The Era of the Intelligent Enterprise
The digital revolution has unequivocally arrived. And it’s having huge impacts in every industry.

Adaptability and an organization’s ability to quickly rotate to the new are critical — both for organizations striving to become digital leaders, and for employees.

Accenture and Oracle are in the vanguard of this revolution. Along with our clients, we are driving some of the biggest changes in how enterprises operate since the start of the information age. As technology innovations continue to transform the way we all live and work, it’s raising challenges and opportunities in equal measure.

Accenture believes that these innovations are a force for positive change, because the power lies squarely with people to bring great benefits to business and society. While there are risks, as there are with any technology, we are in control. We can shape technology so that it adapts to us, elevating our ability to create a future that fits our needs.

The overall theme for the Accenture Technology Vision 2017 is ‘Technology for People: The Era of the Intelligent Enterprise’. This vision is wholly aligned with the partnership between Accenture and Oracle and what it aims to achieve with our clients. It’s all about how technology, from the vast amounts of data on Oracle databases — nearly half the world’s enterprise data — to the introduction of artificial intelligence and whole new platform-based ecosystems, can augment and enhance organizations’ talent and achieve new heights of performance.

That requires deeper intelligence at all levels of the enterprise — from strategy through operations. Every decision about technology implementation, ecosystem relationships, workforce enablement, behavior design, and industry expansion must be made with people in mind — both on an individual and societal basis. This report highlights how Accenture and Oracle are helping companies to forge ahead in each of these areas.

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TREND 1
AI IS THE NEW UI
Experience Above All

TREND 2
ECOSYSTEM POWER PLAYS
Beyond Platforms

TREND 3
WORKFORCE MARKETPLACE
Invent Your Future

TREND 4
DESIGN FOR HUMANS
Inspire New Behaviors

TREND 5
THE UNCHARTED
Invent New Industries, Set New Standards
Accelerating digital advances are creating a people-centric technology environment in which the power is shifting to people to shape technology for themselves. The world of enterprise IT increasingly has the same design principle at its core. So what does that mean for Oracle technologies and the way Accenture helps clients to harness their power for transformational outcomes?

It’s clear that the enormous potential of new technologies like artificial intelligence (AI), machine-learning, advanced analytics and virtual reality has barely begun to be realized. And, for the first time ever, even technology pundits are overawed by the surging speed of technology change. Think about it: 2.5 quintillion bytes of data are now being generated every day.¹

Accenture and Oracle’s work together, showcased in this Accenture Technology Vision for Oracle 2017, demonstrates how organizations now have the vision and the means to turn the tables on new, would-be disruptors, and truly become disruptors themselves.
More than ever before, we as humans control our own destiny. But the reasons why may surprise you.

This accelerated pace of change is the driving force behind the five trends we introduce and analyze in this year’s Accenture Technology Vision for Oracle. These trends — AI is the New UI, Ecosystem Power Plays, Workforce Marketplace, Design for Humans and the Uncharted — are based on how Accenture sees Oracle’s technologies driving the future business environment. Just as today, it’s a future in which Oracle solutions and Accenture’s delivery and implementation will be right at the heart of change and innovation.

Instead of being disrupted by technology developments, the big shift is that technology is now adapting to us. As this gathers momentum, organizations will increasingly be equipped to empower their people and enable them to reach new heights. As this report demonstrates, Accenture and Oracle are together working to help realize this new symbiosis between people and technology.
“Alexa. Can you provide an analysis of underpenetrated markets from our supply chain data and suggest a phased sales campaign strategy?”

Sounds far-fetched? Not at all. As Accenture and Oracle’s work together shows, artificial intelligence (AI) is emerging from the enterprise background to take its seat at the boardroom table as the key interaction point between the business and technology. As it matures, many of the former barriers to adoption are disappearing, making AI more commonplace in everyday life.
AI is now being used to add frictionless intelligence to people’s interactions with technology, creating opportunities to make every interface both simple and smart. In the process, it’s fulfilling its promise to augment and enhance human skills, and drastically reduce the time and effort that people will need to devote to get machines to take care of an increasing range of tasks and activities.

AI’s ability to support new and more engaging forms of technology interaction is by no means restricted to the consumer context. In the enterprise world, how people interact with the systems they need to use every day is changing dramatically. It’s an area of enormous opportunity: Accenture now leverages AI across its range of Oracle solutions and client engagements to accelerate and innovate new forms of interaction with enterprise technology.

The massive scale of investment into AI is predicated on the wide-scale adoption of AI technologies by the people who interact and work with them. To accelerate this adoption, it is important to have a multi-modal system design in which users can interact naturally with applications, using familiar voice- or text-based channels. In this way, AI will be critical to drive the self-service user interactions that support real-time and highly responsive business decision-making.

In the 2017 survey for the Accenture Technology Vision, 79 percent of the survey participants agree that AI will help accelerate technology adoption throughout their organization. That confidence is reflected in the scale of investment in AI technology: Forrester predicts that investments will increase by more than 300 percent in 2017 compared to 2016.2 2017 is well underway, and AI is emphatically no longer a futuristic phenomenon. We’re seeing daily news stories confirming its breadth of application: from reports that 90 percent of securities are now traded algorithmically,3 to coverage of Ravn’s ‘sleuth robot’ that assists forensic teams in large-scale litigation by processing 600,000 documents a day.4
INTEGRATING AI IN THE ENTERPRISE

Crucially, AI creates new ways to deliver projects and support, allowing Accenture to innovate simply and leverage the vast amount of data (client and industry) correlated to the technology and work delivered. The result? Increased speed to value and reduced delivery risk.

One such innovation isAccenture myWizard®, a virtual platform that currently includes a number of intelligent virtual agents. These agents use machine learning to collaborate with their human co-workers in managing projects, applying analytics to deliver on business goals, making judgement-based decisions and monitoring all aspects of application development and management.

For Oracle-based solutions, Accenture myWizard provides market-leading tools and assets to build Oracle custom integrations. Accenture has invested significantly in developing the key features of this platform and integrating it with Oracle technology, leading AI technologies, as well as Accenture-developed tools and assets. The initial results have been impressive. Organizations can use the Accenture myWizard intelligent automation platform to eliminate repetitive application development tasks, helping software developers become up to 60 percent more productive on task-related work which enable them to focus on more strategic initiatives.5

The combination of Accenture data points from a large and diversified client base, coupled with advanced AI components and algorithms, has resulted in integrating virtual agents and bots that can advance Oracle application interaction and system support. Accenture myWizard also offers significant potential to reduce costs and support improved user experiences.

Oracle’s footprint in software and data services uniquely positions its technology to make a significant contribution to enhance and develop how people interact with business services in the years ahead. Several key features of Oracle technology will be critical to how AI becomes embedded in everyday interactions. Below, Accenture takes a look at some of these factors and the impact they will have on organizations and individuals interacting with consumers and colleagues.
In this context, Google and its development of Site Reliability Engineering is a concept that has spread throughout Silicon Valley. It provides an interesting framework for examining how new support systems for the future of Oracle applications might develop. One primary component that impacts the future support of applications is the elimination of ‘toil’, the redundant, often manual, tasks skewed to lower-level activities, which application engineers carry out as part of their support processes. In Site Reliability Engineering, the toil factor is controlled by systems built on AI, including reactive patterning and an automated testing/quality process that improves system reliability and enhances user interactions.

AI takes over lower-level support activities and increases the ability of the application engineers to focus on value-adding system work and delivering an improved customer experience. In combination with Agile methodologies and DevOps, AI will deliver a ‘liquid’ system environment, with a smaller, highly-skilled, and dynamic team that works directly with users to anticipate and resolve issues, accomplish changes and enhancements, and participate in a multi-node feedback process. This will create a delivery mechanism that decreases hand-offs, is closely linked to overall user participation and experience, and has a laser focus on user empowerment rather than system functionality.

