The widespread adoption of cloud computing and software as a service (SaaS) is a threat to existing on-premises applications and independent software vendor (ISV) business models. But it is also an opportunity for ISVs who step up to meet market needs.

This paper examines the trends that are driving cloud and other computing innovations. It explains how platform as a service (PaaS) provides a new development platform to deliver the new applications businesses need. And it shows how Progress Pacific—our platform as a service—helps ISVs create the new applications and business models required to thrive in the cloud computing era.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Changing Application Landscape</td>
<td>3</td>
</tr>
<tr>
<td>Opportunities and Challenges for ISVs</td>
<td>3</td>
</tr>
<tr>
<td>A New Generation of Applications</td>
<td>3</td>
</tr>
<tr>
<td>A New Business Model</td>
<td>3-4</td>
</tr>
<tr>
<td>A New Development and Operating Platform</td>
<td>4</td>
</tr>
<tr>
<td>Capturing the Opportunity</td>
<td>4</td>
</tr>
<tr>
<td>Progress® Pacific™—The Application Platform for ISVs</td>
<td>4-5</td>
</tr>
<tr>
<td>Learn More</td>
<td>5</td>
</tr>
</tbody>
</table>
A CHANGING APPLICATION LANDSCAPE

The IT industry has seen technology innovations come and go. Or perhaps come and stay, but fail to change the IT world in the manner predicted. But today’s computing innovations—cloud, mobile, social media and Big Data—look like stayers, and changers.

The business benefits that drove early cloud adoption are well understood. By subscribing to infrastructure and software as a service—rather than acquiring, deploying and maintaining their own infrastructure and applications—businesses can improve time to market, convert fixed capital costs to variable operating expenses and match outlays to revenue rather than paying up front for unused capacity. They can scale up instantly when needed and scale back when business needs decline. And as innovators begin to apply the cloud to create new business value, they are creating connections among people, information and services.

The cloud enables business ecosystems and new business models that deliver the value customers want. The result: according to Saugatuck Technology, by 2020 60% of applications will be deployed purely in the cloud, with another 30% offering cloud and on-premises options. And Cisco Global Cloud Index predicts that by 2016 nearly two-thirds of all workloads will be processed in the cloud.

But cloud computing isn’t the only change. Today’s world is characterized by connectivity—to information and to people—and mobility.

The explosion of data and data sources is well documented. Harvard Business Review says 2.5 exabytes (billion gigabytes) of new data are created daily (as of 2012), and the volume doubles every 40 months. Smart businesses are finding ways to extract meaningful business insight from data sources like sensors and social networks that didn’t exist just a few years ago. And they want new business applications that can access a vast variety of data sources and put them to work creating competitive advantage.

Consumers have integrated smartphones, tablets and social media into their personal lives, and they expect their business information and relationships to work the same way. This year, sales of mobile devices will outstrip PCs two to one. And consumers spend 82% of mobile media time using applications.

OPPORTUNITIES AND CHALLENGES FOR ISVS

For ISVs the changing application landscape creates both challenges and opportunities.

A NEW GENERATION OF APPLICATIONS

To survive and thrive you must step up to create the new applications businesses demand—and you must do it quickly. There are five imperatives for next-generation applications:

- Cloud—New applications must be deployable on-premises and in public and private clouds.
- Data integration—Applications must be able to easily connect to a wide variety of data sources and formats. And they must be able to easily adapt to new and changing data sources.
- Mobile—Modern applications are taking a mobile-first approach, so they must enable access by the users’ devices of choice.
- Social media—Research suggests users spend more than 10 times as much time on social media sites as they do on email. New business applications must enable these connections for business purposes.
- Community—People want to feel they are a part of something bigger. Businesses strive to create communities around their products and services.

A NEW BUSINESS MODEL

Because of the rapid adoption of cloud computing, much of the market demand for on-premises applications is shifting to SaaS. To maintain revenue growth and profitability, ISVs must, as a minimum, deliver new applications deployable on cloud services. But much of the competitive pressure for application developers now comes from SaaS providers, so ISVs may need to go beyond offering cloud-enabled applications to offering their application value as SaaS.

