes.

www.loggly.com | hipchat.com



"The changing future of work has only just begun. We're in the early stages. Not everyone gets it yet. That's why apps which are popping up are creating more silos, creating more problems to solve. That's why monolithic platforms that claim to be a one stop shop don't work. Collaboration isn't an add-on, it's where it starts."

Elisa Steele, CEO, Jive



Times of London x Slack

Newspaper Customizes Collaboration Software To Improve Efficiency

UK newspaper The Times of London uses software tool Slack to make teamwork seamless and increase publishing efficiency. As publishers move away from a breaking news model, collaboration software will become more critical in helping journalists meet multiple daily deadlines. To date, the software has reduced meetings at The Times by 50 percent and has increased transparency to 40 percent. Times staff has also created bots to customize the software in order to make it a more effective publishing tool. The Times soon plans to implement the software company-wide based on its success in improving efficiency.

bit.ly/1MNsdpk



Comilion

Security Platform Allows Companies to Share Cyber Intelligence to Boost Security

Cybersecurity collaboration company Comilion pioneered a “community-based” infosecurity approach to tackling cyber threats. The fully-decentralized platform creates Slack-like security communities that enable companies to share real-time cyber intelligence, research findings and cyber threat strategies. Comilion’s product removes obstacles that traditionally prevent security collaboration across company, country and industry boundaries, including business process, compliance and data challenges. Other industries are applying Comilion’s technology to foster greater collaboration and research. For example, Comilion is being used within the healthcare industry to share information on patient case studies, identify larger treatment patterns and spur research to foster advancements in medicine.

comilion.com

02.

AGILE DEVELOPMENT

To keep pace with the rapid change in today's marketplace, businesses must have the digital platforms and processes in place to continually refine existing products and seamlessly rollout new initiatives without impacting core operations or customer experiences. To accomplish this, organizations must strike the proper balance between speed, scale and quality, ensuring that key teams are aligned on deliverables and results. By adopting a more open and flexible approach to innovation, companies are better positioned to respond to the evolving needs of their business and customers.

WHY THIS IS IMPORTANT

- » Aligns business more closely with the needs of its customers to promote greater retention and loyalty.
- » Integrates testing and quality assurance earlier into the development cycle to eliminate potentially costly issues and ensure the seamless rollout of updates or new products.
- » Creates the conditions for companies to lead with entries into the marketplace, delivering value faster.
- » Eliminates risk by enabling companies to perform partial rollbacks without impacting critical systems.
- » Ensures more timely delivery of products by allowing multiple work streams to happen in tandem.

KEY QUESTIONS TO CONSIDER

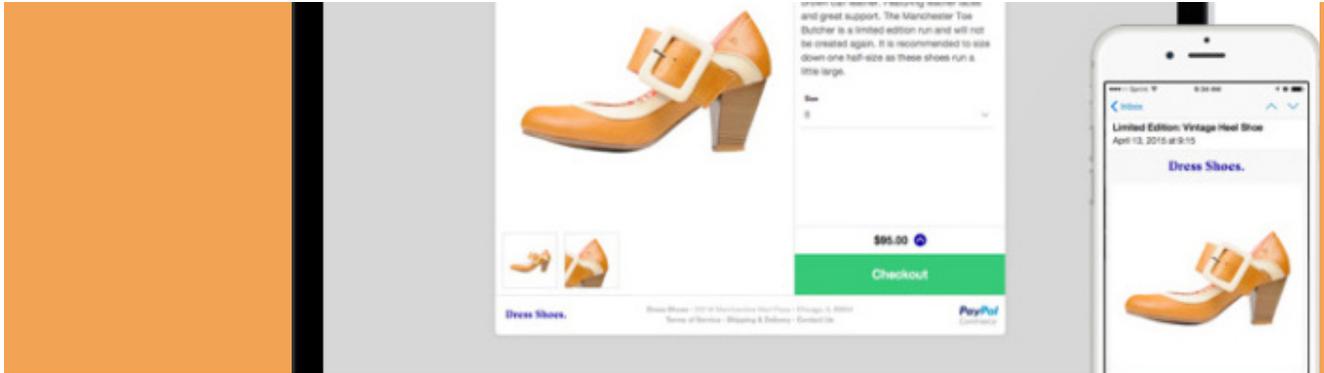
- » Who ultimately has ownership of a project or rollout?
- » Is there a common set of goals and benchmarks in place?
- » Which stakeholders should be a part of the feedback process both before and after a rollout is implemented?
- » How can testing and feedback be seamlessly incorporated into development and release processes?
- » What impact will new initiatives have on legacy systems or core operations?
- » What processes are in place to ensure that learnings from both successes and failures are shared?
- » What is the best way to communicate the benefits of this strategy to internal teams and customers?

PRO TIPS

By BMC

- 1 Promote common DevOps tool chains across all project and application teams to minimize "tool clutter".
- 2 Ensure agile processes and actions are reflected in a common change management platform.
- 3 Consider updating operational technologies and processes to handle high-velocity application release.

CASE STUDIES



PayPal

Platform Enables Businesses To Seamlessly Test, Deploy And Scale Retail Tech

Online payment company PayPal has launched PayPal Commerce, a service that offers retail APIs to businesses of all sizes. The platform technology enables companies to test, implement and scale digital innovations in an easy and modular manner, allowing brands to easily create an “omni commerce” shopping experience for their customers. PayPal Commerce will help retailers grow their reach, increase their sales and receive support when scaling services. Platforms such as PayPal Commerce will serve as an important tool, enabling small businesses to quickly tap into and use new tech by providing streamlined back-end optimization services. Since its launch in February 2016, merchants have uploaded over 7 million products.

paypal.com/webapps/mpp/commerce



Domino's

Pizza Company Becomes Successful E-Commerce Retailer

Despite famously and publicly admitting they did not make good pizza, Domino's is now one of the most profitable pizza companies in the US, thanks to their investment in e-commerce. After pushing through the standardization of all their franchises' point of sale systems, Domino's enabled e-commerce ordering platforms across all locations in 2008. These in-house efforts also added the pizza tracker function and layered in a loyalty structure that could help remember people's orders and streamline the ordering process. Company analysts are able to quickly see what works and what doesn't online and on the mobile app to help them adapt as they go.

www.dominos.com



"[DevOps adoption and the emergence of a DevOps culture] is being driven by competitive pressures and the need to be more responsive to customers. DevOps practices enable organizations to increase their speed of delivery and, ultimately, the rate at which they can innovate."

Kurt Bittner, Principal Analyst, Application Development and Delivery, Forrester Research



Intel

DevOps Enterprise Adoption Requires Restructuring At Technology Provider

Tech provider Intel adopted a DevOps and Continuous Delivery transformation strategy to support internal innovation. By increasing communication between teams, regularly hosting sharing sessions and hackathons, and creating internal open source projects, Intel has been able to streamline its development process. This change in corporate culture and process has been facilitated by coaching and consolidating the various resources used across departments such as monitoring, automated tests and continuous integration tools. Although conversations around security compliance have come up, the restructuring has been largely well received.

www.infoq.com/interviews/devops-enterprise-intel



Transamerica Life Insurance

Insurance Company Leverages Online Tools To Retain Agile Work Processes

Transamerica provides a variety of financial services - from life insurance to retirement plans - to more than 20 million people worldwide. Transamerica seeks to innovate their service offerings, while increasing efficiencies and staying one step ahead of shifting customer expectations, a challenge that is complicated by the need to comply with regulatory standards. The task of maintaining and demonstrating compliance with multiple standards needs to be done in an agile and speedy manner, while consuming as few resources as possible. Transamerica leveraged BMC offerings to power an intelligent closed-loop compliance process that validates compliance; identifies, fixes, and revalidates out-of-compliance servers; and creates audit reports. Transamerica is applying automation strategically and in creative ways to drive efficiency, minimize risk, and enhance business agility. The resulting wins have transformed Transamerica's business, empowering the company to innovate and, as a result, increase competitiveness.

bmc.co/1UG3raE

OPPORTUNITY 2.