Data analysis will be one of the primary skill areas in the overall support model, blending business and technology roles. The building blocks for this data-driven organization will be anchored by virtual platforms that interact with Oracle systems and provide AI capabilities, whether as simple or complex bots and virtual assistants, or as multi-pronged integrations.

The future of applications will shape the support and skills needed to help users interact with, and develop, Oracle systems. How they use these technologies will require approaches that are interactive, predictive and are constantly learning and retooling as technology continues to develop.

INTERACTING WITH ORACLE SYSTEMS THROUGH AI
TREND 1 AI IS THE NEW UI

DATA: THE ENGINE OF AI
And data levels are growing all the time: analysis shows that there will be a 50-fold increase in the rate of data growth from 2010 to 2020, with 90 percent of the world’s data having been created in the last two years.\(^6\) Scope for the scale and pace of data growth beyond 2020 is faster than exponential, considering that just 25 percent of the world’s economy is forecast to be digital by that date.\(^7\)

It’s not just the quantity of data that’s growing. The availability of data, both structured and unstructured, is increasing all the time. This requires organizations to harness the power of data with predictive analytics, and also to secure and protect data stores. The expansion of data to multiple platforms has created a web of interaction that cannot effectively be managed through standard processes and practices as the volume and the underlying data points have become not only dispersed, but volumetrically expansive.

With nearly 50 percent of the world’s data residing on its databases,\(^4\) Oracle is uniquely positioned to be the leading global data-centric software provider. Oracle technology is rapidly moving the enterprise model to a data-powered ecosystem where the organization and curation of data define business insights and predict interactions between the market and an organization’s supply chain, finance and talent management systems.

Oracle Adaptive Intelligent Applications enable businesses to address the growing volume and variety of data and data sources by defining and growing data management services and advanced analytics. These are based on insights gleaned from within Oracle’s Data Cloud, a collection of more than six billion consumer and business profiles, with more than 45,000 attributes. Oracle’s Adaptive Intelligent Applications use web-scale data and apply advanced data science to learn about an organization’s users and their behavior, empowering businesses to function as data-driven enterprises.

Initially sourcing data from Oracle Software-as-a-Service (SaaS) solutions such as Oracle Sales Cloud, Oracle HCM Cloud, and Oracle ERP Cloud, it will also ingest and mash-up data from multiple third-party sources. Oracle has ensured that partners such as Accenture will be able to help speed innovation by employing open-source algorithms along with Oracle proprietary algorithms written by Oracle data scientists. The Accenture Innovation Centers for Oracle will be a key aspect of future development.

**At the heart of the broad adoption of AI and AI techniques is data. Without data, there’s no intelligence to artificially manufacture.**
Technologies such as adaptive intelligence will play a significant role in increasing the value and speed to market of the data-driven enterprise by proactively mining data, alerting users to insights, and architecturally analyzing performance and system usage to actively tune the system and automate development operations without manual intervention. AI is at the forefront of making massive data volumes manageable.

Another key part of the AI/data equation will be the proactive protection and secure bursting of the data as part of the AI stream. As cybersecurity continues to attract public attention, it needs to be high on the agenda for the data-driven enterprise. The links between data security and the volume and availability of data provide both risks and opportunities for organizations.

The development of AI as a key component in a data-driven economy will help reduce organizational risk with predictive analysis, and create market opportunity to develop, enhance, and implement next-generation security practices. In the data-centric model of the future, not only will data become one of the key elements of organizational intellectual property, but the platforms, custom algorithms built around the data for analysis, and analytic output will represent a significant intellectual property footprint. That’s why Accenture and Oracle are making investments in Identity and Access Management (IAM) with the aim of significantly enhancing the protection and control of access to data stores in an increasingly complex and challenging environment.

Within IAM, the use of AI is becoming increasingly critical to proactively scan for intrusions and vulnerabilities, and respond to cyber threats by creating an automation sequence that can counteract the attacks without operator intervention. When it comes to applications, AI’s ability to identify users through facial recognition and digital fingerprinting will rapidly become not only the norm for system access, but also link to auto-customization of the user interface and content. It will preload information and data, and provide user-specific content based on learning from past system interactions and user profiles.

An example of this in action is the Accenture Velocity Identity Platform for Oracle. This is a unique set of IAM automation tools and pre-configured solutions that enable rapid deployments. Capabilities scale across nearly everything that companies have connected, from employees and customers to the many endpoints that span the Internet of Things. Controlling access to applications on a temporary or permanent basis, the platform gives organizations the ability to become predictive for issuing access, removing the need for human intervention to deal with many basic security support tickets.
The continued movement, development and adoption of cloud solutions is the other main driver of AI adoption. Cloud provides more computing power, cheaper storage and security solutions, and the economies of scale that are so important for large-scale adoption and future development.

As the overall technology environment becomes increasingly complex, integration points proliferate, and the ability of on-premises security to protect and provide access to data stores declines, the pivot to the cloud will accelerate rapidly over the next two to three years. In response, Oracle’s technology strategy has repositioned from ‘bridge’ to ‘reinvent’, developing not only at the software layer, but at the integration and performance layers as well. Oracle has created a leading middleware, database and platform strategy and capability, structured for the business enterprise. It has focused its efforts on building a modern enterprise cloud architecture that integrates infrastructure, platform and software.

Oracle’s prominence at the database level will be the basis for building the integrations that will be needed for the continued adoption of cloud services. Advances in system architecture will provide the performance organizations require to enable their use of analytics as a source of competitive advantage. In addition, to support the move to cloud, Oracle will need to continue forging key partnerships, and pursue acquisitions to deliver new technologies, scale and industry-specific relevance.
Lastly, the flexibility of Oracle’s software to integrate new technology provides Oracle practitioners with the ability to use Oracle Middleware components, and also to create ‘as-a-Service’ capabilities.

Accenture and Oracle’s continuing collaboration through the Accenture Oracle Business Group to include as-a-Service offerings reflects the commitment of both organizations to create the data-centric platform of the future.

For example, the Accenture Cloud Hub for Oracle has prebuilt integrations into third-party AI engines that allow our clients to find insights from the ‘dark data’ that has been collecting for months or decades. That dark data does not need to be the unstructured data-lakes from which many businesses are striving to extract value. In fact, a quicker route to value could be the structured data that has been accumulating for years in an ERP system. This could provide a faster and easier route to valuable new business insights.

In addition, Accenture has developed more than 400 assets purpose-built for Oracle-based solutions, supporting an end-to-end process for the delivery of new technology and the development, support, and integration of future-focused activities in AI and robotic automation. The amalgamation of data, analytics, AI and automation, combined with the future of applications in a liquid support model, will power the enterprise of the future. This will contribute not only to a competitive advantage for organizations that embrace a flexible, innovation platform approach, but also a pronounced ability to accelerate market advantage with the rapid adoption of key disruptions in technology.

Remember the question we asked Alexa at the start? Well, we have an answer: Yes, Alexa can provide the analysis. Our researchers in the Accenture Innovation Center for Oracle have successfully integrated Amazon’s Alexa with Oracle’s Database. It’s here, now.
TREND 1 AI IS THE NEW UI
More and more companies are integrating their core business functions — from customer service to machine maintenance — with third parties and their platforms.

By Aaron Wright
But rather than treat them like standalone partnerships, forward-thinking leaders leverage these relationships to build their role in new digital ecosystems. In doing so, they’re designing future value chains that will transform their businesses, products, and even the market itself.