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1 Cisco Global Cloud Index: Forecast and methodology, 2011-2016
3 “82% of mobile media time is via Apps,” Danyl Bosomworth, Smart Insights, May 11, 2012
4 Report: Americans spend 2.38 hours a day glued to their tablets and smartphones,” Philip Elmer-DeWitt, Fortune.com, April 3, 2013
There are advantages. SaaS lets you focus development on a single platform, deploy once to serve many customers, scale up instantly to meet new opportunities and scale back when the need no longer exists. It also creates a platform to enable the community your customers want and that you need to enhance customer retention. There is an investment in acquiring and supporting customers, but the same is true of on-premises application delivery.

A significant change is that up-front license revenue is replaced by over-time subscription revenue. But for most ISVs the shift from on-premise to SaaS delivery will be incremental, based on new application offerings. When coupled with license sales, that can enable profit stability. And with effective customer retention, subscription revenue turns into a valuable long-term annuity.

A NEW DEVELOPMENT AND OPERATING PLATFORM
The same agility and efficiency benefits that drive cloud adoption in general are available to software developers adopting a cloud-based platform as a service (PaaS) development environment. Providers of PaaS offer varying degrees of database, middleware and development tools to let subscribers develop applications and deploy them on the PaaS cloud.

Shifting development to a PaaS lets you avoid capital outlays and map investment in developer facilities to revenue potential. You can ramp up quickly to handle special needs or capture new opportunities, and you can ramp down when needed to reduce costs. And it can provide a single set of integrated development, deployment and management tools to make ISVs more efficient and reduce support costs.

CAPTURING THE OPPORTUNITY
Development and deployment of next-generation, cloud-ready, mobile and social applications that can connect to a myriad of data sources has become a survival factor for ISVs. But how do you create these new applications, and how do you convert premises-delivered software to SaaS with the resources available to you?

The PaaS approach offers ISVs the development, deployment and management tools they need. But to let ISVs quickly create the new applications and implement the new business models, a PaaS platform must enable:

- Rapid application development—To create new cloud-based business value quickly, ISVs should be able to assemble applications rapidly rather than starting from scratch with traditional low-level development tools. And “citizen developers” should be able to extend the service to solve new business problems.
- Data integration—To adapt to the vast number of new data sources and formats, developers should be able to easily create data-driven application that integrate traditional and non-traditional data through a single driver and interface method.
- Access from any device—To meet user demands for access anywhere, anytime and from any device, the PaaS must enable access by mobile devices as well as PC browsers.
- Deployment on any cloud or on-premises—It will be a mixed deployment world for the foreseeable future. A PaaS must enable deployment not only on its own cloud, but on any cloud and on premises.

PROGRESS PACIFIC—THE APPLICATION PLATFORM FOR ISVS
To help ISVs capture the opportunities for modern, cloud-deployed business applications, we have enhanced Progress rapid software development products to enable the creation of cloud-ready, multi-tenant, mobile business applications. Now we have introduced Progress Pacific, a new PaaS that lets business professionals and software developers rapidly create and deploy powerful business applications that are driven by data, can run on any cloud service and are accessible by any device. Progress Pacific enables:

- Rapid development—Progress Pacific provides browser-based visual design that replaces coding in most instances. Business users can create powerful business applications without coding. And IT professionals can do more, faster using JavaScript, standard APIs, custom Java Server Pages and Java-based business logic.
- Connection to diverse data sources—Developers can access a comprehensive set of SaaS, social, relational, NoSQL, Big Data, CRM, ERP and other cloud data sources in real time and via a single driver and interface method.
Access by mobile devices—Progress Pacific enables access by any device so new applications can take a mobile-first approach.

Open deployment—Not only can you create your applications in the cloud, you can deploy them in cloud, on-premise and hybrid environments. Further, deployed applications can integrate with other applications and are accessible by any device.

LEARN MORE ABOUT PROGRESS PACIFIC

Progress Pacific helps ISVs meet the challenges and capture the opportunities brought by the changing application landscape. To learn more about cloud capabilities of Progress Pacific and other Progress Software products, visit www.progress.com/pacific.

If you are an existing Progress partner, contact your Progress Partner Account Manager to better understand how Progress can help you move your business to the cloud.