BIG DATA FOR IMPROVED INSIGHT

Information is a competitive advantage in today's marketplace, but only if companies can make sense of it. With access to more data about their customers, their competition and their internal operations than ever before, companies need the right tools and processes in place to translate this data into actionable insights. These systems can help organizations unlock hidden knowledge, enable faster and more informed decisions, drive new innovations and build forward-looking plans for the future.

DIGITAL TRANSFORMATION STRATEGIES

- » **Customer Analytics**
Understand your customers to drive engagement, retention and sales.
- » **Operational Auditing**
Analyze internal process to streamline operations, improve performance and identify new areas for innovation.

KEY CHALLENGES

- » Choosing the right data to analyze.
- » Asking the right questions.
- » Collecting, saving and keeping data secure.
- » Distributing results to key decision makers.
- » Transforming insights into actions.
- » Keeping databases refreshed with relevant information.



"Big Data is actually a misnomer. Defining a robust analytics architecture and constructing deep and wide 'data lakes' is simply the how - what's most important is to focus first on defining the insights the business needs to inform strategy and execution. Customer analytics and operational process audits are two areas where Big Data can impact top line revenue, expand bottom line profit, and improve customer satisfaction."

Herb Van Hook, VP & CTO, BMC Software



WHY BIG DATA FOR IMPROVED INSIGHT MATTERS



Companies that make extensive use of customer analytics see a **126 percent** profit improvement over competitors.

McKinsey, 2015



For companies that are using big data, **92 percent** of executives are satisfied with the results and **89 percent** rate big data as “very” or “extremely” important.

Big Success From Big Data, Accenture, 2014



The average initial increase in profits from big data investments was **6 percent**, increasing to **9 percent** for investments spanning five years.

Big Data Is Getting a Better Read, McKinsey, 2016



59 percent of early adopters were improving operational analytics through use of varied data. As a result, more than half of early adopters said operational analytics were now integral to their decision-making process.

Going Big: Why Companies Need to Focus on Operational Analytics, Capgemini Consulting's Digital Transformation Institute, 2016



Researchers found that **89 percent** of respondents who have implemented at least one big data project see it as a way to revolutionize business operations, and **85 percent** believe big data will dramatically change the way business is done.

Big Success From Big Data, Accenture, 2014



70 percent of companies have shifted the priority of their analytics effort from front- to back-office operations.

Going Big, Capgemini Consulting's Digital Transformation Institute, 2016



84 percent believe big data analytics will “shift the competitive landscape for [their] industry” within a year and **87 percent** believe so in three years. In addition, **89 percent** believe a lack of big data adoption will create a risk of losing market share, and **75 percent** cite growth as the key value of analytics.

Industrial Internet Insights Report, Accenture, 2014



Just **27 percent** of C-level executives think their company makes “highly effective” use of data, while about a third (**32 percent**) say access to mountains of information has actually “made things worse.”

Joining The Dots, The American Institute of CPAs, 2016



Unstructured data is not only richer, but also more readily available. It's estimated that more than **90 percent** of the digital universe is in unstructured formats (audio, text, images, and video).

The Right Data Can Drive Customer Action, Direct Marketing, 2016

03.

CUSTOMER ANALYTICS

As today's consumers transact across digital platforms and in-store channels, there is an increasing amount of data available about their demographics, spending behaviors, preferences and activity. When analyzed on both a macro and individual level, this data can lead to meaningful insights, helping businesses understand the motivations and needs of their customers to ensure that their product and service offerings remain relevant. These data-backed insights can be paired with contextual information like location, weather and time of day, to more effectively invite individual consumers to engage in the moment or uncover opportunities within the marketplace where a business can gain advantage.

WHY THIS IS IMPORTANT

- » Helps companies anticipate the wants and needs of consumers to successfully focus their product and service innovations.
- » Increases the success rate of new launches and campaigns by understanding the motivations and behaviours of consumers.
- » Minimizes the need for available inventory, by being able to forecast where and when products will be in demand.
- » Drives sales by identifying what customers are interested in, how they would like to be approached and what other products they might be interested in.

KEY QUESTIONS TO CONSIDER

- » What type of data is being collected and how?
- » Is the data collection process opt-in and transparent for consumers?
- » How is the data being kept anonymous and secure?
- » How are insights being outputted and distributed to different teams?
- » How and how often does the data flow from operational systems to the Big Data environment for analysis? What processes are utilized to ensure data delivery and to identify issues and notify stakeholders should they occur?

PRO TIPS

By BMC

- 1 Ensure you have defined your big data dependencies.
- 2 Ensure you have defined your big data flows.
- 3 Ensure you have alerting and error processing if a big data flow is interrupted, slowed, or fails.

CASE STUDIES

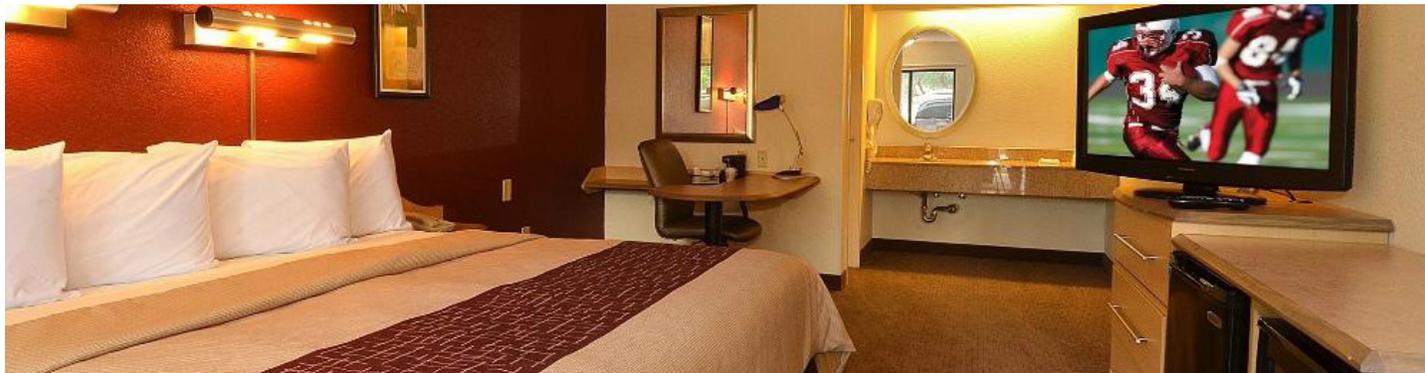


Spotify

Listener Data Informs Strategy From Personalization To Marketing

Music streaming platform Spotify uses data from their users to inform everything from the music in advertisements to the creation of personalized recommendations in their Spotify 'discover weekly' playlists. By analyzing listeners' preferences from a higher level, Spotify is able to see trends and narratives and help people find new songs they will likely enjoy. By integrating this same information into TV spots, Spotify is able to publicize that more music which people in specific markets like exists. Everything in their ecosystem is aimed at helping listeners discover and share new music.

spotify.com



The Red Roof Inn

Leveraging Real-Time Data Helps Hotel Chain Offer Services To Guests In Need

The Red Roof Inn is leveraging big data analytics to increase the effectiveness of its marketing efforts and raise demand. After studying data indicating that approximately 90,000 air travelers are stranded on a daily basis, the hotel chain recognized a business opportunity for its outlets located at or near airports. To capitalize on this perceived need, Red Roof Inn launched a strategic initiative that leverages real-time data such as weather conditions and flight cancellation statistics to target mobile users in regions affected by flight cancellations due to bad weather. As a result of its targeted marketing campaign, The Red Roof Inn realized a 10 percent increase in revenue in the areas where the strategy was deployed.

redroof.com



"In order to be personalized, you have to know a lot about your customers, and in order to know about your customer, you have to have a system that allows you to collect customer insights. You can use those insights to create explicit or implicit signals about your customer. Those can help predict what they're going to do next or maybe what they're going to buy next."

