



The Foundation of Digital Business

Delivering Transformative Apps



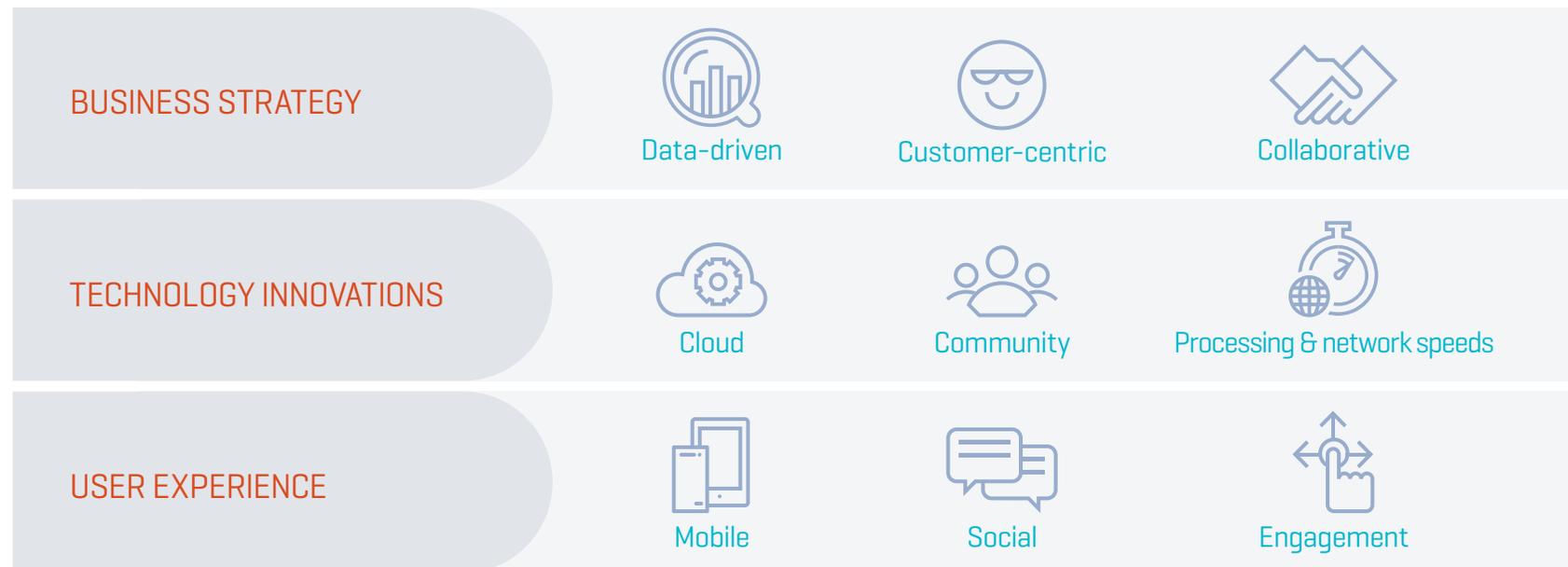
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The Foundation of Digital Business

