IDC FutureScape: Latin America IT Industry 2019 Predictions

Ricardo Villate, GVP Latin America
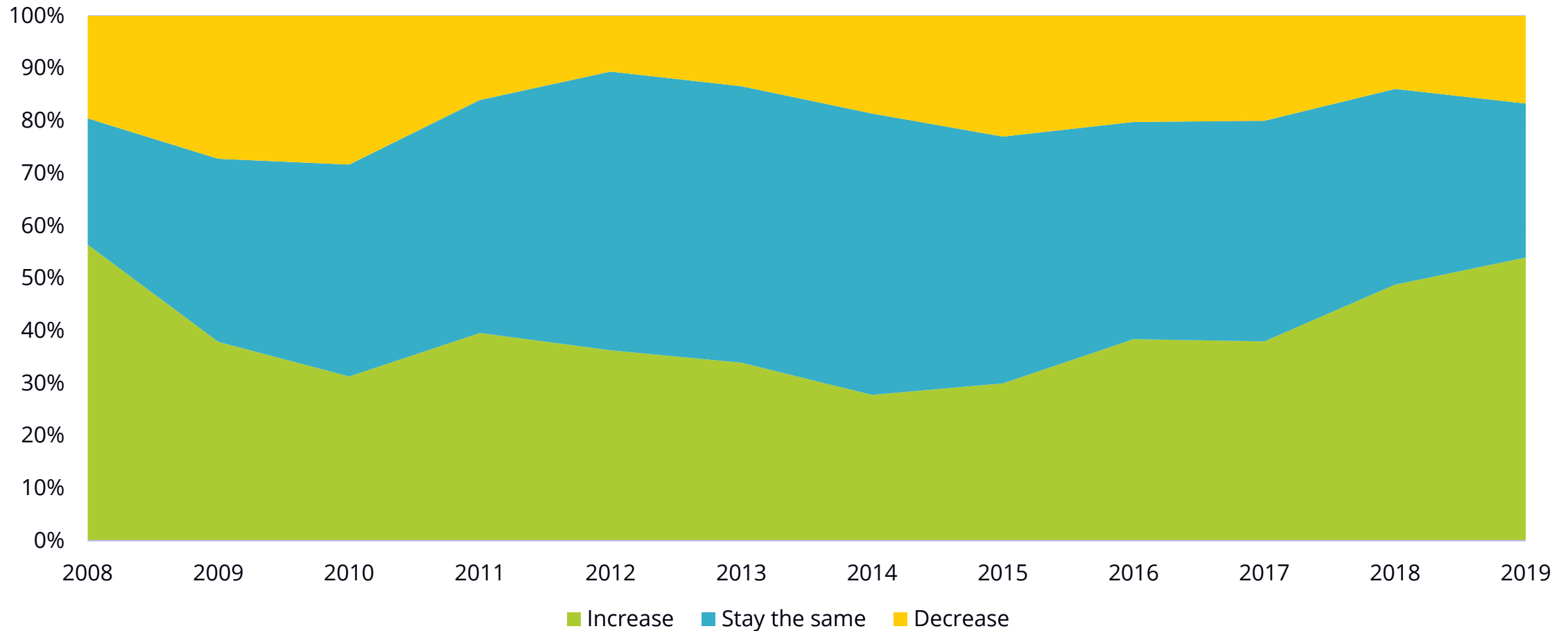
Q&A
Con el equipo de Predicciones
2019 de IDC Latinoamérica
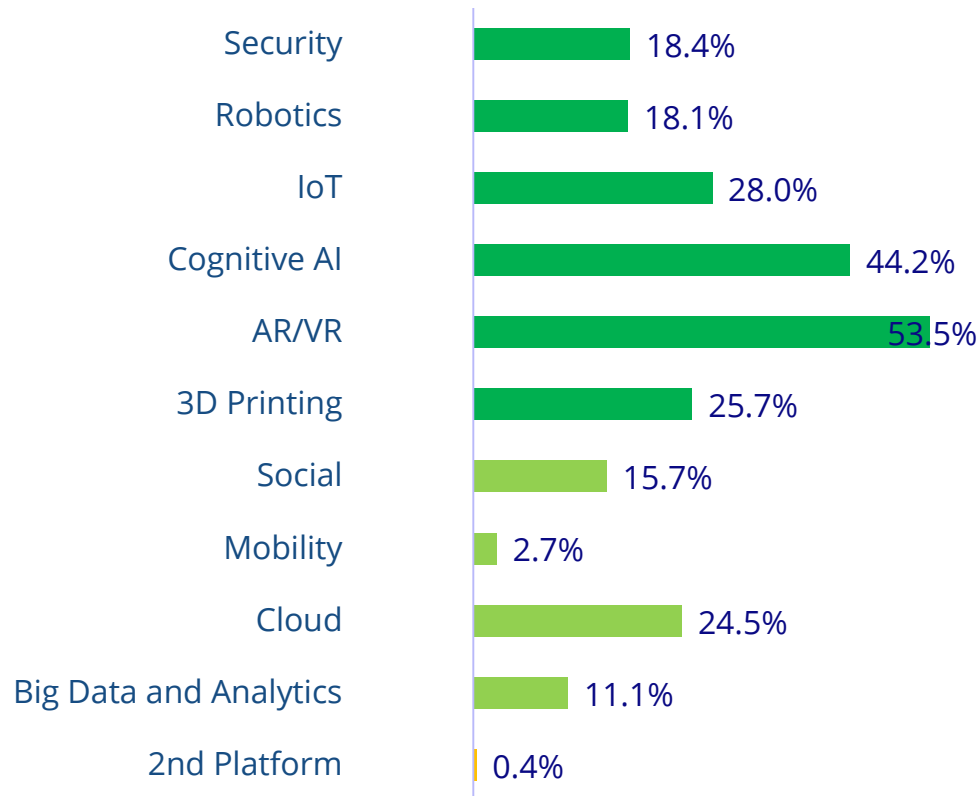
Diciembre, 2018