Courtney Nagle, Sr. Director of Digital Marketing, Sears Holdings



Kreditech

Banking Platform Uses Big Data To Assess And Scale Banking Services

A German bank has launched a system providing traditional bank services to “underbanked” communities. By collecting, analyzing and synthesizing the data of their current consumers, the platform - dubbed Kreditech - has built an algorithm that determines if a customer is suitable for a loan. The platform analyzes a broad collection of real-time data, factoring in social network activity and e-commerce record data to generate a credit score independent from a customer’s bank. This opens up a new market for the bank, allowing it to offer services to reliable customers that lack traditional good credit.

kreditech.com



Hershey's

Chocolate Brand Uses Data Driven Insights To Ensure Quality Offerings

The chocolate company Hershey's has put big data and customer insight at the center of its retail strategy, stating that advance insight and knowledge are “critical to survive” today's retail environment. The brand is already capitalizing on its efforts; Hershey's realized a 20 percent increase in business after employing facial recognition technology in retail outlets to capture real-time customer feedback data. To facilitate this push towards big data, Hershey's partnered with SAP to create a flexible, adaptable infrastructure for analytics and one of the uncovered insights was that consumers were prone to view a “meal” as a “snack”. This presented the brand with an opportunity - high-protein Hershey snacks. Knowing this, the brand was able to plan for future products catering to this need. Recognizing the importance of incorporating big data and technology into its business strategy, Michele Buck, President of North America at Hershey's stated that “with insights and knowledge, you win by being the smartest and being better at meeting customer needs.”

hersheys.com

04.

OPERATIONAL AUDITS

As a business grows, internal operations and logistics are bound to become increasingly complex. With all of the information being reported by separate teams and lines of business, it can be difficult for executives to understand the bigger picture of their organizations and make the right tactical and strategic decisions to streamline practices and allocate resources. To break out of these siloes, companies can leverage sophisticated analytics tools to identify internal trends and shifts at all levels of their business, and determine the appropriate response. By basing decisions on actual data, leaders are better positioned to create positive outcomes and build more resilient organizations.

WHY THIS IS IMPORTANT

- » Creates a broader context for understanding the health of an organization and the performance of individual teams.
- » Anticipates potential gaps in resources or opportunities for growth.
- » Eliminates redundancies and points to areas for improvement.
- » Enables organizations to be more resilient through incremental changes.
- » Provides a framework for testing the success of new rollouts and initiatives.

KEY QUESTIONS TO CONSIDER

- » What are major pain points where the organization needs improvement?
- » How is data being gathered and what are key performance metrics?
- » How is success measured and reported?
- » How are data-driven insights being transformed into opportunities?
- » What practices are in place to respond to these insights?
- » Who is responsible for acting on this data?

PRO TIPS

By BMC

- 1 Remember to incorporate traditional data sources and KPIs together with new sources such as social media and machine-generated data to gain a complete, well-rounded view of your organization's performance.
- 2 Leverage automation to ensure reporting and dashboards are refreshed only after all the required data is updated/available.
- 3 Ensure business users and non-technical folks can easily determine the lineage of the data so they have a high level of trust in the information.

CASE STUDIES



UPS

Big Data And Prescriptive Analytics Are Optimizing Routing Efficiencies

Shipping giant UPS expects ORION, its new prescriptive analytics platform, to save the company millions of dollars in logistics-related costs. The goal of the software is to improve routing efficiency for delivery trucks by ensuring that the right package gets on the right truck on the right day. UPS delivers approximately 15 million packages per year and every optimization measure that can reduce the distances traveled affects the company's bottom line. UPS anticipates that ORION will help reduce miles driven by 100 million per year, saving 100 million gallons of gas, and eliminating 100,000 metric tons of carbon dioxide. This reduction equates to \$300 to \$400 million per year in savings for the company.

bit.ly/1VOLF4K



Buzzfeed

Content-Led Data Enables Agile Editorial Strategy

Designed to help the media company BuzzFeed build an effective editorial strategy across platforms and audiences, Hive is an internal data collection system that tracks the performance of each piece of BuzzFeed content. Since each BuzzFeed story recycles across various platforms - the same article may manifest as a website feature, a Facebook video post and a Snapchat clip - Hive assigns each content file a unique ID, which tracks how each post performs on its respective platform and identifies when it crosses to another site. Hive's data insights enable BuzzFeed to understand how viewing trends differ between platforms and audiences. As a result, the company can develop a customized and effective rollout plan for each piece of content.

buzzfeed.com



"Leading organizations are changing how they measure their operations, interactions with customers, and resource allocations. Faster access to more relevant data and constant experimentation is creating a further gap between leaders and the rest of the organizations."

Dan Vessel, Group Vice President, Analytics and Information Management, IDC



Guardian Life

Insurance Company Improves Decision-Making Capabilities By Adopting Digital Infrastructure

Guardian Life Insurance Company of America is modernizing its big data mainframe infrastructure to improve its business insights and digital services. Guardian partnered with Cognizant BIGFrame to incorporate the latest in digital and cloud technologies to help develop new products and services, including a “data lake” that acts as a massive storage repository and powerful processing engine that can handle a large volume of jobs at a lower cost than a mainframe. Guardian Life initiated a big data program that focuses on building an enterprise data management strategy in line with their digital vision of the future and by partnering with Cognizant’s, they were able to fast-track their modernization program while minimizing risk and operational impact. Since incorporating the technology, Guardian Life has been able to boost self-service analysis, improve decision-making, and create products more efficiently.

guardianlife.com



Ericsson

Integrated HR System Analyzes Performance And Determines Future Hiring Needs

Ericsson, the nordic telecom provider, has restructured its offerings to be service and software focused. To make this shift a success, Ericsson defined a need for HR to reorder priorities and become agile, global, and data dependent. As previous HR tools had been locally sourced and analyzed, the myriad of unconnected tools used obstructed data mining and left Ericsson leadership with little insight. Through restructuring and connecting the tools into a global system, Ericsson gained access to useful data points that are now used to predict hiring and training needs. The network analyzes performance, know-how and future needs of the company to suggest training programs for specific employees. It also predicts the workforce’s capacity and flags HR personnel when a department is soon to be short staffed. Going through this back-end digital transformation enabled Ericsson to successfully provide new services and products to previously unknown marketplaces, diversifying their revenue streams and educating their employees in time for their future staffing needs.

ericsson.com

OPPORTUNITY 3.

ENABLING THE NEXT GENERATION WORKPLACE

With the consumerization of technology, particularly mobile devices, today's employee operates in a much more fluid environment. As a result, the entire notion of work has changed. Work is no longer time or location-based, but can instead take place anytime and anywhere. In order to attract and retain the best talent, organizations must create the culture and conditions that enable this new style of working. By adopting the right digital tools and policies, companies can empower their employees to effectively navigate their organizations and careers to be more productive from wherever they choose to work.

DIGITAL TRANSFORMATION STRATEGIES

- » **Employee Empowerment Tools**
Leveraging digital solutions to provide employees with access to the information, connections and resources needed to excel in their professional roles.
- » **Workforce Mobilization**
Equipping employees with a secure set of technologies and tools that enable them to be productive from any location.

KEY CHALLENGES

- » Competing for the best and brightest talent.
- » Enabling seamless collaboration and connection from any device or location.
- » Unlocking internal know-how.
- » Ensuring sensitive data collection meets strict security standards.
- » Finding software solutions that work across devices and platforms.
- » Managing data requirements across the organization.
- » Onboarding employees and educating them about new systems and policies.
- » Creating a sustainable company culture despite having a dispersed workforce.
- » Improving business results through improved workforce productivity.



"In 2016 the 'workplace' is no longer a place. Enterprises are accelerating the shift to a more consumer-like computing environment based on crowd-sourcing technology and persona-based approaches that enable employees to choose the productivity tools and technology they want to use – be it inside or outside the office. This is setting a new IT standard in delivering personalized services to employees and allowing them to be the curator of their own work experiences."