Research for this year’s Accenture Technology Vision points to the accelerating momentum behind this trend. Already, more than 27 percent of the executives we surveyed report that digital ecosystems are transforming the way their organizations deliver value. In this new world, the mandate for leaders is to capitalize on new relationships, and build a network of digital partners that will enhance their existing business, and allow them to trailblaze a path into newly emerging digital ecosystems. It’s a vision that Accenture and Oracle are bringing to life today, through collaborative innovations that build new ecosystems with businesses at the center.

Critically, each time an enterprise leverages a third-party platform to support aspects of its business, it is, in fact, choosing the alliance partners it will count on when building out its next generation of services.

In the drive to remain competitive over time, every business must share a common goal: start thinking beyond the short-term gains that digital platforms provide. It’s time to embrace a more holistic strategy that balances tactical IT decision-making with fostering and investing in the digital ecosystems that will encompass and sustain their long-term growth.

It’s a future-focused vision that determines the leaders and laggards in every industry. In the case of Accenture and Oracle, Oracle makes the products and Accenture implements them across the complexities of our clients’ enterprises. This combined work results in the creation and integration of new ecosystems through a platform approach leveraging Oracle solutions.

Some companies see these new ecosystem relationships as little more than a logical evolution for existing value chains. Tech-savvy leaders think differently. They recognize that these decisions indicate a much deeper strategic shift: to new multidimensional ecosystems that are redefining industries.
THE ACCENTURE LIFE SCIENCES CLOUD FOR R&D: TRANSFORMING HEALTHCARE FROM THE PLATFORM OUT

One example of an ecosystem-driven approach using Oracle technologies is the Accenture Life Sciences Cloud (ALSC). The ALSC speeds clinical development, helps improve patient outcomes and creates greater R&D efficiency. It achieves this through a single analytics platform that brings together multiple internal and external data sources across clinical, safety, regulatory and operational functions. With this high-performance Clinical Data Warehouse platform, created around the Oracle Life Sciences Data Hub, the ALSC provides a unique way for life sciences companies to realize the benefits of a Clinical Data Warehouse while streamlining their IT landscape.

Offerings within ALSC include the Oracle Health Sciences Data Management Workbench, with prebuilt integrations to the Oracle Health Sciences InForm, an electronic data capture solution that creates an end-to-end clinical data collection and management platform. Through this feature, ALSC automates the time-consuming and resource-intensive manual processes required to load, transform and clean trial data. It means trial sponsors and contract research organizations can now increase the speed and accuracy of data collection, integration and analysis; achieve greater efficiency of clinical workflow and query management; and accelerate stakeholders’ access to data across the trial lifecycle.

Some of the world’s top pharmaceutical companies are already part of the ALSC ecosystem, including Eisai Co., Ltd., Merck & Co., Inc., Eli Lilly and Company, Pfizer Inc., Vertex Pharmaceuticals and GlaxoSmithKline plc., to name a few. These companies are also part of the Life Sciences Cloud Coalition, by which the companies collaborate to bring innovation to the Accenture Life Sciences Cloud and digitally enable the R&D function. This speeds up the drug development process while improving quality and cost for the industry.

Take a moment to consider what this represents. Six of the world’s largest — and most competitive — pharma businesses are coming together to solve common R&D challenges and accelerate their ability to innovate. It’s truly disruptive. Imagine if the world’s taxi companies had come together to create an Uber-style platform in advance of Uber itself. It demonstrates how established players in a 100-year old industry can create a platform-based ecosystem that ‘out-disrupts’ the disruptors.
Six of the world’s largest — and most competitive — pharma businesses are coming together to solve common R&D challenges and accelerate their ability to innovate. It’s truly disruptive.
An ecosystem is taking shape with a new innovation that Accenture is currently working with companies to develop. Accenture Fit is a connected health wellness platform built on multiple Oracle as-a-Service technologies. It encourages an organization’s employees to seek healthier lifestyles through wearables that monitor their steps, intensity minutes, activities and more.

This innovation provides three key features:

1. Automatic tracking and aggregation of employee wellness activities (from wearable devices)
2. Targets, campaigns, and gamification to encourage employee activities
3. Business insights for employees, wellness administrators, and the company

In combination, these three features provide the foundation for an ecosystem by connecting employees to their employers. As the universe of wearables expands, the platform, which already supports Fitbit, Apple Watch and Garmin devices, will expand and integrate new devices and the data they generate. End-users are able to leverage the data: the device owner/wearer to track their progress to a healthier life and their employers to improve the healthcare packages to match their employees needs.

While it is packaged with several cloud technologies from Oracle — such as Oracle’s Internet of Things Cloud, Database Cloud, Business Intelligence Cloud, and Mobile Cloud — Accenture Fit is much more than a technology and a lifestyle ‘nice to have’. The information it provides about employee wellness can be used to lower healthcare costs and insurance premiums, which are a major expense for businesses worldwide. This exemplifies an ecosystem becoming a power play with benefits that are delivered across life and work.
As the universe of wearables continues to expand, Accenture Fit, which already supports Fitbit, Apple Watch and Garmin devices, will keep on growing to integrate new devices and the data they generate.
This means that many companies, whether they realize it or not, are already well on their way to becoming ecosystem players. In the 2016 State of the Cloud survey, 95 percent of respondents reported using public, private or hybrid cloud technology; and the CIO Strategic Partner Index run by IDC reports that 29 percent of IT leaders spend more than half their IT budget on external providers.

Individually, these investments are tactical operational moves based on short-term functional gains and cost savings. But in aggregate, they represent a much larger set of strategic decisions. In other words, a company’s infrastructure decision will directly influence the ecosystems it will join, and the network of partners leveraged to bring future strategies to life.

TAKING THE ESSENTIAL FIRST STEPS

For any company seeking to embed itself into an ecosystem, the journey to the cloud is the vital first step. Across almost every client relationship, Accenture takes a Cloud First strategy — working with organizations to help evaluate whether now is the right time to make the move to the cloud for a particular capability. In many cases, it’s a step to the cloud where a hybrid cloud and on-premises solutions will exist for a number of years. In others, it’s a deep dive into cloud transformation.

Whatever trajectory makes sense for their business, Accenture’s alliance with Oracle means that our clients have access to cloud solutions across the spectrum. Whatever trajectory makes sense for their business, Accenture’s alliance with Oracle means that our clients have access to cloud solutions across Infrastructure-as-a-Service, Platform-as-a-Service, and Software-as-a-Service including ERP, HCM and CX. Cloud solutions like these offer a vital step toward a business being able to participate in broader ecosystems.

TREND 2 ECOSYSTEM POWER PLAYS

What relevant trends are indicated by the text? The text highlights the importance of companies becoming ecosystem players and the migration to cloud technologies as a strategic decision. It emphasizes that Accenture’s alliance with Oracle provides clients with access to cloud solutions across various services, which is crucial for participating in broader ecosystems.
More than ever, the digital partnerships companies make today have long-term implications for their future. Whether it’s accessing new customer touchpoints or building new markets with industry partnerships, the external platforms that companies rely on throughout their enterprise are becoming the gateways to new digital ecosystems — and the pillars of an evolution in their value chain.

It’s time to look beyond the short-term gains of tactical vendor and partner relationships and consider them in the context of the larger opportunities — and challenges — for the company’s future. The race is on as companies across industries begin to forge the relationships that will drive their next waves of unprecedented growth. An explosion of collaborative ventures between industry leaders is on the horizon, and Accenture and Oracle provide the cloud-based platform capabilities that will bring these ventures to fruition.
The future of work has already arrived, and digital leaders are fundamentally reinventing their workforces.