Record IT Spending Optimism Continues

Q: For [the current year], do you expect your organization's overall IT expenditure to increase, stay the same, or decrease in comparison to [the previous year]?
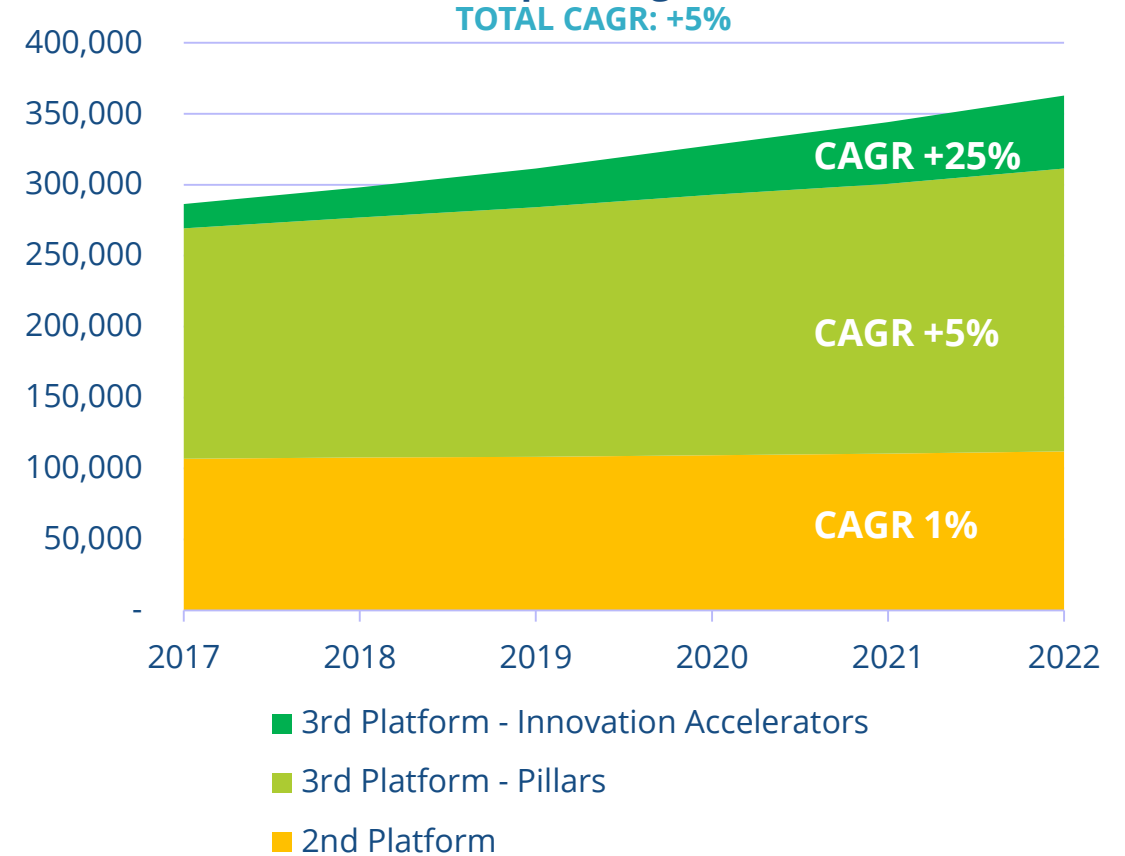