Herb Van Hook, Chief Technology Officer, BMC



WHY ENABLING THE NEXT GENERATION WORKFORCE MATTERS



65 percent of U.S.-based IT decision-makers let users connect their own smartphones to an internal network.

Frost & Sullivan survey, 2015



Only **22 percent** of respondents said that HR is adapting to the changing needs of their workforce, and only **20 percent** feel that HR can adequately plan for the company's future talent needs. It also predicted that **60 percent** of enterprise recruitment technology would be replaced in the next 18 months.

Deloitte Reinventing HR: An Extreme Makeover, 2015



Developing an onboarding agenda helps companies boost the productivity of new hires by up to **15 percent**.

Managing Talent In A Digital Age, McKinsey Global Institute, 2016



69 percent of millennials see their company's review process as flawed. **75 percent** of millennials feel in the dark about their performance and nearly **90 percent** would feel more confident if they had ongoing check-ins with their bosses.

TriNet Perform Survey, 2015



53 percent of millennials believe a mentor relationship would help them become a more productive member of the company.

Millennial Branding and American Express Survey, 2015



78 percent of millennials are strongly influenced by how innovative a company is when deciding if they want to work there.

Mind The Gap: 2015 Deloitte Millennial Survey



BOSTON COLLEGE
Center for Work & Family
CARROLL SCHOOL OF MANAGEMENT

60 percent of millennials said they plan to stay in their jobs to advance.

25 percent who want to get ahead by moving from employer to employer.

How Millennials Navigate Their Careers, Boston College Center for Work & Family, 2015



49 percent of British **24-35** year olds say that they would interact more with store associates if the shopping experience was personalised.

Manhattan Associates, 2016

05. EMPLOYEE EMPOWERMENT TOOLS

A successful business should aim to hire and cultivate the best talent, ensuring that every employee has access to the information and resources required to perform their tasks from day one, as well as the feedback and training required to continually grow and learn. To achieve this, organizations are adopting dynamic technology solutions that make professional development, transparency and relationship-building integral aspects of the workplace culture.

WHY THIS IS IMPORTANT

- » Creates an ongoing dialogue and two-way engagement between employees and leadership.
- » Enables employees to take greater ownership of their jobs and careers.
- » Contributes to greater workplace satisfaction.
- » Makes development and training a more integral part of the day-to-day culture of an organization.
- » Increases the collective knowledge of an organization through more effective sharing tools.
- » Positions employees as key stakeholders in the overall success of the organization.
- » Empowers employees to share their ideas and act on them, potentially adding greater value to the company.
- » Encourages employees to seek experts and collaborators across the organization.

KEY QUESTIONS TO CONSIDER

- » Is there a structured onboarding program in place and how could it be improved?
- » Is there a formal approach to harnessing and developing the talent within your organization?
- » Does your company invite employees to share feedback? If so, how?
- » How could communication between employees and management become more streamlined, and how could recommendations be tracked and implemented?
- » What systems are in place for helping employees find collaborators and share their expertise?
- » What platforms are in place to give employees access to key resources?
- » Do any of these systems have a mobile component?

PRO TIPS

By BMC

- 1 Focus on providing every employee with digital solutions for requests, knowledge and access to amplify their productivity.
- 2 Focus on how you enable productivity at “minute one” on the new employee’s start day.
- 3 Tailor onboarding and empowerment to roles and their needs/entitlements.

CASE STUDIES



General Electric

App-Based Employee Review System Offers Real-Time Performance Development

As part of a broader initiative to cultivate empowered, collaborative, cross-functional teams, tech giant GE has been experimenting with a new mobile employee management system for individual performance development. As part of the new system, rather than a formal, once-a-year review, managers and their direct reports hold regular, informal “touchpoints” where they set or update priorities that are based on employee needs. Managers can then coach employees toward a variety of goals, and suggestions can come from anyone in an employee’s network. Key to this is a smartphone app that accepts voice and text inputs, attached documents, and even handwritten notes. In addition to regular meetings, the app serves as a constant digital outlet for managers and employees to conduct meaningful conversations.

ge.com



Vodafone

Mobile Phone Operator Enables Remote Employees To Circumvent The Service Desk

As the world’s second-largest mobile operator, Vodafone tapped BMC to enable its 150,000 employees to seamlessly work from anywhere at anytime. Before the partnership, if an employee needed to access IT services or support, they had to navigate 31 separate service desks running on 23 different platforms to reach agents who are tasked with handling up to 250,000 tickets each month. Vodafone wanted to empower its employees by streamlining this process, offering self-service access to the answers and tools they need based on their location, role, and preferences. Available through a desktop browser or mobile app, BMC offered solutions ideally suited to the company’s highly distributed, mobile workforce.

www.bmc.com/customers/vodafone.html



“Employee engagement is strongly connected to business outcomes essential to an organization’s financial success, such as productivity, profitability and customer engagement. Engaged employees drive the innovation, growth and revenue that their companies need.”

Amy Adkins, Marketing Communications Specialist at Gallup



Tinypulse x Hubspot

Automation Company Harnesses Employment Sentiment Tool To Foster Culture

When the software company Hubspot was faced with the challenge of scaling their start-up culture, they harnessed the online employee management tool TinyPulse. The mobile tool aims to help companies of any size manage retention, recognition and benchmarking results by measuring employee engagement by asking for employees to answer one question per week. The interface helps promote an open and transparent company culture, providing leadership with ongoing feedback along with actionable and real-time data on how employees are performing and feeling. The software helped Hubspot retain its culture, increase departmental autonomy, while scaling at a 50 percent year-over-year rate.

www.tinypulse.com | www.hubspot.com



LinkedIn

Company-Wide Communication Network Makes It Simple to Connect With Colleagues

LinkedIn launched its stand-alone app, Lookup, to help coworkers easily connect with their co-workers based on specific skills. To use the platform, employees login using their work email address and use the search navigation to find colleagues based on factors like name, job responsibility, past work experience, title or education. The service enables co-workers to easily learn more about one another, whether they're meeting someone new in the office or trying to find the best person suited to manage a new project. For larger teams that operate in silos, Lookup offers a one-stop shop for employees to find out what everyone else is working on.

business.linkedin.com/lookup

06.

WORKFORCE MOBILIZATION

The globalized economy and the mobilization of daily life has changed the nature of work. Traditional eight-hour workdays and office environments have given way to an always-on model of work with a constantly changing set of requirements. The modern professional will look to evolve from spending every day at the office to bringing the office with them, wherever they go. To embrace this shift, companies must put flexible systems and policies in place to enable their employees to effectively work in a manner that suits their needs, whether that be from a desk, an office social space, or on-the-go across the globe.

WHY THIS IS IMPORTANT

- » Reduces overhead costs by limiting the space and resource requirements associated with a traditional office environment.
- » Gives employees the flexibility and freedom to work in the manner that is most effective for them.
- » Attracts talent from traditional businesses that haven't embraced this change.
- » Enables business to tap into a diverse, global talent pool.
- » Provides additional resources and support to traditional roles like a salesforce who are already on-the-go.

KEY QUESTIONS TO CONSIDER

- » What percentage of employees would take advantage of the opportunity to work remotely if that were an option?
- » What is the best way to predict and manage the flow of workers who will be partially working from the office?
- » What systems need to be in place to keep external communications and file transfers secure?
- » What are the policies and systems that need to be in place to allow employees to use their own devices?
- » How do you ensure that existing software and systems work seamlessly across devices?

PRO TIPS

By BMC

- 1 Ensure employees can access systems and services through any device – mobile or desktop.
- 2 Ensure employees can be productive immediately when visiting any office around the world upon entering.
- 3 Focus on next generation digital employee services coupled with modern collaboration capabilities.