Driven by a surge of on-demand labor platforms and online work management solutions, legacy models and hierarchies are being dissolved and replaced with workforce marketplaces. This resulting on-demand enterprise will be key to the rapid innovation and organizational changes that companies need to transform themselves into truly digital businesses.
There’s no getting around the challenge that this new paradigm presents. To illustrate how different the future workforce will be, a World Economic Forum report forecasts that 65 percent of children entering primary school today will work in jobs that don’t even exist yet. Tried-and-tested approaches to addressing this new marketplace for talent will not work.

Those who can rise to meet this challenge have been identified in this year’s Accenture Technology Vision as leaders who are “fundamentally reinventing their workforces.”

Taking a step back from this trend to look at how Oracle Human Resources (HR) technology customers are responding to the fast-changing workforce marketplace, we’re seeing four key changes to the workforce, each one enabled by digital technologies. These are:

- **How services are being delivered:** Cloud services quickly deliver consumer-type applications into the enterprise to drive greater agility. Success comes from focusing on employee experiences. As discussed in Trend 4, ‘Design for Humans,’ the key is to put the human experience in the center of the services being delivered.

- **How things are discovered and connected:** By providing tools for collaboration across sites and geographies, social platforms improve employee engagement and enable communities to form and coalesce.

- **Who performs the work:** As robotics and artificial intelligence take on HR roles, HR resources have more time to focus on high value activities. As Trend 1 states, AI is the new UI and nowhere is this more relevant than in interactions between employees and HR.

- **How insights are created:** Analytics built on big data enables HR to extract more information and insights from both internal and external data, driving significantly better workforce performance.

Oracle clients are developing new and innovative ways to take advantage of these technology enablers. While this is by no means without challenge, there are three powerful motivators driving the need to change. First, competitive pressures to extend innovation to the workforce and wider organization. Next, the need to step beyond an HR application implementation to achieve truly transformational promises from SaaS applications. And finally, the ability to access in demand highly skilled workers. It remains true the technology industry faces an acute talent shortage. To address this, companies will need to take a workforce marketplace approach to fill critical roles — for which they don’t have internal resources or candidates in the recruiting pipeline — on a project-by-project basis. The same approach applies to meeting sudden surges in demand.

There’s nothing new about innovation driven by competition. Building a better widget for less relies on innovation in manufacturing. The same principle can be applied to workforce transformation. Attracting and retaining talent requires innovation. Even as early as 2011, a study by Cisco Systems, Inc. showed that 56 percent of millennials would not accept jobs from companies that ban social media. It follows that the experiences employees receive from HR technologies play a key role in attracting and retaining talent.

Additionally, all businesses are driven by a need to continue HR technology transformation journeys beyond SaaS implementations. In the aftermath of the often long and costly journey to implementing a SaaS solution, many companies are still struggling to realize the full benefits of the transformation on which they embarked. As a result, some are questioning if the cloud is more of a fashion item than a must-have. The cloud is fundamental, of course, but only where it is incorporated in a wider HR technology ecosystem that includes some or all of the four enablers we itemize above. In essence, we have to go beyond the cloud and make the ‘R’ work for the ‘H’ in HR.
Let’s take a closer look at these key HR technology enablers and how they are propelling Accenture’s Oracle clients in their transformation journeys.
We see four key areas of technology combining to enable the development of a new approach to sourcing, managing and training workers. Together, they will support the emergence of the Workforce Marketplace.

1. Cloud

Simply implementing a SaaS application will not deliver true HR transformation. All too often, companies experience repeated challenges in user adoption of their newly implemented SaaS systems.

One reason for this is the lack of focus on customer experience. Customer experience is key to being able to provide an HR system that employees are able to use, and actually want to use.

Employees expect the same experience when they access their HR system as they receive when shopping online or using an app on their smartphone. For example, employees want experiences that are personalized, seamless and on-demand.

Personalization/customer insights

Customers now expect that all data stored about them will enable companies to precisely target their needs or personalize what they experience. Employee expectations are no different. Their HR system should provide them with a personalized experience, whereby the system knows all about them and can intuitively target what they may need, rather than requiring the employee to enter information only to receive a generic answer.

Seamless customer experience

Employees also expect a similarly seamless work experience across all of the channels, echoing their consumer experience. They don’t want to have a different experience when they view their paycheck statements, change their address, or make a request. They want a single point to access the system, and a consistent look and feel across all transactions. Oracle’s ‘Glance-Scan-Commit’ approach to user experience across its products is based on the ability of users to glance to make sure there are no urgent tasks, scan for more details if something comes up, and commit to fully engaging with an app only when a task requires it.

On demand services and information

The availability of up-to-date and on-demand information is a given in the digital world. It is understandable that employees would want this in the workplace, too. They want to be able to log absences at night and over the weekend. They want answers to questions and information when they’re needed, and they don’t want to wait for the system to catch up with their data. Oracle’s ability to provide a fully-mobile user experience, with access to real-time data, is critical to our Oracle customers in all industries. Within the past three years, we have seen mobility move from a “nice to have” requirement to a “must have” as part of their solution. On-demand also refers to how organizations can access the talent they need. For example, Accenture’s Oracle specialists are constantly evolving what can be achieved by integrating new tools, like Upwork, into Oracle HCM Cloud.
To adapt to these new demands from employees, Oracle is making rapid progress in its new releases to continue improving the user experience. This includes working with new technologies like wearables to discover and develop the user experience of the future. In much the same way, Fjord, part of Accenture Interactive, is designing employee-centered user interfaces for SaaS applications that create more human and consumer-like experiences. Achieving this requires a focus on the following features:

- **Segmentation of services and channels:** By identifying the moments that matter for employees, the steps or processes with greatest value receive the most focus. The moments that matter differ from employee to employee, and are mapped via the segmentation of services and channels. This approach improves the quality of service for each employee.

- **Integrated architecture:** A seamless experience is more and more important to employees. In the case of Oracle applications, this means that all cloud modules should be integrated architecturally. The employee shouldn’t even notice which specific function is involved in any step or process.

- **Outcome-based measures:** Focusing on employee experience leads to measurable improvements, with a direct correlation between increased engagement and increased revenue. Engagement means employees focus on their jobs and what they do best. Research has shown that every five percent increase in employee engagement correlates to a three percent uplift in revenue for the organization in that year.

### 2. Social platforms

Social platforms result in improved employee engagement because they enable communities to develop by promoting collaboration across sites and geographies. In last year’s Accenture Technology Vision for Oracle, we spoke about Oracle Taleo Social Sourcing Cloud Service. This module helps organizations tap into the power of social networks and media by automating talent sourcing across multiple social channels.

Getting employee experiences right democratizes processes and empowers people. Social platforms enable these processes, allowing employees to co-create talent processes with HR, further improving their engagement and experience. These start with onboarding employees using social media — for example, posting videos explaining their jobs and the company culture to others. Having employees explain their team and activities not only has a better chance of describing the true experience, but instantly makes the new joiner feel like part of the team. More effective learning can also be delivered using social tools. For example, Oracle’s new Learning Cloud enables employees to share learning content, including videos. They’re able to use familiar social tools such as ‘liking’ content and sharing their own views and experiences of the materials they have used.