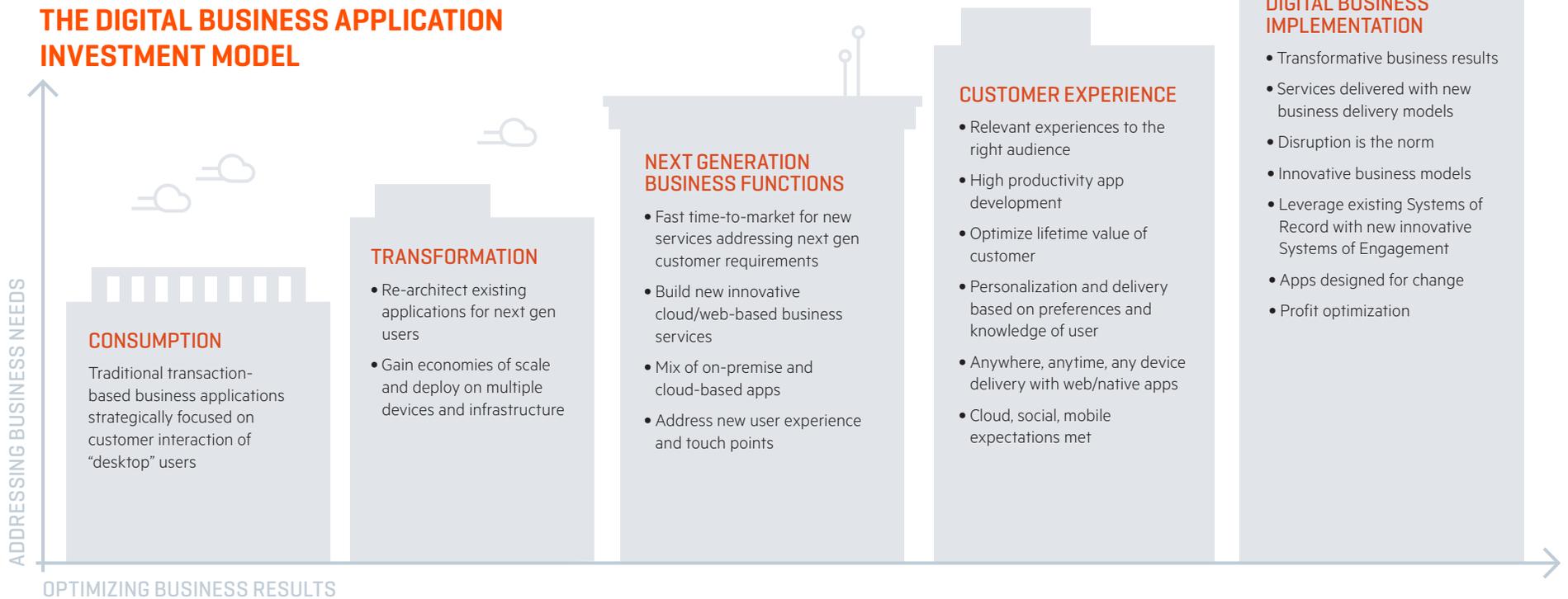
You need your business applications to adapt to changing customer demands, regulatory constraints and market conditions. They need to be highly scalable and up and running 24x7; but now you face a new and challenging business imperative. Your applications must support the customer engagement model and provide an optimal customer experience in order to be productive and competitive.

Constantly innovating and staying ahead of trends like **mobile, cloud, analytics, business rules and SaaS** can be financially and resource intensive. That's why you need an adaptable application development platform that can continuously meet your needs and accommodate the ever-changing business landscape.



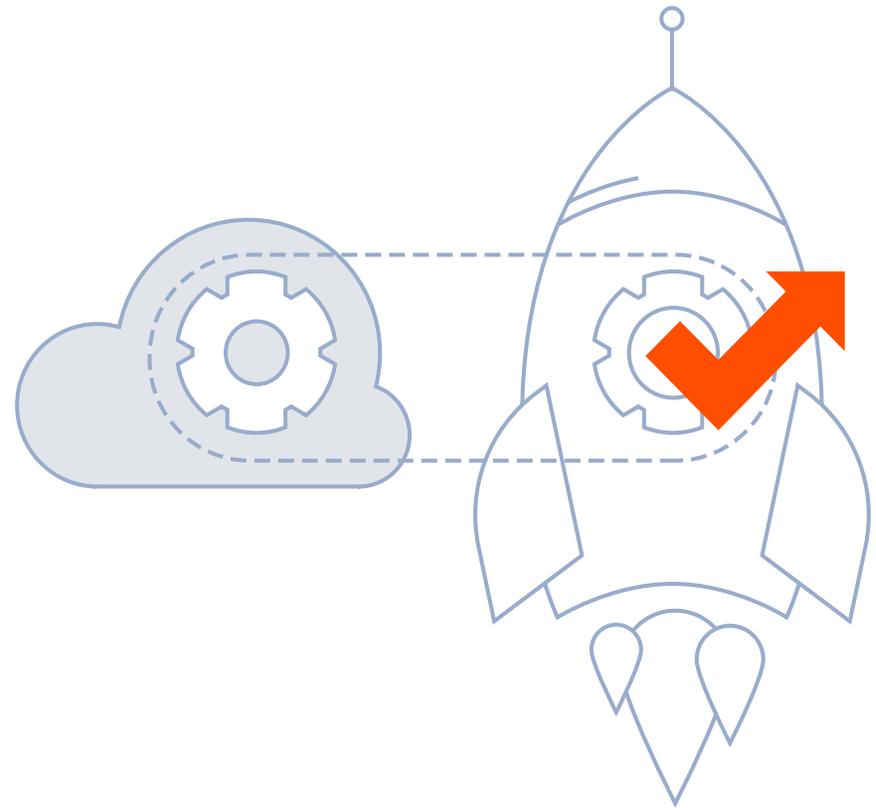
Capture Business Opportunities in the Digital Age

Succeeding in today's digital economy requires making a strategic and business investment in an application portfolio strategy that delivers faster response and better ROI while preserving integrity, integration and governance. Analyst firm Gartner, Inc. calls it a [Pace Layered Application Strategy](#), whereby companies leverage necessary transaction-oriented systems fundamental to the operations of a business, to ad hoc applications that capitalize on technology trends and deliver transformative business results, opening new markets and optimizing profits.