CASE STUDIES



Esprit

Fashion Brand Uses Image Sharing Platform To Facilitate Employee Collaboration

Contemporary fashion brand Esprit is using an enterprise image sharing platform called Foko to help employees collaborate more efficiently with respect to implementing visual merchandising strategies at each retail location. The platform acts like a private Instagram, allowing employees to share photos with one another over a closed network. This allows merchandisers to efficiently disseminate and deploy updated visual merchandising guidelines to regional store employees, a task that had previously been both time-consuming and resource intensive. Once the images are received and merchandising changes are implemented, store employees can provide feedback in real-time, allowing merchandisers to revisit the placement or styling of a particular item. In addition to facilitating more efficient communication, the platform also allows Esprit to exercise more control over the look and feel of each retail outlet.

nrf.com/news/see-what-i-mean



VSO International

Non-Profit Reduces Operating Costs With Workplace Management Software

Voluntary Services Overseas (VSO), a UK-based nonprofit, adopted Asure Software's workplace management product as part of a cost-cutting measure. Faced with an expiring commercial lease, the organization decided to downsize its office space in order to reduce overhead expenses and shift more money towards the organization's mission. Asure's mobile workplace management software allowed the organization to staff and manage 320 employees at only 180 desks while saving the organization \$550,000 in annual office-space costs.

www.vsointernational.org



"The era of the PC has ended. Employees are becoming more mobile and looking for ways to still be connected wherever work needs to be done. The convenience and productivity gains that mobile devices bring are too tempting for most companies and their employees. Securing corporate data on mobile devices is a big challenge, but one that companies must embrace. Enterprises are struggling with how to support and secure this dynamic workforce."

Phil Redman, Research Vice President, Gartner



UCSF Medical Center

Digital Communication Provides Seamless Sharing of Crucial Information

UCSF Medical Center has transitioned from a pager-based messaging system to a new, on-premise and cloud-based communication tool created by software company MuleSoft. The platform not only facilitates improved patient care through real-time collaborative messaging and HIPPA-compliant data sharing, but has also reduced the hospital's operating costs. Hospitals will continue to adopt digital collaboration software both to improve the delivery of medical care and to cut overall operating costs.

www.ucsfhealth.org



True Religion

Denim Brand Equips Sales Staff With Smart-Watches To Offer VIP Service

The luxury denim brand, True Religion, is looking to improve the level of service their repeat customers experience in-store. By equipping key personnel with smartwatches, employees can easily tap into past purchases, preferred silhouette and type of denim of important customers. The smartwatch can be connected to in-store screens, allowing employees to bring up a specific style on their smartwatch and mirror it on a large screen to show the customer a movable image of the product. If something is out of stock in-store, the smart-watch can order the jeans and provide employees with the customer's shipping details.

www.truereligion.com

OPPORTUNITY 4.

SECURITY AT THE SPEED OF BUSINESS

As companies accelerate their rate of innovation, prioritizing rapid release cycles over full testing and quality assurance, they run the risk of overlooking critical security flaws and exposing sensitive data. With more connected systems and applications being interconnected with the aim to deliver end-to-end digital services, a breach in one system can give unlawful access to all other connected systems. At the same time, as more employees, vendors, clients and customers gain remote access, businesses must deal with an increased number of potential backdoors into key systems. As a result, it has become critical for organizations to streamline their security processes to ensure that all systems are challenged, tested and upgraded on an ongoing basis. By leveraging automated tools, alongside better internal protocols, companies can significantly shorten the time between identifying and patching any system weakness, minimizing the likelihood of breaches and data loss.

DIGITAL TRANSFORMATION STRATEGIES

- » **Proactive Security Systems**
Invest in security systems that anticipate, identify and remedy vulnerabilities on a continual basis to eliminate threats.
- » **Automated Efficiencies**
Leverage intelligent systems to outsource human effort and reduce error, scaling the frequency and speed of response.

KEY CHALLENGES

- » Reducing exposure to breaches by minimizing human error.
- » Monitoring, identifying and fixing system vulnerabilities in a timely manner.
- » Developing security protocols that can keep up with pace of product launches and updates.
- » Automating aspects of the process to scale response rate.
- » Regaining consumer trust and brand value following a breach.



“80 percent of vulnerabilities are known, yet it takes an average of 193 days to patch these vulnerabilities - meaning that companies are exposing themselves to a potential breach for more than six months at a time. In 2016, it’s not a matter of if your enterprise is going to get hacked, it’s a matter of how, and when.”

Herb Van Hook, Chief Technology Officer, BMC



WHY SECURITY AT THE SPEED OF BUSINESS MATTERS



21 percent of organizations suffered a security breach involving a mobile device sometime in the past, primarily due to connections to malicious Wifi hotspots and malware.

[2016 BYOD and Mobile Security Study, Blanco Technology Group, 2016](#)



62 percent of companies are increasing the percent of the IT budget dedicated to security solutions.

[CIO IT Economic Outlook Study, 2016](#)



As the number of connected devices soars toward 8 billion, **70 percent** of these devices are still unprotected from known threats, not to mention all of the unknown vulnerabilities yet to be discovered.

[2015 Internet of Things Research Study, HP Fortify on Demand](#)



80 percent of respondents expressed concern over large data breaches, **55 percent** of respondents indicated their organizations do not have adequate resources to detect those breaches.

[Mitigating the Inevitable, Advisen Ltd. Report, 2016](#)



89 percent of CEOs believe they are at risk, **34 percent** are very or extremely vulnerable, **92 percent** are looking to increase or maintain existing spending on IT security and data protection.

[2015 Vormetric Insider Threat Report, Vormetric](#)



90 percent of corporate executives said they can't read a cybersecurity report and are not prepared to handle a major attack.

[The Accountability Gap, Tanium & Nasdaq, 2016](#)



90 percent of senior security executives around the world indicate their organization is vulnerable to data threats.

[451 Research Report, 2016](#)



There is a pattern of strong growth in cyber insurance: **32 percent** increase in 2014, and **21 percent** increase in 2013.

[Benchmarking Trends, Marsh Inc., 2016](#)



40 percent of executives said they don't feel responsible for the repercussions of a privacy breach.

[The Accountability Gap, Tanium & Nasdaq, 2016](#)



88 percent of companies called their information security insufficient, and a third either lacked confidence in their attack detection or had no cyber-threat intelligence program at all.

[Global Information Security Survey, EY, 2015](#)



US consumers will spend \$626 billion via mobile by 2018, and an estimated **85 percent** of business relationships will be managed without human interaction by 2020. All organizations must take notice, because all hackers certainly are.

[Goldman Sachs Forecast, 2014](#)

07. PROACTIVE SECURITY SYSTEMS

As companies migrate more aspects of their business to the cloud and other digital services, they are potentially exposing more sensitive consumer, client and internal data to increased vulnerabilities. To help mitigate the risk of potential breaches, companies are leveraging intelligent systems that are capable of anticipating attacks, upgrading systems independently and evolving their level of encryption to eliminate threats.

WHY THIS IS IMPORTANT

- » Makes security an ongoing priority rather than a reactive solution.
- » Enables businesses to confidently adopt digital solutions that will drive the effectiveness of their employees and operations.
- » Builds trust with consumers and clients.
- » Automates core processes, enabling support staff to focus on larger issues and long-term strategies.
- » Reduces exposure, even when breaches do occur.