Employees can use internal social platforms to guide career counselors about how best to advise them, instead of relying on HR to provide this advice. Certain behaviors can be encouraged. Sports clothing and accessories company Under Armour, for example, has a focus on innovation and change that is so engrained in its culture that employees reported in 2015 that the only words they could be sacked for saying are: “That’s the way we’ve always done it.” Employees are rewarded each time they come up with a different way of doing something that leads to a new HR process or a new way of configuring the system to avoid costly extensions.
3. Robotics and Artificial Intelligence

Who performs the work is changing. Robotics and artificial intelligence are taking on HR roles, enabling people to devote more time to more stimulating and higher-value activities. AI could be anything from a simple line of code that executes automatically to a physical robot or interface that appears on screen and engages with a user. Robotics and AI are found in all applications within the HR technology ecosystem and have been around for some time. Simple keystroke replacement tools have been in use for several years, but the latest developments go further, and involve cognitive computing that interacts, adapts and learns behavior.

In research for the Accenture Technology Vision 2017, 73 percent of executives we surveyed reported corporate bureaucracies are stifling productivity and innovation. Of course, companies can address this issue by changing organizational structures — and the Accenture Technology Vision 2017 describes several instances of this. But organizations can also innovate without changing the organizational structure.

To illustrate, a large financial services company in the UK is conducting a proof of concept trial using robotics to perform tasks normally carried out by HR resources. In one use case, the client is piloting the use of robotics to carry out tasks that could otherwise have been addressed by creating an automated integration. Resources would be needed to design, build, test, and support the integration, resulting in unneeded cost and complexity. In contrast, a robotics solution is surprisingly simple. It not only replaces a more expensive technical approach, but it also frees up resources in situations in which a technical approach would not have been possible to start with. Imagine taking that solution and replacing 30, 50 or 80 percent of both automated and manual integrations. The cost savings from this simple solution rise exponentially.

4. Business intelligence and big data

We’ve been talking about big data and analytics for some time. Analytics has a spectrum that moves from tactical to strategic. Starting with simple tactical reports that require very little business intelligence and provide little or no competitive advantage, the further businesses travel up the analytics maturity curve the greater the competitive advantage they are able to capture. However, this journey is far from easy and while businesses see the advantages, they are often hampered by technology that fails to keep pace with the need to process the rapidly expanding amounts and complexity of data available.

The trends we see in analytics begin with the ability to solve the challenges of delivering insights from complex data in real time. Once that’s achieved, those that can identify the data providing the best insights, with the most value, will be able to improve the performance of their workforce and secure clear competitive advantage.

For example, hospitals are dependent on their staff — doctors, nurses, therapists, technicians, janitors and many more. Scheduling the right staff to ensure the right coverage for the unknown every day of the year for a service that never closes is complicated. Accenture worked with a client to not only leverage historical data to understand trends based on seasons, weather and types of ailments, but also to vastly reduce the amount of time it took the systems to process staffing and the ever-changing needs of a 24/7 business from hours to minutes. Data matters and when the business is saving lives, people come first.
BRINGING IT ALL TOGETHER
The technology enablers that we’ve described are all intertwined.

Social platforms encourage collaboration, which improves user experience. Robotics and AI can execute repetitive tasks, allowing employees to focus on higher-value activities, which in turn improves engagement. Advances in AI ensure that the quality of interaction with the HR system that employees expect is not degraded. And finally, analytics will help HR understand the workforce, resulting in the ability to identify and correct trends and developments that might lead to a lack of engagement or poor user experience.

Businesses face many constraints, from restricted budgets and limited manpower to the need to meet strict legal and regulatory requirements that differ across geographies. These constraints drive them to identify new and unique ways to develop and use technology. This is nothing new, as innovation has always been driven by the creative impulse to find new solutions to familiar problems.

Oracle’s Adaptive Intelligent Apps, powered by vast quantities of consumer and business data from Oracle’s Data Cloud, by sophisticated decision science/machine learning, and by a scalable cloud infrastructure, will play a pivotal role in establishing data as a core resource in HR. And Accenture’s focus on delivering systems based on what users want (vs. what the technology is built for), will ensure that these solutions continue to evolve.
Inspire New Behaviors
By Catherine Macrae

Today, most technology operates at a machine level: it can do a great deal with data and facts, but it doesn’t understand people. But what if technology could operate at a more human level?

How would the relationship to technology change if it could not only interact with customers and employees in a more natural, human way, but understand personal and workplace behaviors and goals, and respond appropriately?
With today’s nearly unlimited data stores, this is suddenly a real possibility. As technology is integrated into every action people take, every process they follow, and every object they use, 2.5 quintillion bytes of data are produced every day. The data not only provides businesses with vast information on how customers live and employees work, it also creates an unprecedented opportunity for companies to use more sophisticated analytics to understand how people behave. Companies suddenly have a potential level of insight they have never had before. In order to gain these insights, companies need to understand how to use the data that they may or may not know they possess. Designed with this in mind, technology can operate on a scale that is simultaneously more grand and more granular — at a human level, in other words.

The first step in humanizing technology is to provide technology that works for them — technology that’s designed specifically for human behavior. And it’s an area where Oracle technologies are pointing the way ahead.

**ORACLE’S ALTA UI: HUMANIZING TECHNOLOGY FOR A ‘MOBILE FIRST’ WORLD**

Oracle has focused on the development of Alta UI for its most recent Cloud First products. Designed for Mobile First, one of its key design objectives is to engage users with more visual content. In a world where people snack content, the Alta UI is designed for browsability. The use of visual and typographical techniques makes its modern application pages more easily consumable — and more pleasurable to use.

The arrival of the Oracle Alta UI means users can now interact with the machines used in a more natural way. Through a deliberately responsive design, it creates a more engaging customer experience that meets the modern expectations of customers living in a mobile world. Focusing on the design paradigm of ‘Glance, Scan, Commit,’ it humanizes the interactions that most people have every day with smartphones, smart watches, tablets or laptops.

Just as millions of people wake up and scan Facebook and Twitter on their mobile phones for the latest news, a salesperson using Alta UI to access Oracle Sales Cloud can now check their daily appointments on the same device. The mobile application simply displays the right information, at a glance.

By designing for humans, and building technology around this idea, Oracle’s Alta UI helps people reach their goals, and positions companies as true partners with their employees. Most importantly, it’s software designed for humans.
ALIGNING BUSINESS GOALS TO PEOPLE’S GOALS: INSPIRING NEW BEHAVIORS

Increasingly, Accenture is seeing companies using their understanding of human behavior to deliver technologies that are more adaptive, responsive, and aligned to the goals and actions taken by customers and employees alike. It’s a win-win: the more goals technology helps people to achieve, the more confident (and the more productive) they will be.

BAI Communications, an Australia-based company that designs, builds and operates highly available communications networks — broadcast, radio, cellular, Wi-Fi — across the globe, is embracing this approach. In 2016, in alignment with its growth and cloud-driven technology strategy, and with Accenture’s help, the company implemented Oracle Human Capital Management (HCM) Cloud as part of their Human Resources transformation agenda. Along with a technology transformation, they leveraged Oracle HCM Cloud to change how employees are measured and monitored for personal growth and achievement. The BAI Communications performance management transformation was achieved by aligning employee performance to company strategy. The company captured insights into how closely its goals for revenue growth matched employee goals for performance.

As part of this change program, they did away with the traditional, yet sometimes demoralizing, rankings and ratings that most employees ignore until their annual performance meeting. Instead, they focused on introducing a goals-based approach for performance. Goals can be set at the most senior levels, and the goals of all BAI employees are inherited along reporting lines and can be shared in the same way. This means each time employees achieve their goals, their achievements are also reflected as successes for their managers. This way of setting goals increases both the visibility and accountability of employee achievement to managers and senior executives.

