



The State of Application Development Platforms for Delivering Industry Solutions.

Market Research & Analysis.

IN PARTNERSHIP WITH

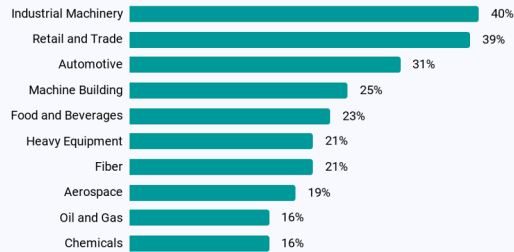
SIEMENS

Ingenuity for life

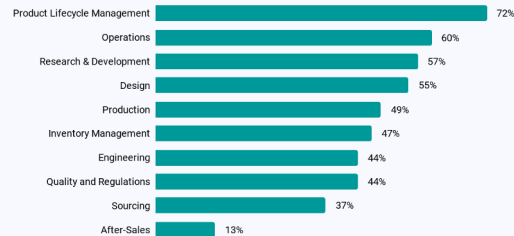
Study Demographics.

Incisv conducted a quantitative survey of 75 North American industry executives from independent software vendors and system integrators.

Respondents by industry served



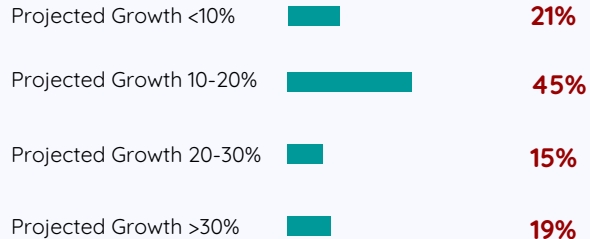
Respondents by key functional areas



Respondents by revenue:



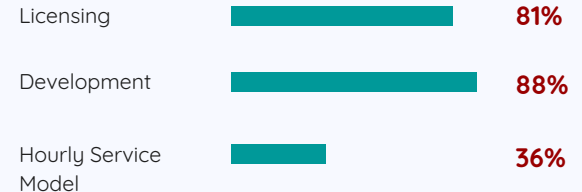
Respondents by projected business growth in 2 years:



Respondents by delivery model:



Respondents by commercial model:



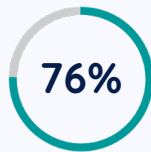
As the speed and complexity of business increases, companies are rushing to **adopt digital transformation strategies** to keep up. Technology can drive these efforts, but lack of system flexibility can also derail them.

Digital transformation across industries is being hampered by lack of speed in the development and implementation of technology.

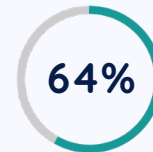
Why have digital transformation efforts not yielded full benefits for businesses across industries?



Inability to test and prototype new technologies quicker



Inability to implement technology faster



Complex legacy technology landscape

Note: Percentage figures above indicate % of respondents.

The processes by which technology is being purchased is changing.

There have been large shifts in the landscape of industrial organizations that has caused a blurring of lines between IT departments and the business. Increasingly, technology decisions are made from a broad set of stakeholders across functions or outside of IT entirely.

While **82%** of companies leverage outside vendors to fill resource gaps, only **43%** state they leverage them effectively. Companies want their vendors to simplify their complex environments and it is incumbent on independent software vendors (ISVs) and systems integrators (SIs) to help them get to market faster.

For Independent Software Vendors (ISVs) and Systems Integrators (SIs), **external speed & complexity** are driving the need to develop faster. However, meeting the requirements for internal development slows the process.

Several industrial segments see the real value that technology can bring to their business and are pushing their technology partners to provide value and functionality on:

- New technology (cloud + IoT)
- Enhanced functionality
- Mobile enabled
- Data security and compliance

However, managing ‘the basics’ in application development takes up disproportionate amount of software vendors’ resources:

- Infrastructural and environment setup
- Documentation
- Uniform execution and standard deployment procedures
- Architectural standards
- Quality assurance
- Change management

The complexity of application development and marketing can be daunting. ISVs and SIs need to look at ways to **simplify the process and expand their development capabilities.**

Top business concerns for SIs and ISVs in development, marketing and deployment of applications:



#1. Poor data security



#2. Long development cycles



#3. Cost overruns



#4. Complex migration to cloud-based technology



#5. New customer acquisition

These concerns can be addressed by exploring capabilities and partnership outside the organization.

Application developers must acquire the expertise to address customer needs and expectations in an ever-growing set of buyer personas inside of industrial firms.

Partnering with an established enterprise solutions provider can be a good strategy to acquire new skills. In addition, with platform providers that provide capabilities such as low-code or no-code development options, such a partnership will shorten development cycles.

Finally, enhancements in application functionality are possible through access to platform provider resources as well as an ecosystem of other potential partners.

While awareness of application development platforms from enterprise solution providers is increasing, adoption remains very low.

Because they have direct correlation with services revenues, systems Integrators (SIs) are currently more mature in the adoption of a partnership with an enterprise solution provider's application development platform than independent software vendors (ISVs).

Awareness of application development platforms from enterprise solution providers.