KEY QUESTIONS TO CONSIDER

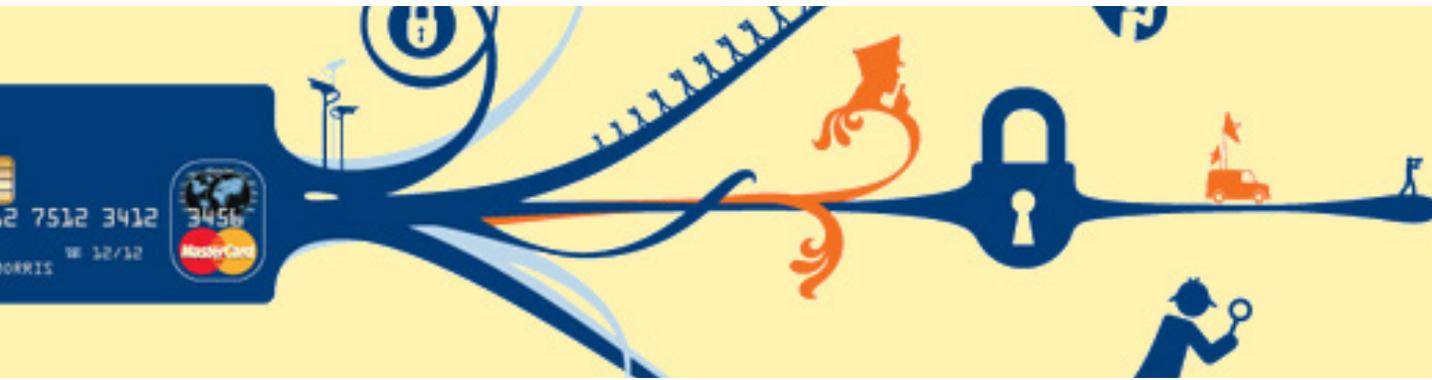
- » What are the core problems in the way security is currently handled?
- » How is sensitive data monitored, managed and stored?
- » How long does it take on average to remediate a vulnerability?
- » What are the company's biggest vulnerabilities?
- » What are the current protocols if and when a breach happens?
- » What is the process for onboarding employees and vendors on security policies?

PRO TIPS

By BMC

- 1 Use modern discovery solutions to uncover unused and/or unmanaged systems.
- 2 Close the gap between vulnerability awareness and remediation actions through improved security operations integration.
- 3 Automate vulnerability remediation and integrate with change management to ensure audit compliance.

CASE STUDIES

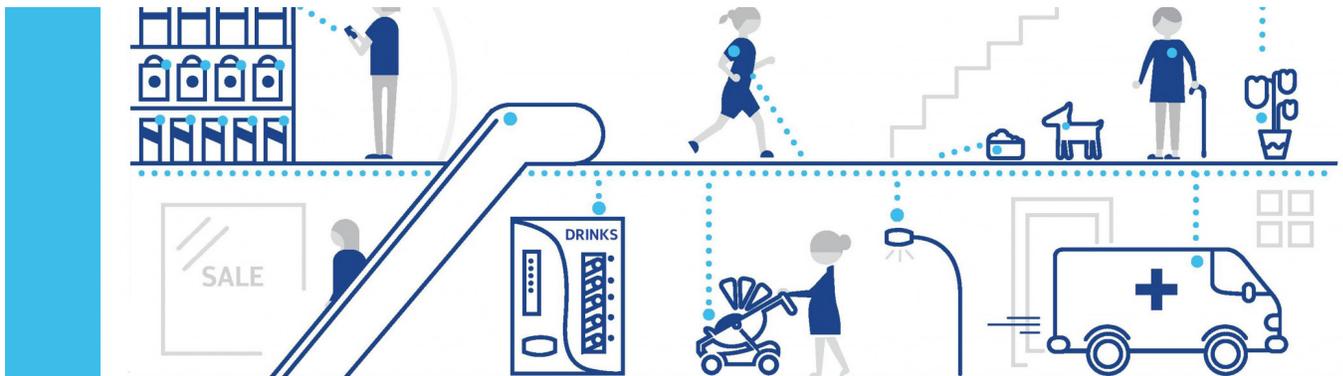


MasterCard

Machine-Learning Thwarts Cyber Attacks And Limits Losses

Financial services company MasterCard is applying machine-learning to provide customers with greater security by defending companies against cyber attacks. The Safety Net system analyzes more than 1.3 billion transactions per day using algorithms that assess customer behavior in real-time to create data visualizations. The system also looks for global transaction patterns that raise red flags. Rolled out in early 2016, the technology has already helped identify and control three separate cyber attacks, limiting losses to less than \$100,000 in each case. The artificial intelligence technology employed by Safety Net is expected to become more refined in the future, and will be an important tool in combatting cyber attacks in the financial services industry.

mastercard.com



Nokia

Telecom Provider Brings Greater Security To IoT Devices

Mobile infrastructure company Nokia created a new platform to bring better, more holistic security to the Internet of Things. The security concern is one of the biggest hurdles to IoT deployment. Nokia's NetGuard Security Management Center platform addresses this concern by monitoring all IoT devices, analyzing activity using a malware database, drawing correlations between events in different parts of the network, and setting security parameters to minimize the likelihood of a successful attack. This technology is an improvement over current IoT security software, which typically only protects individual elements. The software is expected to help carriers and other IoT service providers take a more holistic approach to preventing and responding to attacks and will enable acceleration of IoT deployment.

nokia.com



"We know that breaches are getting bigger, the impact of a breach five years ago to now is much bigger as we go more digital."

Ken Allan, EY Global Cybersecurity Advisory Leader



O2

Mobile Operator Tapped Into Digital Scaling Tools To Deliver On Customers Expectations

O2, a UK mobile infrastructure provider is leveraging the power of BMC solutions to deliver exceptional digital experiences to its 25 million customers and nearly 7,500 employees. In 2015, mobile data usage on O2's network in the UK grew more than 100 percent, making customer expectations higher than ever. To maintain their customer base and the customer's demand for data, O2 realized it needed a best-in-class service management solution to ensure it delivered on its commitments. O2 partnered with BMC to leverage tools that offer insight into the service lifecycle and stringently record and manage 100,000 change requests a year without adversely impacting customers' service experience.

bmc.co/217CSgB



Jask

Startup Employs Artificial Intelligence and Machine Learning to Provide Proactive, Real-Time Cyber Security

Cyber threat intelligence startup Jask is using artificial intelligence and machine learning technology to provide businesses with proactive, rather than reactive, cyber security. The company will build a predictive security operations center that helps businesses automate their security operations while also increasing the speed at which businesses react to security threats. Jask's approach reflects a growing demand for the ability to provide real-time, proactive threat intelligence that can be used to identify and block cyber threats as they unfold. Jask plans to launch later in 2016.

jask.io



"Federal IT Security professionals are like generals fighting today's wars with the weapons of yesterday. Spending intentions reflected a tendency to stick with what has worked in the past, such as network and endpoint security technologies that offer little help in defending against multi-stage attacks. Clearly, there's still a big disconnect between what we are spending most of our security budget on and what's needed to ensure that our sensitive data remains secure."

Garrett Bekker, Senior Analyst, 451 Research

08.

AUTOMATED EFFICIENCIES

As companies look to scale their operations to compete in a global marketplace, they are turning to intelligent systems that are capable of supplementing the work being done by human members of the staff. These automated tools excel at completing tedious and time-consuming tasks at speed, while minimizing potential issues caused by worker error and ensuring that all layers of compliance are being followed. Beyond a reduction in costs and inefficiencies, these systems open the door for employees to focus more of their efforts on knowledge intensive work and long-term thinking that can have a greater impact on the business.

WHY THIS IS IMPORTANT

- » Reduces potential issues caused by human error.
- » Accelerates the speed at which service can be delivered.
- » Creates scalable efficiencies as businesses grow.
- » Frees employees to focus their time and attention on more meaningful work.
- » Enables key operations to take place outside of normal business hours.

KEY QUESTIONS TO CONSIDER

- » What aspects of the business can be automated to streamline operations?
- » What are the checks and balances that need to be put in place to ensure that these automated systems are operating properly?
- » How will employee efforts be refocused or roles change as more automated systems are adopted?
- » How is the value of these systems being communicated to workers, clients and consumers?
- » How can these tools be used to improve customer-facing experiences?

PRO TIPS

By BMC

- 1 Create an Automation Center of Excellence to address automation holistically – and fund it through increased efficiency savings.
- 2 Assemble an “automation tool box” to address automation across the data center and application workloads.
- 3 Measure “before and after” to gain demonstrable insights into improvements.