This technology implementation was rolled out in just eight weeks, across five continents, enabling all 800 of the company’s employees to align with new HR initiatives set by the CEO. Accenture utilized the Accenture Oracle HCM Agile implementation methodology to take the company’s wants and needs and turned them into software, built around the experience required to roll out this new change. With the extensibility of the Oracle HCM service, Accenture was able to deliver the technology component of this pervasive change with no significant IT overhead.
AN ULTRA-PERSONAL MARKETING EXPERIENCE

The first step in humanizing technology is to provide technology that’s designed specifically for human behavior. Imagine unleashing the power of intimate customer knowledge on your marketing department. Could the marketing department create a purchasing journey that supports individual customer wants and desires? We are using Oracle Marketing Cloud to do just this - harnessing the strength of this data to re-imagine the car-buying experience for a European auto manufacturer.

As part of a broader initiative to create a more cohesive, coordinated marketing theme across Europe, the company engaged with Accenture to rethink how the overall car buying customer experience could be improved. Nowadays, most car buying journeys typically start with visits to a company’s website. So, as part of this redesign, the manufacturer wanted to incorporate the ability to request a test drive with a local dealership. This test drive request was far beyond a simple appointment booking. The manufacturer leveraged capabilities from the Oracle Marketing Cloud (Eloqua) to capture a customer’s digital interactions and intent. This digital footprint, made prior to requesting a test drive, provides intelligence that is now passed to the affiliated dealer. The dealer now not only knows which car to have ready when the customer walks in the door of the showroom, but is able to tailor their interactions based on previously captured customer buying signals. Site visit information combined with intelligent analytics of first- and third-party data provide a better understanding of customer expectations. This ensures that the type of engagement customers experience at the dealership exceeds what any customer might expect from a car salesman.

Accenture enabled this seamless transition from the digital world to the non-digital world by aligning an individual’s implicit digital buying signals with their real-world experience at the dealership.

Accenture was involved from the start of the project, bringing in Oracle Marketing Cloud expertise to design, implement, and integrate the platform for the company. Implementation was completed in an agile manner and leveraged the quick enablement of the platform capabilities. The Oracle Marketing Cloud was operational within months while additional layers of capabilities have been added throughout the lifetime of the engagement. Accenture continues to be involved from a marketing strategy, technology enablement and execution perspective.

The relationship between the auto manufacturer and Accenture further embodies this idea of aligning technology with business goals to achieve desired results. The initial engagement was a sales lead and opportunity management system that would encourage customers to visit the dealerships for test drives and then to purchase. Accenture and the company took this further by implementing a shared responsibility approach, whereby Accenture uses the Oracle Marketing Cloud to provide ongoing innovation on the car buying customer experience and is compensated for the number of customers initiating test drives and purchasing cars. Outcomes have been outstanding for both parties, with significant increase in the volumes of the campaigns executed; more than 15 percent in leads from digital marketing campaigns and a nearly 10 percent increase in leads converted.
A NEW PARADIGM FOR CUSTOMER AND EMPLOYEE RELATIONSHIPS

By responding to human behavior, companies will find themselves redefining their relationships with both customers and employees. In other words, businesses are shifting from provider to partner.

The creation of partnerships with the people who use their products, services, and technologies gives enterprises a new opportunity to create long-term loyalty — driven lasting value into both the marketplace and the workplace.

Through its “Service Revolution Transformation,” Westpac, an Australian bank and financial-services provider headquartered in Sydney and one of Australia’s “big four” banks, is leading the way in this area by pursuing an experience-led transformation, putting the customer at the center of the roadmap. For this core customer hub replacement, the bank has selected Oracle as the technology to provide platforms for customer and product originations, loans and deposits, a single customer master, and customer relationship management capabilities.

Westpac’s approach to upgrading its technical capabilities represents a different approach to technology modernization. Rather than starting at the bottom layer of technology where the core systems were all upgraded so that they could then be built on top of, Westpac has started in the middle so that older systems can work in a more modern fashion. Westpac has chosen a “middle out” customer hub replacement as they did not want to restrict themselves to a core banking replacement.

However, rather than being led by technology, we see many Australian banks using a human-centered, experience-led approach to truly transform the customer experience. So what does a human-centered, experience-led roadmap look like?

For Westpac, the first phase of their program has focused on helping customers with “home ownership,” typically described as “loan origination” in traditional banking speak. By simply re-framing the business intent as home ownership, rather than loan origination, our perspective becomes much more expansive. For example, the entire home ownership experience brings into consideration capabilities that may be linked to home search, borrowing capacity assessments and pricing guidance, through to auction bidding and negotiation support — in other words, everything people go through when they buy a home. Helping customers with home ownership isn’t simply a more efficient way for bankers to process loans.
By going deeper into partnership with its customers, banks are rethinking what “customer” actually means. Typically, the definition of customer tends to be heavily IT-led, thanks to established system guidelines that have been in use for years through established CRM applications. In Siebel, a customer has a lifecycle in IT which starts with prospect, before moving on to lead and customer. The status only shifts from prospect to customer once an individual commits to purchase, and it’s only at that point that the level of service they receive starts to change.

What if banks started thinking about their customers from the angle of human experience, instead of a system experience? From a human-centric view, a customer is still a customer even if he or she hasn’t committed to a loan product. If banks see themselves as a partner to customers, getting to know them and being part of their journey at the “moments that matter,” it follows that they will be selected when the customer finds a home and applies for a mortgage. It’s a radical mind shift. And a crucial one: banks are now seeking to build lifetime customer relationships that go beyond transactional events that are just one aspect of a human experience.

As banks look to harness experience and design to drive innovation in customer service, Accenture is working with Oracle to drive process flexibility with the Oracle software that banks use. Accenture is helping to define what business flexibility means, the functional and architecture patterns it requires, and recommending solution changes. Accenture is also critically assessing how Oracle implements change so that what it delivers is future proof, easily upgradeable, and able to adapt to new developments.

For example, Progressive Decisioning during the originations process is an experience that shifts when considering a natural human experience. The existing Oracle Banking Platform product experience was a linear process with limited ability to jump around the steps, and limitations on progressing past the defined steps without providing detailed and comprehensive information. Oracle product development is working to refine the user interface of this foundational technology, reusing existing data and adding automation to bring to life the desired customer service experience.

Building on Accenture’s long history of working with Oracle, Accenture is able to support clients who are seeking to transition Siebel to Oracle Sales and Engagement Cloud, a new offering in Oracle’s Customer Experience Cloud portfolio. The Oracle Cloud is set to play a key role in making this happen. As well as giving banks the benefits of cloud-based software agility, it also comes pre-delivered into Oracle Customer Hub and Oracle Banking Platform for needs assessments, customer creation and origination. As an enterprise-wide solution, it significantly accelerates the velocity with which IT can be enabled to support the new user experiences that are so essential.
ACCENTURE & FJORD: DRIVING A HUMAN-CENTERED EXPERIENCE AND ROADMAP

Fjord, part of Accenture Interactive, can drive an improved customer experience in digital customer-facing channels. Now, it’s also successfully driving customer service transformations in IT consolidation programs.

One leading financial services business is conducting a trial of Fjord’s human-centered approach to design, using Oracle Engagement Cloud to test and confirm its CRM capability. This technology is the engine that’s driving an improved customer experience. The organization leveraged Accenture’s Human-Centered Design approach and Fjord methodology to arrive at an optimal customer experience. With this baseline established, it’s been able to confirm the capability and design required to drive implementation activities.

The Fjord approach uses an industrialized methodology for collecting customer insight through research, customer workshops and Fjord Rumble™ sessions. A customer roadmap is created, which empowers the business to progressively achieve its digital transformation and customer vision.

