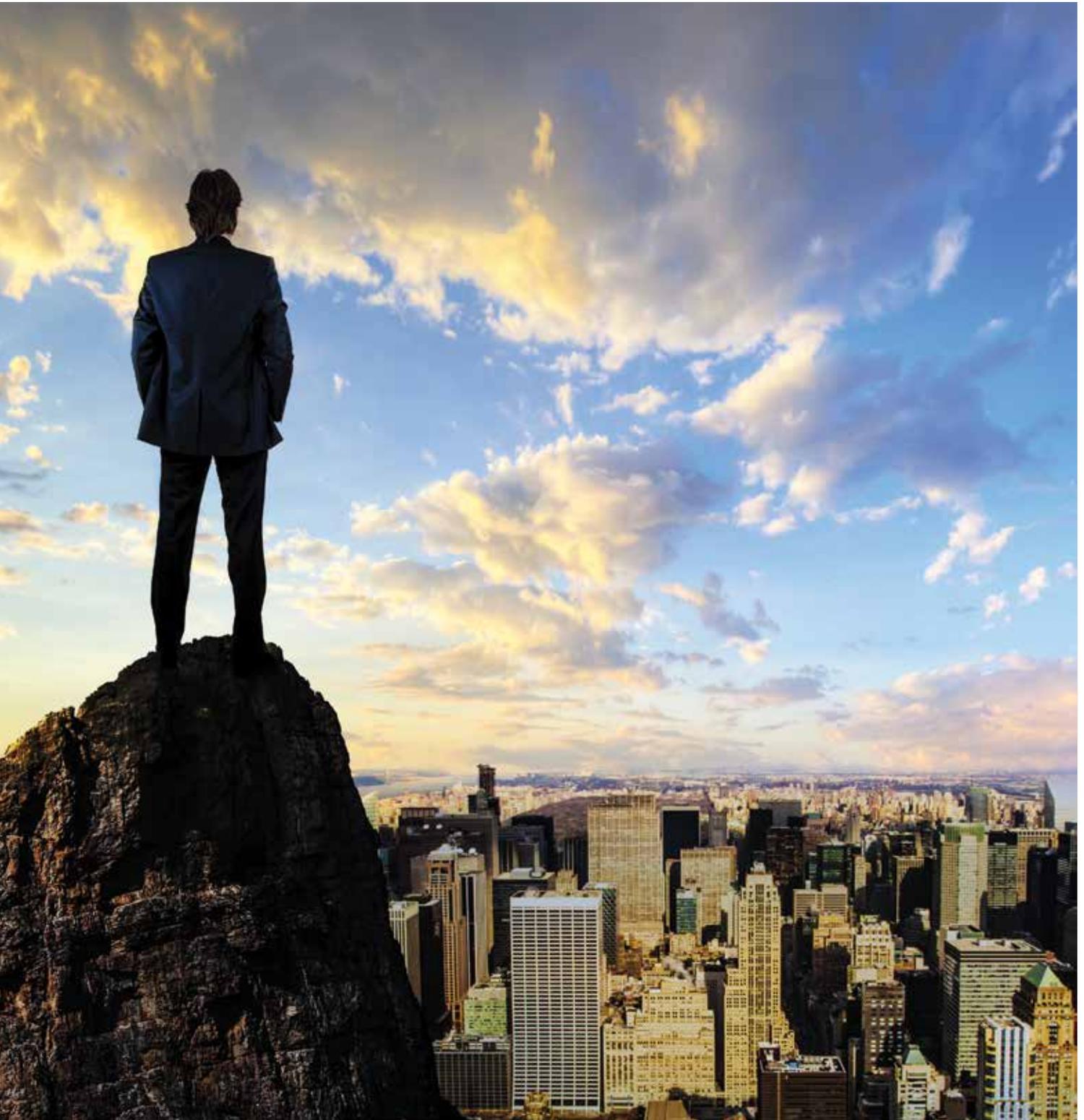# CLOUD BUSINESS IN THE AGE OF EXPERIENCE

## Powering digital transformation

**Digital technology trends such as mobility, the Internet of Things (IoT), big data and analytics are changing business processes and disrupting business models. The common denominator among them, both a transformative force and a prime enabler for all, is the cloud.**

The cloud delivers what businesses require to make a digital transformation: high flexibility, on-demand access anytime, anywhere, immediate availability of advanced software without the associated hardware, but above all, it delivers simplicity.

The cloud is the foundation of tomorrow's next-generation applications and business processes. This is why Dassault Systèmes has placed the cloud at the heart of our business experience strategy. Dassault Systèmes is the third fastest growing cloud company.[1]

## A PLATFORM ON THE CLOUD FOR THE EXPERIENCE ECONOMY

In the experience economy, products and services are no longer enough. Consumers want unique, personalized experiences that are greater than the sum of their parts or features. Experiences build brand loyalty at an emotional level, which bind customers to a business.