Accelerate Digital Business with a Pace-Layered Approach

Many IT application strategies are based on technological viability and cost. Such an approach leads to purchasing or building solutions that merge many functions together into large suites of applications. But users today have grown accustomed to apps that help them quickly complete tasks and update data in a matter of seconds. Many business users, for example, cannot understand why their business applications don't work the way their mobile apps do. Applications today must support the customer engagement model and provide an optimal customer experience in order to be productive and competitive. Adopting a pace-layered strategy to serve as an enabler of business innovation can bridge the gap.



Implementing a Pace-Layered Strategy

Pace layers can be used to build a portfolio strategy that delivers faster response and better ROI while preserving integrity, integration and governance. The three pace layers defined by Gartner are:

- **Systems of Record**

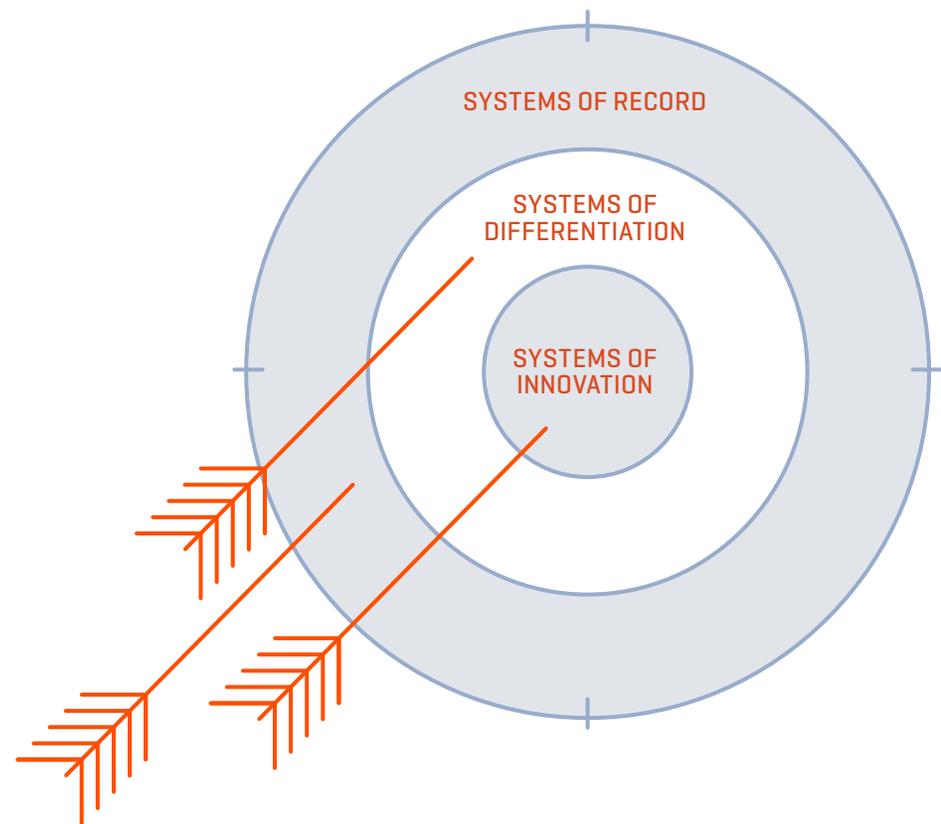
Established package or legacy homegrown systems that support core transaction processing and manage critical master data

- **Systems of Differentiation**

Industry- or business process-specific applications that enable unique capabilities used by the organization

- **Systems of Innovation**

Ad hoc applications built to address new requirements or opportunities



Mapping Business Apps to Pace Layers

The first step to achieving business innovation is to map existing applications in your portfolio to one of the three pace layers. Your application layering strategy should be defined only by your business requirements, not by a vendor-defined packaging scheme. To make this process simple, it can be helpful to map business needs to layer attributes by acknowledging simple facts about each project:

- **Record Layer**

Core transaction processes that helps to “run the business.” These systems can readily be made into “Systems of Engagement” that enhance the customer experience across deployment models making core applications accessible anywhere.