CASE STUDIES



TalkTalk

Telecom Company Uses Cloud-Based Service to Automate And Streamline Payments Process

Telecom company TalkTalk uses Statement-Matching.com's automated, cloud-based reconciling system to efficiently reconcile supplier statements. The system alerts TalkTalk when it finds discrepancies such as missing invoices or duplicated statements. The service enhances TalkTalk's financial controls and makes the accounts payable process more efficient. For example, by automating the reconciling process, accounts payable teams are freed from reviewing each statement line-by-line, and can shift their focus towards resolving problematic statements instead. By streamlining the supplier statement reconciliation process, automated supplier statement reconciliation technology will help companies reduce the size of their accounts payable team and improve functional efficiency.

talktalk.co.uk/mail



MorningStar

Back-End Updates Increases Operational Efficiency And Service Reliability

For Morningstar, an investment research firm, efficiency and productivity are an organization-wide focus. When backend issues undermined the performance of its monitoring systems, workflow, and automation tools, the company decided to move its SaaS applications to a private cloud hosted by BMC. In this way, Morningstar increased its own efficiency while enabling greater reliability and a better experience for its customers. Internally, an automated approach to service provisioning helped its developers build, test, and deliver new solutions more quickly at higher quality.

www.bmc.com/customers/morningstar.html

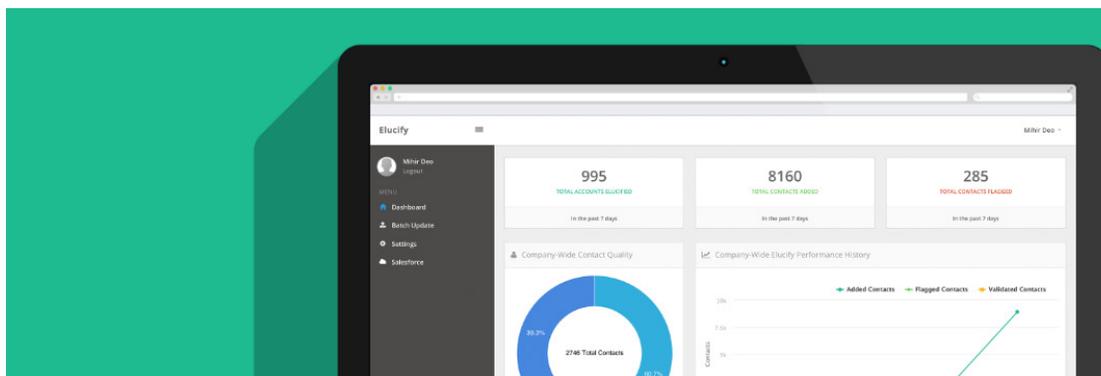


Goldman Sachs

Automated Assistants Take On The Grunt Work For Junior Bankers

Banking firm Goldman Sachs introduced a series of new initiatives that encourage junior bankers to stay longer than the typical two-year resignation mark. Some of the company-wide shifts include early promotion and a formal “mobility program,” enabling younger associates to envision personal and financial growth within different areas of the business. To solve the problem of monotonous everyday tasks for recent college grads, the bank built out tech platforms to encourage more human impact in the workday. With the help of artificial intelligence, necessary tasks like aggregating timelines and fee runs that might require six hours of human-powered work can be completed by the platform in 30 minutes. Such automated services not only allow bankers to complete their jobs with better precision in less time, but also create opportunities and motivation to foresee themselves with the firm as a long-term career.

read.bi/1LSNQ3D



Elucify

AI-Powered Salesforce Plug-In Helps Sales Teams Prospect More Efficiently

Software company Elucify uses artificial intelligence and Salesforce integration to help ensure that salespeople have the most up-to-date information for old contacts and new prospects alike. The Salesforce plug-in connects to various public and private data sources to mine current contact information. Sales personnel simply click on the Elucify button within Salesforce and the tool updates all existing contact information, cleaning hundreds of contacts in seconds. The software is expected to relieve sales teams from having to hunt for valid contact information on a daily basis; according to one study, sales and marketing professionals estimate that approximately 30 percent of their existing contact data is out-of-date.

getelucify.com



“Generally, our time is made more valuable by the machinery we employ, enabling us to accomplish more. In the long run, automation makes us more prosperous overall, but it will create further income distribution challenges, with the people towards the bottom being crowded out. If we manage to create resources without a huge labour demand, the problem will not be, ‘Oh no, there’s no jobs!’ but ‘Oh no, we have lots of wealth – now how do we distribute it?’”

David Autor, Professor Of Economics, MIT

5 WAYS TO READY YOUR BUSINESS FOR DIGITAL TRANSFORMATION

Behave Like A Startup

Ensure continued productivity and development by remaining a nimble and prototype driven organization. Enable employees to act and test ideas by circumventing any unnecessary bureaucracy and using digital tools to automate some approval processes.

Accelerate Collaboration

Enable collaboration by building frameworks and harnessing tools that align disparate departments and clearly define shared goals and priorities. This will invite employees to share insights and know-how across team lines.

Empower The Workforce

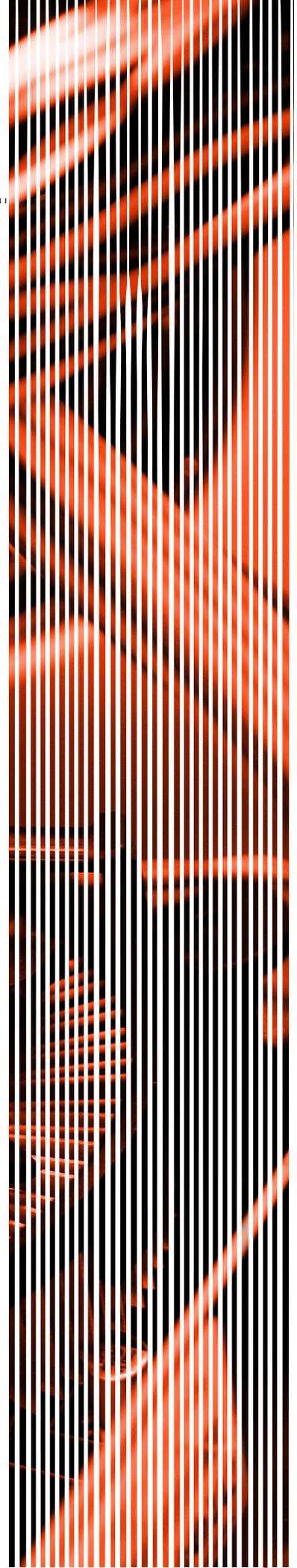
An organization's most valuable asset is its dedicated employees and their knowledge and insight. Empowering these workers to be able to act on ideas for improvement will prove to be mutually beneficial, offering increased project ownership to employees that in turn deliver tailored innovation concepts back to the company.

Focus On The Consumer

Customer wants and needs should be at the core of any business and with more data driven customer insight readily available, it is important that organisations and decision makers harness digital tools to further understand the motivations of the consumer.

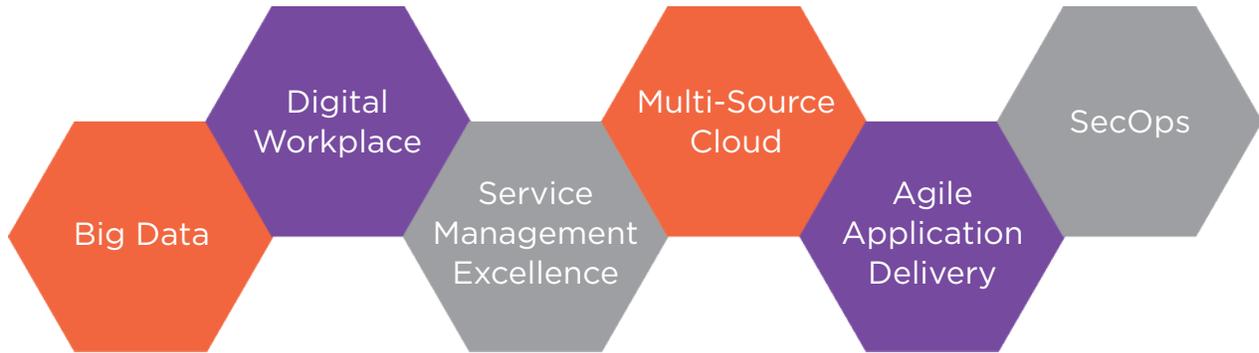
Balance Speed With Quality

Traditional cycles for product rollouts and updates have been replaced by continuous and incremental developments, more successfully balancing speed of delivery with quality of product. This allows companies to do minor rollbacks of faulty updates instead of extensive shutdowns of complete offerings.