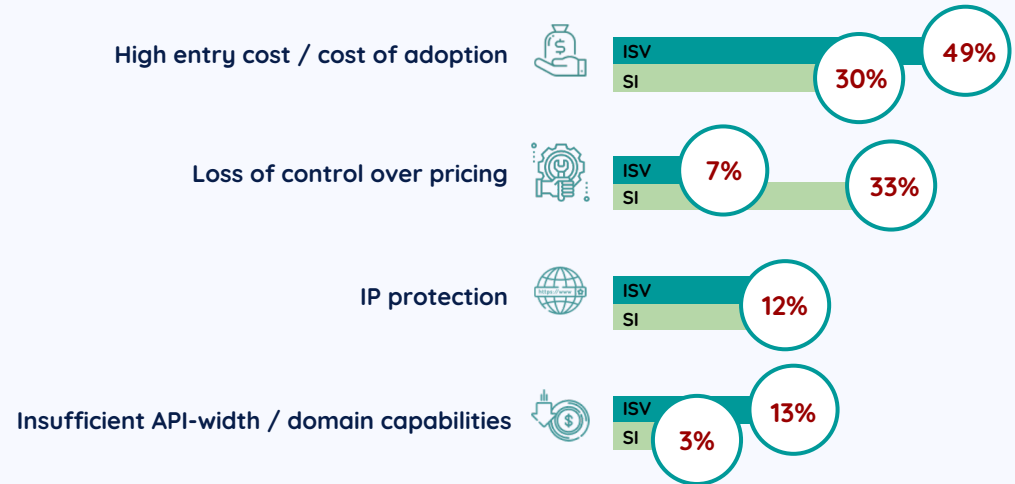


Adoption of application development platforms from enterprise solution providers.



Adoption rates are being hampered primarily by the perception around **cost of entry**.

Primary obstacles to adoption of application development platform.



If enterprise solution providers can market the many benefits around partnering on an application development platform, adoption rates will grow significantly (as none of the other obstacles ranked above 20% overall).

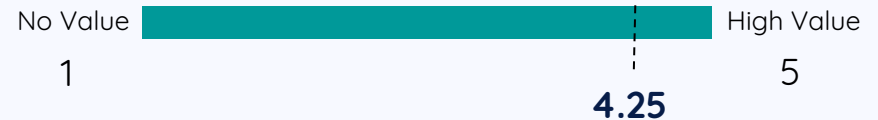
SIs will always have concerns over controlling pricing due to the value-added services they want to sell but application development platforms, if marketed properly, will gain greater adoption in the next 6-12 months.

ISVs & SIs that are aware of application development platforms **see the benefits** of partnering with an enterprise solution provider.

Top 5 perceived benefits of partnering with a large enterprise solutions provider for application development:

1. Tech support
2. Flexible pricing model
3. Breadth of domain APIs
4. Modern UX
5. Enhanced speed-to-market

Perceived value of ISVs / SIs becoming a partner on an application development platform of a large enterprise solutions provider:



Cloud-based development and delivery has created new opportunities for partner collaboration & speed to market. ISVs / SIs are willing to pay a premium to access a cloud-based platform for development.

Cloud-based delivery has reached full maturity in the applications industry.



of respondents currently offer solutions as a plug-and-play application.

The value (premium) assigned to working with large enterprise solutions providers on an application development platform.



of respondents are willing to pay up to 5 - 10% of the total cost of system development.



of respondents are willing to pay in the range of 10 - 25% of the total cost of system development.

While ISVs and SIs can benefit from multiple capabilities in partnering on an application development platform, **Speed of Development and Speed to Market** is what will deliver the most value.

Top benefits of partnering (by vendor type)

#1 for ISVs

Speed of Application Development

#1 for SIs

(tie) Speed to Market & Technology Support

Top overall benefits of partnering with an enterprise solutions provider on an application development platform (combined ISVs / SIs)

- | | |
|--|---|
| #1 User experience | #8 OEM marketing |
| #2 Technology support | #9 Documentation of standard protocols and guidelines |
| #3 Usage cost and pricing model of API | #10 IP protection |
| #5 Breadth of domain APIs | #11 Developer community |
| #5 Enhanced speed to market | #12 Development cost and SG&A reduction |
| #6 Speed of application development | #13 Sales support |
| #7 Access to newer markets / clients | #14 Access to OEM customer base |

ISVs and SIs are looking for **four primary value drivers** in consideration of an application development platform.

Key elements that drive maximum value.



Flexibility in development options

The platform should provide the flexibility and the functionality to support various developer options and rapid application developments.



Broad set of core APIs

The platform should be able to offer a wide range of API's to build a robust portfolio.



Integrated selling platform

The platform should incorporate a marketplace for the application developers to pitch their product to subscribers.



Personalization / value-add

The platform should be customizable depending on business needs and should provide high customer value for the vendors.

Key capabilities for a best in class application development platform.

The **functionalities** of a next-gen platform should be provided keeping in mind the most important needs of small-and-medium Independent Software Vendors and System Integrators.

Cloud-native design

The platform should be focused on digital engineering and IoT applications with a cloud-native design.

Access to development options

The platform should support development options like low code / zero code to enable non-programmers to easily adapt to the platform.

Marketplace option

The platform should have complete end-to-end integration that helps vendors develop and sell their apps on the platform and act as an additional revenue channel.

Multi-user development model

Multiple developer should be able to work on an application concurrently. The platform should provide cross user synchronization.

Broad library of APIs

The platform should offer a wide Range of APIs across the core and domain spectrum.

Usage based pricing model

The value offering should include trial packages and no-frill options for SMBs. Beyond the free tier of a given API, it should be billed per service based on their usage.

Open source platform

An open source platform is easy to operate and troubleshoot.

Analytics dashboard

The platform should have an interactive analytics dashboard to track project, customers and product life-cycles.

The increasing sophistication of businesses across industries combined with complexity of application development means ISVs and SIs need to expand their development options to get to market faster.

Application Development Platforms offered by enterprise solutions providers can be an important channel to access development resources and forge meaningful partnerships to speed up development cycles for ISVs and SIs. In addition, such platforms can be a new selling channel. While current adoption is low, ISV's and SI's are starting to see the value of such platforms as an important tool to meet the demands of their customers.



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