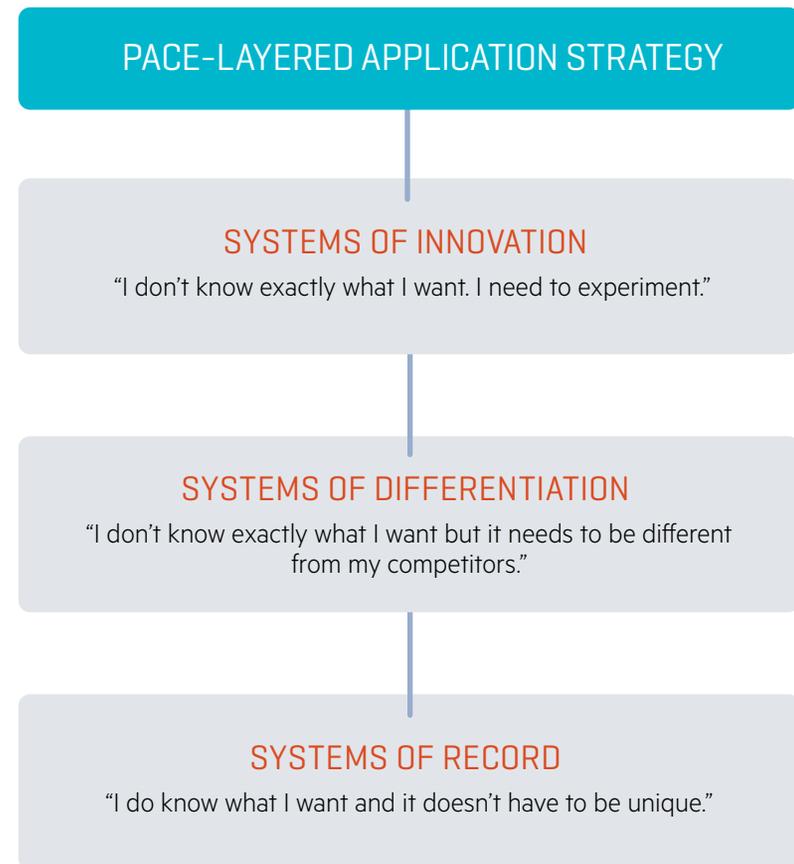
- **Differentiation Layer**

Processes or workflows that can improve efficiency and execution of current business applications.

- **Innovation Layer**

Enabling additional interaction for expanded users in new situations/experiences.

Map business needs to Pace Layers by acknowledging simple facts about each project



Pace layers map to competing forces. Systems of Record (SOR) are concerned with compliance; they are the more traditional back office and transactional applications. But even in this environment, the customer experience can be improved by enhancing these apps into Systems of Engagement.

Systems of Differentiation (SOD), on the other hand, must be adaptable to change while still conforming to departmental regulations and other policies. SODs are usually business workflows that enable an organization to improve in areas to differentiate themselves from the competition.

Finally, Systems of Innovation (SOI) are wholly focused on flexibility and speed. Often the source of critical business innovations, these systems must be more responsive than typical IT application development projects. Business users should be able to use SOIs to quickly piece together and/or prototype fast solutions to unique business problems. They also are focused on unique experiences for new and expanded users of business applications.

The table below, originally devised by Gartner in the report, “How to Use Pace Layering to Develop a Modern Application Strategy,” describes the characteristics of the pace layers.

Gartner’s Characteristics of Pace Layers

CHARACTERISTIC	RECORD	DIFFERENTIATION	INNOVATION
Process Characteristics	Well understood	Well understood	Unique
	Slow to change	Unique	Not well understood
	Highly integrated	Highly configurable	Dynamic
		Autonomous	Ad hoc
Data/Information	Highly structured	Internal and external	Structured and unstructured data
	Well managed	Some unstructured	Heavy reliance on external data
	Mainly internal	More dynamic	
	Audited		
Content	Static/stable	Both	Dynamic
Analytics	Reporting	Planning	Predictive
	Historical	Budgeting	Scenario-based
Security	Tightly controlled	Distributed control	Federated control
	Managed complexity	Manageable complexity	High potential complexity
Collaboration	Limited	Moderate	High