KEY INITIATIVES IN MANAGING A DIGITAL ENTERPRISE

Historical approaches to managing IT are no longer sufficient in today's digital era. Digital Enterprise Management is the strategic foundation used by BMC, a leading global IT solutions provider and enhances and augments traditional businesses with new IT disciplines that are fast, seamless, and optimized from mainframe, to mobile to cloud and beyond. These disciplines support key enterprise initiatives such as Big Data, Digital Workplace, Service Management Excellence, Multi-Source Cloud, Agile Application Delivery, and Security and Operations (SecOps).



65 percent of bimodal IT organizations are increasing their budget allocation for exploratory IT.

CIO Economic Outlook Study, CIO, 2016

CORE IT (aka Mode 1):

Multi-Source Cloud, Digital Workplace, Service Management Excellence

Core IT is traditional & sequential; focused on stability & efficiency.

- » Completeness is more highly valued than rapid impact
- » Upgrades are substantial and sequentially planned and executed
- » All IT upgrades are built and tested individually, before being deployed
- » When an upgrade is less successful the entire system is retracted
- » Sets standards and enforces them throughout a system
- » Relies on tried and true solutions that are testable

INNOVATION IT (aka Mode 2):

Big Data, Agile Application Delivery, SecOps

Innovation IT is exploratory & nonlinear; emphasizing agility, speed & alignment with business.

- » Rapid Impact is more highly valued than completeness
- » Upgrades are incremental tweaks that can be rolled individually
- » IT upgrades are rapidly rolled out, before quantitative testing
- » When an IT upgrade is less successful, the faulty piece is rolled-back
- » Has high business impact by offering improvements fast
- » Is experimental, exploratory, and flexible

KEY INSIGHTS FOR THE C-SUITE

Chief Executive Officer

Unlock new revenue streams in mature and emerging markets by leveraging technology as the ultimate competitive advantage.

Chief Information Officer

Become a world-class provider of easy to use, integrated technology solutions that drive business innovation.

Chief Marketing Officer

Gain real-time access to business analytics and uncover market trends faster than ever before.

Chief Technology Officer

Plan and deliver a customer-centric digital technology strategy that increases market adoption and overall brand equity.

Chief People Officer

Win the talent war by implementing digital workplace technology that helps your employees innovate in an open, collaborative, and mobile way.

Chief Security Officer

Minimize security exposures and implement a long-lasting strategy that ensures early detection and remediation of threats and vulnerabilities.

Chief Procurement Officer

Help our company compete at the lowest possible cost, and facilitate investments that expedite innovation and increase your company's digital footprint.

Chief Digital Officer

Reinvent products, services, and business models using modern digital services that rely on tribal knowledge, legacy systems, and a modern user experience.



About BMC

Bring IT to Life

BMC is a global leader in software solutions that enable IT transform traditional businesses into digital enterprises for the ultimate competitive advantage. Our Digital Enterprise Management set of IT solutions is designed to make digital business fast, seamless, and optimized. From mainframe to mobile to cloud and beyond, we pair high-speed digital innovation with robust IT industrialization-allowing our customers to provide intuitive user experiences with optimized performance, cost, compliance, and productivity. BMC solutions serve more than 10,000 customers worldwide including 82 percent of the Fortune 500.

About PSFK

PSFK Labs is an innovation consulting firm. Since 2004, our agency team have helped global corporations concept better products, services, communications and experiences. Our researchers, analysts and designers leverage a unique research process with unparalleled access to experts to identify and develop new business opportunities for brands.

In addition to our client work, PSFK Labs oversees the innovation portal PSFK.com and produces a series of reports, workshops and events that inspire creative professionals in their work.

PSFK LABS

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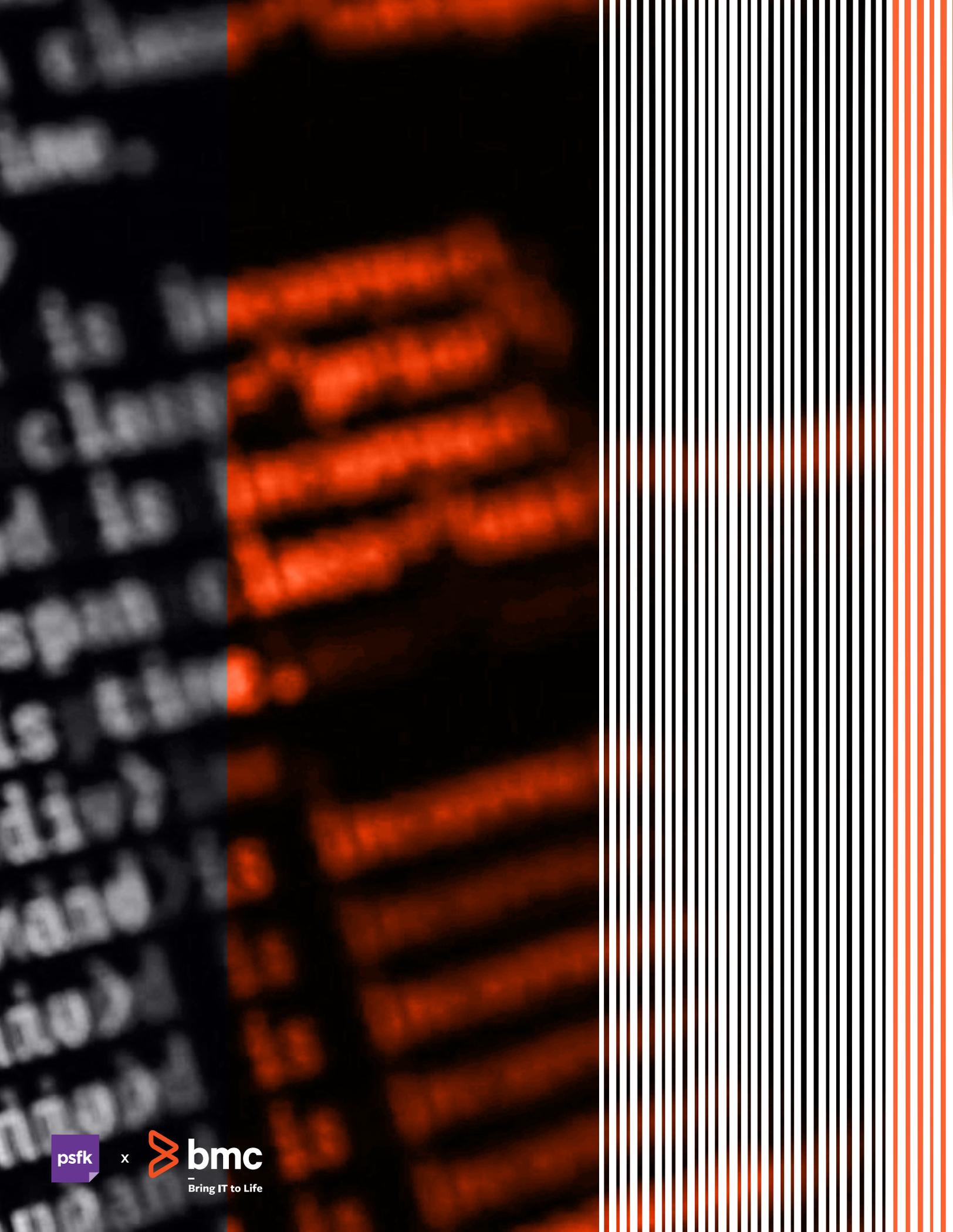
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