Using an agile delivery methodology, 30-day sprints are defined in line with prioritized product backlogs, with the team engaged to deliver a complete and potentially shippable increment. These sprints can be deployed to production as a fully-working, comprehensive solution. This moves the approach from quarterly release schedules that are part of the traditional waterfall methodology.

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The scope for agile delivery is driven by business-prioritized changes that flow through the governance model. Human-centered design workshops create a runway along which these requirements can be rolled out.
PEOPLE FIRST APPROACH WITH TECHNOLOGY FOR FOOD INSPECTION

The Canadian Food Inspection Agency (CFIA) is a science-based regulator that safeguards food, animals and plants, which enhances the health and well-being of Canada’s people, environment and economy by enforcing regulatory requirements, which includes granting import and export licences.

The complexity of the global marketplace and the interplay between different regulations make the manual management and administration of multiple export licences — up to 300,000 a year — very challenging and time-consuming, often requiring highly skilled field inspectors to spend hours on policy documentation search and retrieval. CFIA needed to develop a better approach.

Working with Accenture and Oracle, the agency has begun to implement a new solution based on Oracle Policy Automation. The solution will eliminate many of the manual inputs required to keep constantly changing import/export information up to date. In the past, employees spent a considerable amount of time on policy administration. Once implemented, the new system will reflect global market and regulatory changes in near-real time. It will also be easier for exporters to find the information and guidance they need to apply for an export licence. With field staff’s time freed up by the new system, they will be able to devote their efforts to more valuable work, such as inspections. And other CFIA staff, who often would spend hours updating the system with new information, will have a very simple and rapid way to provide new data at the touch of a button.

It’s a win-win for CFIA and its clients, putting people’s needs at the heart of technology innovation. As CFIA’s Geoff Kneen, Director IM/IT Projects, says: “With so many moving parts to be integrated into this solution, we needed the expertise of Accenture and Oracle to bring everything together and provide the benefits both for our clients and for the agency.”

EXTENDING THE BOUNDARIES OF THE POSSIBLE

By considering and responding to human behavior, businesses have an unprecedented opportunity to transform their relationships with people. Building on the insights available from vast quantities of data residing on Oracle systems, leaders are moving to create rich, responsive journeys that guide customers and employees toward achieving their goals, and walk with them to help them get there.
Businesses today aren’t just creating new products and services. They’re shaping new digital industries. From technology standards, to ethical norms, to government mandates, in an ecosystem-driven digital economy, one thing is clear: a wide range of rules still need to be defined.

Accenture Technology Vision 2017 research revealed that 78 percent of executives agreed that their organization feels it has a duty to be proactive in writing the rules for emerging industries. This is an area where Accenture and Oracle are seizing the initiative, working together to create new standards around the technology solutions and capabilities reshaping today’s business environment.
BUSINESSES AS LEADERS

For a business like Oracle, the imperative to lead is clear. As a major enterprise technology player, with a market cap of $164 billion and annual revenues approaching $40 billion, Oracle is deeply enmeshed in the fabric and history of the digital economy. Nearly half the world’s enterprise data now resides in Oracle databases. The company employs more than 140,000 people directly. And there are hundreds of thousands more working on the systems and technologies it creates. As a core member of the technology community, Oracle can combine with other technology providers, including Accenture, to make a real and lasting difference.

LEADING BY EXAMPLE

Tesla is a great case study of a company determined to lead by example. Rather than standing by and waiting for standards to be imposed upon it, the company is driving the way forward for electric vehicles and the whole future of mobility. Far from acting on its own, Tesla is collaborating with government regulators and other industry participants, including its competitors, to create “guiding principles to promote electric vehicles and charging infrastructure.”

By establishing best practices for their entire industry, businesses can help ensure that others abide by those standards to compete in the new market.

Look at how Alphabet, Amazon, Facebook, IBM, and Microsoft are working together to create a standard of ethics for advancements in the artificial intelligence (AI) industry. Although these companies are competitors, they are working together on ground rules for the entire ecosystem of AI pioneers. Collectively setting the rules for this rapidly evolving industry helps to mitigate the risks of complex external oversight, prevent harm to consumers, accelerate innovation, and protect the reputations of every brand pushing the frontier of AI.
BUSINESSES CAN USE THEIR POWER TO SHAPE NEW STANDARDS

In total, Fortune 500 companies represent two-thirds of the US GDP, with $12 trillion in revenues, $840 billion in profits, $17 trillion in market value, and employ 27.9 million people worldwide.²³

That’s an incredible amount of power. And it can be used to set the new wave of standards required for continuing innovation.

Collaborations, such as the Accenture Life Sciences Cloud coalition, show how leaders are taking on new responsibilities to ensure that constructive rules and guidelines are developed for industries that never even existed a few years ago. Research for the Accenture Technology Vision 2017 showed that 65 percent of IT and business executives believe that government regulations have not been able to keep up with the pace of technology advancement.²⁴ Making sure that regulations catch up is fundamental to building not just a single business, but also the wider ecosystems within which many businesses, old and new, will thrive.

As the repository for so much of the world’s enterprise data and the developer of the services that manage it, Oracle has a vital part to play in the ongoing conversation about the standards, ethics and rules that should govern how that data is used and shared. As regulators scrutinize the privacy and security of business data it is important for companies to take on initiatives that help them achieve a high standard of data ethics.

Look at the European Union’s General Data Protection Regulation. Although yet to be fully tested, it has the potential to punitively sanction transgressors by imposing fines of up to four percent of global revenues. Anything that Oracle, Accenture, or any other tech provider can do to help businesses meet standards such as these will be a universally welcomed development.
A key activity for leading organizations is using their market power to spot, acquire and develop emerging new businesses driving future growth. For example, since 2010 Oracle has made more than 50 acquisitions with a total reported value of more than $40 billion; as many of these were private deals, their total value will be higher.

Of course, the motivation for all this is first and foremost business-driven. But beyond business motivations, it’s also the case that Oracle is, in essence, giving back to the wider community by providing these companies with the funding, know-how and support needed to reach new heights. This remains one of the main drivers of innovation today.

Since 2010, Oracle has made more than 50 acquisitions with a total reported value of more than $40 billion.

A great example is Oracle’s acquisition of AddThis.com in early 2016. AddThis.com is a leading provider of publisher personalization, audience insight and activation tools that powers 15 million websites and enables unmatched audience segment quality, scale and insight. By bringing it together with the Oracle Data Cloud, the world’s fastest-growing global Data-as-a-Service (DaaS) provider, businesses will be able to access unprecedented levels of audience insight, measurement and reach. Oracle DaaS and Oracle Data Cloud currently contain five billion global consumer profiles, 400 million business profiles and covers $3 trillion in consumer transactions.

Businesses are already making use of this power. For example, Visa is using the Oracle Data Cloud to leverage digital advertising and cross-device connection data with aggregated purchase data from Visa Advertising Solutions. This enables merchants to measure consumer response to advertising campaigns run on mobile, display, video and social channels, and use the insights gained to optimize their efforts.
DRIVING INNOVATION:
ADOPTING NEW TECHNOLOGIES

We’re also seeing technology advances driving completely new approaches in both business and financial arenas. One example is blockchain. By itself, blockchain technology is relatively unremarkable. But it can become a game-changer when it’s applied in communities of value-traders who agree to use it to cut out the ‘middle man’.

This is why it’s proving so attractive in the financial services sector. By providing a secure transaction ledger, shared by all parties participating in an established, distributed network of computers, blockchain can provide unprecedented levels of transparency, removing the need for any single central authority, creating a self-reconciling ledger, and offering a single source for true data.

Along with its partners, including Accenture, Oracle is doing some preliminary work in this field, supporting proof-of-concept integrations with some of the financial services blockchain networks that are currently being trialed.