Technology Enabling the Pace-Layered Approach

Once mapped into pace layers, most companies find that custom-built applications fit into SOD and SOI layers. To enable true differentiation and spark innovation, IT must provide technology, governance and guidance to a wider core of business developers. IT organizations are in a prime position to offer businesses the agility they need to move growth skyward. Such agility is provided by:

- **Moving process definitions out of code:** Implementing a Business Rules Engine (BRE) enables business users to work directly with rules without endless code changes and delays, while IT can create high performing software
- **Establishing Business Process Management:** Achieve efficiency without losing agility and identify workflows that address changing business requirements

- **Looking for common practices adoptable by all layers:** Standardize common practices accordingly, such as business user collaboration features, DevOps or automated testing
- **Enabling rapid application development:** Provide a low-code environment managed by IT where skilled business developers and other app devs can quickly build apps using a modular approach
- **Adding application governance:** Provide aggregated views across layers, even if delivery approaches differ by layer
- **Deployment Flexibility:** Assess cloud, on-premise and hybrid deployment options and make a choice based on business service
- **Business intelligence (BI)/analytics:** To support a new range of information-driven systems of differentiation and innovation, and to ensure the effective use of data

With flexible and robust application development tools being critical to achieving a pace-layered approach, IT organizations need to partner with a technology vendor that can address the requirements of each of the three application layers. Progress is well-positioned to be that vendor with its diverse portfolio of products and services that provide developers the ability to deliver responsive capabilities that can move a technology strategy toward a more agile, layered approach.

For over 30 years, Progress has been committed to delivering market-leading technology innovations that empower ISVs and customers to dramatically improve the development, deployment and management of business applications. Progress technology is used by nearly 140,000 organizations in more than 180 countries, and powers a community of over 1.7 million developers.

Achieving Digital Transformation with Progress

It takes a wide variety of application types to support a digital business. With both flexible and yet robust application development tools being critical to achieve digital transformation using a pace-layered approach, IT organizations need to partner with a technology vendor that can address the requirements of each of the three application layers.

Progress is well-positioned to be that vendor with a diverse portfolio of products and services that provide developers the ability to deliver responsive capabilities that can move a technology strategy forward.



Solutions that Drive Customer Success

APPLICATION DEVELOPMENT

With Progress® OpenEdge® you can build and protect beautiful applications and deploy across any platform and mobile device—on-premise, cloud, or hybrid. It's one of the most flexible, reliable, scalable and affordable application development platforms in the industry, architected for all of your digital business needs.

MOBILITY

Build great cross platform mobile apps directly on top of, and integrated with, existing applications with Telerik® Platform. The mobile application development tools provide a complete solution that supports the entire scope of an IT organization's mobile strategy.

UI/UX

Create rich UI and improve user adoption, productivity and customer retention with a user-centric approach with our UI/UX tools.

BUSINESS PROCESS MANAGEMENT

Progress® OpenEdge® BPM offers an intuitive and productive way to modernize and streamline applications, making businesses more operationally responsive. With OpenEdge BPM, old hard-coded processes and workflows can be extracted and replaced with configurable and flexible workflows that enable applications to be tailored for and by the consumers of the applications. Both of these technologies support the flexible requirements associated with development of the SOD layer.

BUSINESS RULES ENGINE DECISION MANAGEMENT

Make faster decisions by managing the rules that drive your business processes with our high-powered agile business rules engine Progress® Corticon®. IT organizations get the reliable, high-performance automated compliant and traceable business decisions needed to change rules in hours—not days or weeks for optimized productivity.

REPLICATION

Quickly and easily replicate OpenEdge data into a separate OpenEdge, SQL Server or Oracle database without disrupting normal business operations with OpenEdge Pro2™ data replication.