As the **3D**EXPERIENCE® company, we have designed our business experience platform – the **3D**EXPERIENCE platform – to help our clients imagine, design, simulate and deliver these powerful experiences. The cloud is the optimal way to leverage the power of the **3D**EXPERIENCE platform, which is essential to succeed in today's experience economy.

The cloud enables all employees of a business to instant access to the platform regardless of their location. Their user experience is greatly simplified through the collaborative nature of the platform that unites people, ideas and knowledge in a common mission of experience innovation.

In addition, the Dassault Systèmes MarketPlace will further complement the **3D**EXPERIENCE platform by enabling Dassault Systèmes clients and partners to conduct business, for example, buying or selling 3D printing services on the cloud.

## DASSAULT SYSTÈMES UNIQUE CLOUD STRATEGY

In developing our cloud strategy, we set out to create a holistic offer that supports our clients' core digital transformation strategies and help them compete in the experience economy. By leveraging the power of the **3D**EXPERIENCE platform on the cloud, our customers can collaborate better, experiment more and innovate faster.

The Dassault Systèmes cloud offering is unique in three important ways:

### Largest cloud solution portfolio with apps for every stage of the value stream

The value stream is the sequence of activities a company employs to develop an experience. We offer the most comprehensive cloud solution portfolio at every stage of the value stream, from upstream thinking to customer ownership. The **3D**EXPERIENCE platform revolutionizes the innovation process by enabling real time collaboration among all stakeholders at each stage, eliminating silos, delays and rework. We offer a portfolio of industry solutions, customized to each discipline, eliminating the need to invent or customize.

While other companies have chosen to make applications serving just one or a few disciplines available on the cloud, we have chosen to enable every business and technical role engaged in product innovation to work collaboratively on the cloud, in domains ranging from design and engineering, testing and simulation to manufacturing and industrial operations.

The completeness of the offer enables companies to leverage the full potential of the cloud at a project, program or enterprise-wide level. It enables them to harness the true power of the cloud for business transformation, rather than simply tapping into it to execute ad hoc tasks in a more convenient or efficient manner.

2017 cloud solution portfolio



Ownership *(after sales)* *1 app*

Sales & Marketing *3 apps*

Manufacturing *1 app*

**3DEXPERIENCE**

Upstream Thinking *5 apps*

Design & Engineering *20 apps*

### Unique collaborative business experience platform on the cloud

The **3D**EXPERIENCE platform provides a single point of access and common interface for all applications, and enables all business units - design, engineering, simulation, manufacturing, sales, marketing, finance, procurement and management – to engage in collaborative innovation.

Each subscription includes instant access to unique collaborative applications embedded within the **3D**EXPERIENCE platform such as:

- 3D design, engineering, modelling, simulation, data management and process management on the cloud,

- Social communication, community building and ideation applications for collaborative innovation,

- 3D visualization, analytics and dashboarding for knowledge sharing and data-driven decision-making for communities.

For fast ramp-up and maximum effectiveness, all applications, services and content are available as packages per specific users with defined roles (e.g., Additive Manufacturing Engineer, Aero Surface Modeler, and Car Design Ergonomist) and tailored according to each of our Industry Solution Experiences.

Subscribers can immediately experiment and access all of these essential tools.

### All-in-one comprehensive package offering

The cloud subscription model is a comprehensive, all-in-one package that incorporates all layers of the platform.

- The application layer (Software-as-as-Service, SaaS) for software and content.

- The platform layer (Platform-as-a-Service, PaaS) for deployment, supervision and operation services.

- The infrastructure level (Infrastructure-as-a-Service, IaaS) for on demand and elastic compute, network and storage resources.

With this approach to resource packaging, Dassault Systèmes comprehensive portfolio and its **3D**EXPERIENCE business platform combine to form a unique offering within the industry. In addition, the cloud offers numerous native advantages that are essential to digital business transformation.

### THE CLOUD'S NATIVE BUSINESS ADVANTAGES

This importance of the cloud in business transformation is reflected in CEO and CIO surveys that continually rank the cloud as a top company priority, and in double-digit adoption rates that show no signs of slowing. The market for cloud-based application software has grown to 22% (as of 2016) of total software spend, driving broad changes in enterprise application software and service markets. [2]

Specific business advantages that are driving this high cloud adoption include:

#### Scalability

The cloud offers ready-to-use resources for instant project or company ramp-up. Work can be performed 24/7 from any location, on mobile or fixed devices, and users can add new applications and services on-the-fly, whenever and wherever needed. In addition, advanced and innovative new features can be downloaded, installed and fully configured in minutes.