For its part, Accenture’s blockchain practice is assisting clients across all industries — not just financial services — with solutions that leverage blockchain’s distributed ledger. These solutions are geared to removing previous barriers or longstanding complex business processes that have existed because “that’s the way it has always been done.” Accenture recently announced a patent for an ‘editable’ blockchain that in very particular contexts enables blockchain’s immutability to be overridden.

With Oracle continuing to act as an integrator of blockchain technologies, Accenture will leverage the partnership and our solutions to enable early adopters of this technology to disrupt the status quo.
Accenture’s blockchain practice is assisting clients across all industries with solutions geared to removing barriers and complex business processes that have existed because “that’s the way it has always been done.”
UNLEASHING THE POWER OF US

Of course, the digital future that’s being built today is not just about new technologies. It’s also about people and how people are augmented by the technology innovation around them.

It’s why leaders like Oracle are playing such a vital role by championing open source development. For example, its stewardship of Java, as part of its acquisition of Sun Microsystems seven years ago, has defied the expectations of some in the industry by increasing investments into the Java community and accelerating the Java release roadmap. As a clear standard in the industry, Java has been the driving force behind a huge amount of innovation in the digital world, creating a large pool of skilled developers and technicians. This global community is a key part of the new, flexible, on-demand workforce that is the real engine for a digital future.

Oracle’s Platform-as-a-Service (PaaS) cloud offerings have adopted the Java spirit as well. Most are unaware that Oracle has enabled its PaaS cloud to run Node.js, Java SE, PHP, Python, Ruby, Go and Spark/Hadoop based applications. It has standardized on Docker for its Application Container Cloud. Oracle JET (JavaScript Extension Toolkit) is based on JavaScript, CSS3 and HTML5 design and development principles and run within its Application Development cloud offerings.
Defining the rules for new digital industries is the new corporate responsibility. And with great responsibility comes great opportunity.

Accenture and Oracle will continue to innovate, disrupt and deliver for clients that seek to be winners in the digital evolution. Together, we can establish industry standards and contribute to the ecosystems that are still emerging. If we have learned anything through our three decades of collaboration, it’s that we can demonstrate leadership for our clients and pioneer the journey to the uncharted.
To take advantage of the five trends in this year’s Accenture Technology Vision for Oracle, organizations need to plot a course to the new digital world while managing their legacy technology landscapes.

This means developing a hybrid business model that integrates cloud with existing legacy and new technologies.
Helping companies plot this new digital course, the Accenture Oracle Business Group brings to life the vision of an agile, connected and digital platform, providing a central hub for the rich and complex digital ecosystems organizations want to participate in and access. More than 70 large companies across the globe have now leveraged the Accenture Oracle Business Group’s catalog of assets and accelerators to deliver Oracle Cloud in their enterprises.

As part of that platform, Accenture has developed the Accenture Cloud Hub for Oracle to help organizations architect, accelerate and automate their journeys to cloud.

Building on Accenture’s experience in implementing Oracle Cloud solutions, the Accenture Cloud Hub for Oracle forms the basis for creation and delivery of end-to-end implementations of cloud solutions. It spans a wide range of technologies and integrates with organizations’ architectures at all levels.

In doing so, it plays a key role in supporting their broader ecosystem ambitions. The core of the Hub is four quadrants that support rapid adoption of cloud technology:

- **Architect**: Provides reference architectures, models, viewpoints, blueprints and more to build a robust, scalable, secure and mature architecture.

- **Accelerate**: Speeds up planning and execution with starter kits, common services, prebuilt integrations and solution guidelines.

- **Automate**: Removes the manual work from implementations and migrations to cloud with automated tools for DevOps, cloud reference data and cloud migration toolkits.

The Accenture Oracle Business Group: building digital futures through five connected offerings

**Industry solutions**: Industry-specific business processes configured into Oracle Public Cloud applications, with prebuilt integrations back into the enterprise that support our clients’ ability to quickly move to the cloud.

**Accenture Cloud Hub for Oracle**: Provides an integrated digital platform for the Accenture Oracle Business Group. The Accenture Cloud Hub enables and accelerates the journey to cloud through architecture, accelerators and automation in the areas of IoT, mobility, integrations, AI, custom development and much more. The Hub is central to building enterprise solutions using Oracle SaaS, PaaS and IaaS and making it work in other non-Oracle Cloud and on-premises ecosystems.

**Accelerators**: Built around Accenture Cloud Connect for Oracle, the Accenture Oracle Business Group accelerators house more than 300 migration and integration services to move existing Oracle E-Business Suite, Oracle PeopleSoft and Oracle Siebel customers into the cloud.

**Managed services**: Leveraging the Accenture Global Delivery Network, the Accenture Oracle Business Group offers a set of managed services to maintain the entire platform, including integration, industry solutions, and the ability to assess and implement new capabilities several times a year. Our clients can make use of our digital treasure chest of more than 40 cloud-enabled delivery centers, and take advantage of new ways to implement and run cloud.

**Commercial**: The Accenture Oracle Business Group has created contracting vehicles that help our clients take advantage of commercial constructs for new business models. These bundle Accenture services and Oracle subscriptions together at one price per month, making it easier for our joint clients.
• **Delivery:** Combines Accenture’s experience in industrialized delivery methods with agile and liquid delivery for cloud solutions. It’s backed by Accenture’s in-house design agencies, such as Fjord, and delivered by a network of global delivery centers, innovation centers and liquid studios.

The Accenture Cloud Hub for Oracle provides a crucial and timely platform with which companies can build the new and complex digital ecosystems of the future. It simplifies and automates the journey to cloud on the industry’s most versatile Oracle Public Cloud platform across the areas of applications, platforms and infrastructure.
This year, the themes we’ve explored in the Accenture Technology Vision for Oracle demonstrate once again what a pivotal role Oracle has to play in developing the digital economy, and in the way Accenture is enabling people to create technology solutions that work for them.

‘Amplify You’ is the rallying cry for this year’s Accenture Technology Vision. It reflects how the enterprise must become more intelligent in order to empower all its people to achieve their potential, and perhaps even more. It’s abundantly clear that Accenture and Oracle working together support the evolution of whole new ecosystems that refine how organizations compete, collaborate and grow.

Take that a step further, if you will. Accenture and Oracle together constitute a continuously evolving ecosystem in our own right. Together we’re exploring, extending and reinventing the art of the possible: for ourselves and, above all, for our clients.
'Amplify You’ reflects how the enterprise must become more intelligent in order to empower all its people to achieve their potential, and perhaps even more.
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ABOUT ACCENTURE LABS

Accenture Labs incubate and prototype new concepts through applied R&D projects that are expected to have a significant near-term impact on clients’ businesses. Our dedicated team of technologists and researchers work with leaders across the company to invest in, incubate and deliver breakthrough ideas and solutions that help our clients create new sources of business advantage. Accenture Labs is located in seven key research hubs around the world: Bangalore, India; Beijing, China; Dublin, Ireland; Silicon Valley, California; Sophia Antipolis, France; Washington D.C.; and Israel.

ABOUT ACCENTURE RESEARCH

Accenture Research shapes trends and creates data-driven insights about the most pressing issues global organizations face. Combining the power of innovative research techniques with a deep understanding of our clients’ industries, our team of 250 researchers and analysts spans 23 countries and publishes hundreds of reports, articles and points of view every year. Our thought-provoking research — supported by proprietary data and partnerships with leading organizations such as MIT and Singularity — guides our innovations and allows us to transform theories and fresh ideas into real-world solutions for our clients.

FOR MORE INFORMATION

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