



IDC releases Top Ten Developer and DevOps Predictions for 2020: DevOps to Gain Wide Recognition

Beijing, February 10, 2020 — International Data Corporation (IDC) today announced the release of IDC FutureScape: Worldwide Developer and DevOps 2020 Predictions — China Implications (IDC #CHC45894020, January 2020). The new IDC paper puts forward ten developer and DevOps market predictions for 2020 with a specific focus on China, as well as actionable insights for technology buyers in the DevOps market for the next five years.

Nan Wang, Senior Market Analyst, Enterprise System and Software Research, IDC China, said that the study provides a well-rounded analysis and discussion of developer and DevOps market trends and their impact on digital transformation and business' technology departments.

“Senior IT leaders and business executives will come away from this report with guidance for managing the implications of these technologies,” she said. “Furthermore, our market predictions will help inform their IT investment priorities and implementation strategies.”

IDC’s Top10 developer and DevOps market predictions for 2020 are as follows:

1. Enhanced AI optimizations for developers

By 2024, 56% of companies will not confine their artificial intelligence (AI)/machine learning (ML) use to application development. By then, close to 10% of AI/ML-based optimizations will focus on software development, design, quality management, security and deployment. By 2023, 70% of companies will invest in employee retraining and development, including third-party services to meet the needs of new skills and working methods brought about by AI applications.

2. Wide use of container platforms

By 2024, 70% of new application developed with programming languages will be deployed in containers for improved deployment speed, application consistency and portability.

3. Growth of part-time developers

By 2023, the number of part-time developers (including business analysts, data analysts and data scientists) in China will be double the number in 2019. Specifically, part-time developers will increase from 1.8 million in 2019 to 3.6 million, representing a CAGR of 12.2%. By 2020, 15%

of customer experience applications will deliver hyper-personalization through reinforcement learning algorithms continuously trained on a wide range of data and innovations.

4. DevOps as a daily activity

By 2023, the number of organizations releasing codes for specific applications will increase to 30% from 3% in 2019. By 2024, at least 90% of new versions of enterprise-grade AI applications will feature embedded AI functions, though those disruptive AI-focused applications will only account for 10% of the total market.

5. Accelerating transformation of traditional applications

By 2022, the accelerating modernization of traditional applications and the development of new applications will increase the percentage of cloud-native production applications to 25%, driven by the utilization of microservices, containers and dynamic orchestration.

6. DevOps focus on business KPIs

By 2023, 40% of DevOps teams will invest in tooling and focus on business KPIs such as cost and revenue as operations will begin to play a more important role in the performance of end-to-end applications and business impact.

7. Use of related analytical tools driven by open source software

The increasing reliance of applications on open source components has driven the rapid growth of software component analysis and related tools. By 2023, software component analysis tools, which are currently only used by a minority of organizations, will be used by 45% of organizations.

8. Companies establishing their own development ecosystems

By 2023, 60% of Chinese G2000 companies will establish their own software ecosystems, and 50% will access important reusable code components from publicly accessible community code libraries.

9. Growth of open source codebases

By 2024, open source software derived from open code libraries as a percentage of all enterprise applications will double to 25%, with the remaining 75% being customized according to organizations' business models or use scenarios.

10. Recognized applicability of DevOps

By 2024, applications that completely use DevOps will account for less than 35%. Enterprises have recognized that not all applications can benefit from the complex operations spanning development and production related to continuous integration and continuous delivery (CI/CD).

As shown by the above predictions, emerging business models and frequently changing needs for services have created challenges to enterprises' IT infrastructure. Going forward, the ability to quickly establish new business systems and continuously respond to system iterations brought about by market changes will emerge as the top priorities for IT departments

In response to these external pressures, companies have begun adopting modern methods to implement application development, packaging and testing. In this new and challenging environment, machine learning and AI are being widely used. IDC predicts that the work of future will, to a large extent, will be influenced by how developers and the DevOps community evolve in the next five years.

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About IDC FutureScape

IDC FutureScape reports are used to shape IT strategy and planning for the enterprise by providing a basic framework for evaluating IT initiatives in terms of their value to business strategy now and in the foreseeable future. IDC's FutureScapes are comprised of a set of decision imperatives designed to identify a range of pending issues that CIOs and senior technology professionals will confront within the typical three- to five-year business planning cycle.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,100 analysts worldwide, IDC offers global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a subsidiary of IDG, the world's leading technology media, research, and events company. To learn more about IDC, please visit www.idc.com. Follow IDC on Twitter at @IDC

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For enquiries, please contact:

Frank Wang

Associate Vice President, IDC China

Phone: (+86-10) 5889 1588

Email: frankwang@idc.com

Maggie Xie

Sr. Marketing Executive, IDC China

Phone: (+86-10) 5889 1558

Email: mxie@idc.com

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Figure 1



About IDC

IDC is the premier global provider of market intelligence, advisory services, and events for the information technology and telecommunications industries. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. Over 775 IDC analysts in 50 countries provide global, regional, and local expertise on technology and industry opportunities and trends. For more than 40 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company. You can learn more about IDC by visiting <http://www.idc.com/>.

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For more information contact:

Maggie Xie
mxie@idc.com
+86-10-5889 1558
Frank Wang
fwang@idc.com
+86-10-5889 1558