Legend: Increase · Stay the same · Decrease

Growth from 3rd Platform and Innovation Accelerators

2019 Growth (US$ Const.)

- Security — 18.4%
- Robotics — 18.1%
- IoT — 28.0%
- Cognitive AI — 44.2%
- AR/VR — 53.5%
- 3D Printing — 25.7%
- Social — 15.7%
- Mobility — 2.7%
- Cloud — 24.5%
- Big Data and Analytics — 11.1%
- 2nd Platform — 0.4%

Latin America ICT Spending, 2017-2022 ($M)

TOTAL CAGR: +5%

- CAGR +25%
- CAGR +5%
- CAGR 1%

Y-axis: 400,000 / 350,000 / 300,000 / 250,000 / 200,000 / 150,000 / 100,000 / 50,000 / -

X-axis: 2017 2018 2019 2020 2021 2022

Legend:
- 3rd Platform - Innovation Accelerators
- 3rd Platform - Pillars
- 2nd Platform

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Brazil 2019 Outlook

2019 Growth Rates (US$ constant)

Category	Growth
Security	20%
Robotics	22%
IoT	26%
Cognitive AI	41%
AR/VR	45%
3D Printing	25%
Social	15%
Mobility	1%
Cloud	24%
Big Data and...	9%
2nd Platform	-1%

Scenario

- Expectations are high for a more stable year economically with the exchange rate not impacted by an election cycle
- Delayed infrastructure projects are expected to be put back on track
- Fiscal reforms will be needed in 2019 to get the country back on track, but if done correctly could lead to additional private capital investment