#### Competitiveness

The cloud's immediate deployment and ready-to-use capabilities enable every company to improve execution and accelerate time to market. It also provides all companies with immediate access to resources, instant access to enterprise-class technologies.

This levels the playing field for startups and small and medium-sized businesses (SMB). Deloitte surveys show that SMBs using cloud technology grow 26% faster and reap 21% higher gross profits than those who do not.[3] And SMBs, having reaped early rewards from the cloud, are adopting it as a primary platform at a much faster pace than large businesses.

In parallel, large organizations are also realizing they need to adopt a cloud strategy if they do not want to be disrupted by the inevitable innovation shifts.

#### Profitability

Large and midsize enterprises recognize the attractive cost benefits of the cloud. By providing access to subscription-based shared services, the cloud enables companies to eliminate IT equipment and administrative expenditures. It also enables them to shift IT spending from high capital expenditures (CAPEX) to low operating expenses (OPEX). And with flexible subscriptions and a pay-as-you-go model, financial risks are lowered along with total cost of ownership.

THE CLOUD'S IMMEDIATE DEPLOYMENT AND READY-TO-USE CAPABILITIES ENABLE EVERY COMPANY TO IMPROVE EXECUTION AND ACCELERATE TIME TO MARKET.

### Innovation

The cloud is promoting experimentation and collaboration across business units. It frees organizations to focus on core business rather than IT administration. It frees IT capital for investment, and frees IT talent to focus on emerging technologies and business consulting. Finally, it bolsters strategic planning and visibility through real-time insight into the workflow of products and processes.

### Reactivity and Agility

Cloud computing delivers benefits from two major trends in IT: IT reactivity, where the power of computers is utilized more efficiently through scalable hardware and software resources; and business agility because IT can now be used a a competitive tool making it possible to perform powerful tasks such as business analytics, rapid deployment and parallel batching, and in real-time.

### Sustainability

The cloud also provides solid support for meeting sustainability goals. On average, cloud-centered companies use 77% fewer servers, consume 84% less power and reduce carbon emissions by 88% compared to companies with full on-premise information systems.[4] Through resource sharing and energy innovation, cloud providers have energy consumption and carbon emission rates that are 30% lower than for equivalent resources deployed on-premises.

### Security

Large, established cloud IaaS providers have technical expertise and dedicated security resources that are beyond those of in-house IT teams. They are also at the forefront of innovations in information security.

According to the Cloud Security Alliance, the cloud is inspiring new solutions to old security problems: "a focus on greater automation, disposable infrastructure, agility among other concepts are changing how we deal with problems such as malware, forensics, denial of service attacks and compliance." [5]

Awareness of such evolutions may in part explain why businesses are increasingly identifying the desire to improve information security as their primary reason for adopting cloud services.

## THE FUTURE FOR THE CLOUD

Dassault Systèmes' collaborative **3D**EXPERIENCE business platform was created to help businesses succeed in the experience economy. It offers a complete portfolio of product innovation applications, delivered in tailored Industry Solution Experiences created to foster experience-centric innovation. The cloud is the optimal way to leverage the power of the **3D**EXPERIENCE platform.

The cloud provides the foundation for experience-oriented innovation. Demand in the market for the cloud will continue to grow as more companies embrace digital transformation. While startups and SMBs may be outpacing larger enterprises in cloud adoption today, in the future, the cloud will be the standard for all businesses.

THE CLOUD PROVIDES THE FOUNDATION FOR EXPERIENCE-ORIENTED INNOVATION.

[1] The 25 Fastest Growing Cloud Companies; © 2015-2017 PwC
http://www.pwc.com/gx/en/industries/technology/publications/global-100-software-leaders/25-fastest-growing-cloud-companies.html

[2] Adapting Your IT Strategy for a Cloud-Dominated Business Application Environment; Alexander Drobik / Michael Maoz: 2016 Gartner
https://www.gartner.com/document/342211

[3] Small business, big technology – How the cloud enables rapid growth in SMBs; ©2014 Deloitte MCS
https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Technology-Media-Telecommunications/gx-tmt-small-business-big-technology.pdf

[4] Cloud Computing, Server Utilization & the Environment; AWS Analysis, AWS, 2015
https://aws.amazon.com/fr/blogs/aws/cloud-computing-server-utilization-the-environment/

[5] State of Cloud Security -2016, CSA Global Enterprise Advisory Board, © 2016 Cloud Security Alliance
https://downloads.cloudsecurityalliance.org/assets/board/CSA-GEAB-State-of-Cloud-Security-2016.pdf

**Our 3D**EXPERIENCE **platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.**

Dassault Systèmes, the **3D**EXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.

**3D**EXPERIENCE®



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