ANALYTICS

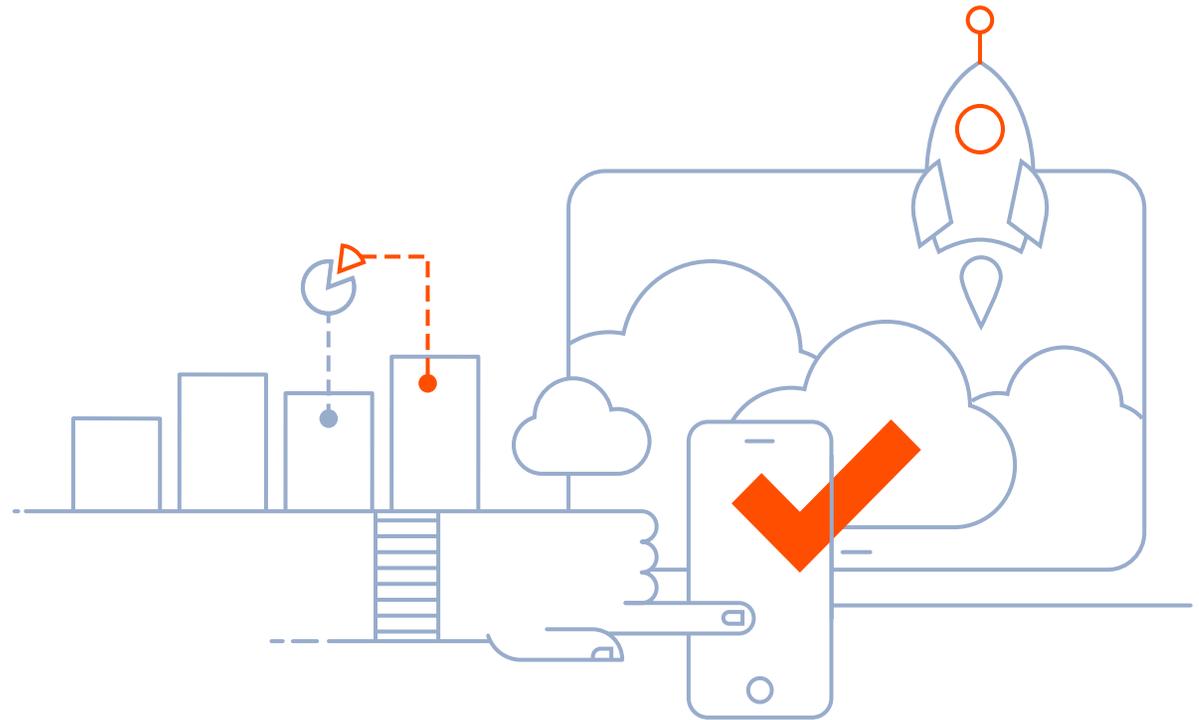
Business Intelligence should take a technology agnostic approach, uncovering KPIs that will be of real value to an organization, and identifying business process improvement opportunities that will directly impact the bottom line. Gain true business insight with our comprehensive business intelligence and data analytics solution, Progress® OpenEdge® Analytics360™.

CUSTOMER ENGAGEMENT

Telerik® Sitefinity™ CMS and the Digital Experience Cloud allow organizations to grow their online businesses, engaging, converting and retaining customers by tracking, analyzing and shaping every step of the customer journey. Sitefinity is trusted by brands such as NASA, Chevron, Expedia, PepsiCo, Panasonic and Roche.

RAPID APPLICATION DEVELOPMENT

Where can IT organizations and citizen developers alike build, deploy and manage cloud-based applications with a single tool? Progress® Rollbase® allows developers to get up and productive fast, enabling rapid development of the SOI layer.



Need a Hand Delivering Transformative Apps?

Today's digital economy promises to usher in an unprecedented convergence of people, business and things that disrupts existing business models and creates new revenue opportunities. The transition will not always be easy, but having the right technology and expertise at hand will help you meet these new business imperatives.

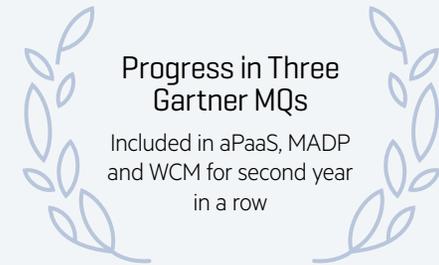
Whether you want to take advantage of the latest Progress technologies to enhance performance, strengthen security or modernize your applications and explore the possibilities of SaaS, cloud and mobility, [Progress Consulting Services](#) can get you there.

Transforming into a digital business doesn't happen overnight. It starts with thinking about where your business is today, and where you want it to be tomorrow.

The world keeps changing. You cannot afford to sit still. Progress can help.

[Try now](#)

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About Progress

Progress (NASDAQ: PRGS) is a global software company that simplifies the development, deployment and management of business applications on-premise or in the cloud, on any platform or device, to any data source, with enhanced performance, minimal IT complexity and low total cost of ownership. Progress can be reached at www.progress.com or 1-781-280-4000.

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Rev 16/02 | 160218-0018