2019 GDP %: 2.3*
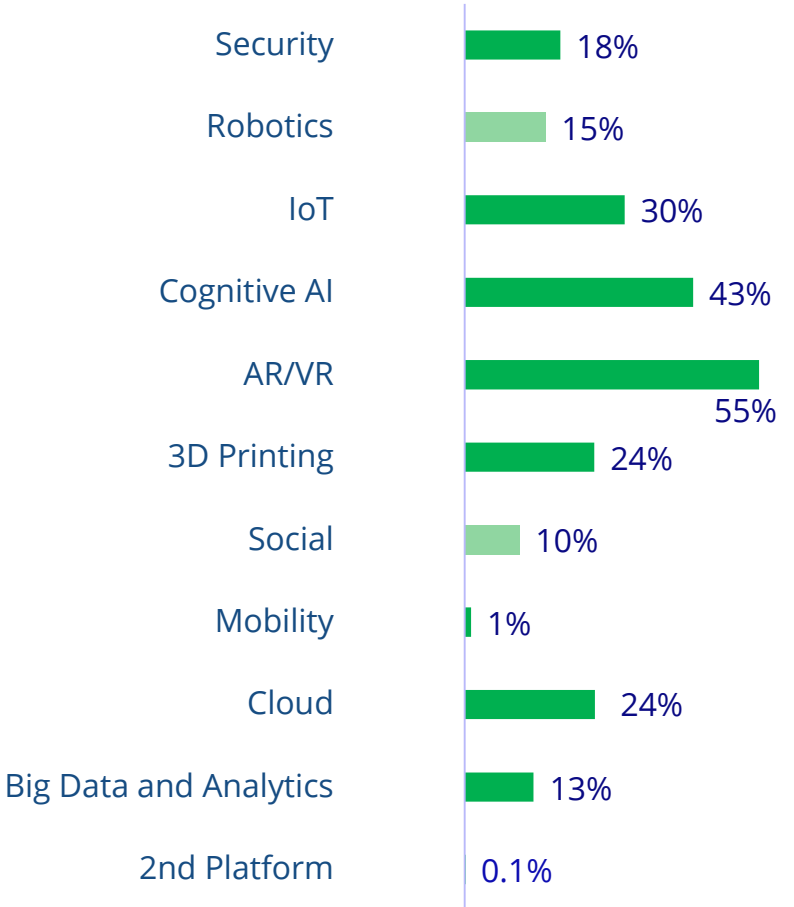2019 Inflation: 4.1%*
2019 Unemployment: 10.7%*

2nd Platform
2017-2022 CAGR
-0.6%

3rd Platform
2017-2022 CAGR
+6.8%

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Sources: IDC Worldwide Blackbook Third Platform Edition, Oct 2018

*IMF, World Economic Outlook Database, October 2018
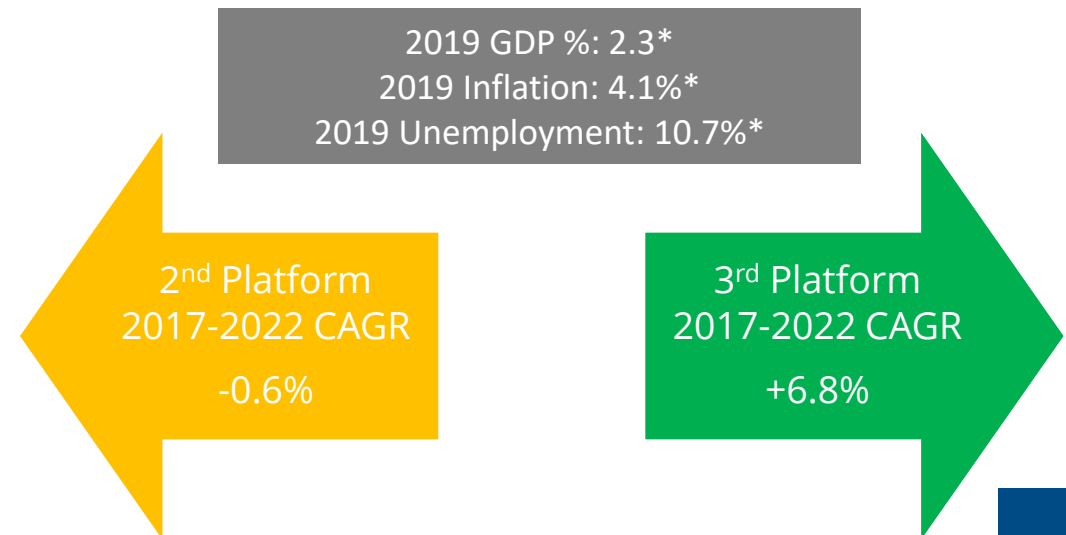
Mexico 2019 Outlook

IT Spending: US$24 B (+3.6%)   **Telecom Services: US$29 B (+1.0%)**

2019 Growth Rates (US$ constant)

Category	Growth
Security	18%
Robotics	15%
IoT	30%
Cognitive AI	43%
AR/VR	55%
3D Printing	24%
Social	10%
Mobility	1%
Cloud	24%
Big Data and Analytics	13%
2nd Platform	0.1%

Scenario

- With Lopez Obrador just taking office on December 1, 2018, 2019 will be a year that many in Mexico will hope will be a recovery from the prior year

- With a new trade deal with Canada, the US and Mexico, manufacturing should see improvements in 2019

2019 GDP %: 2.5*
2019 Inflation: 3.6%*
2019 Unemployment: 3.5%*

2nd Platform
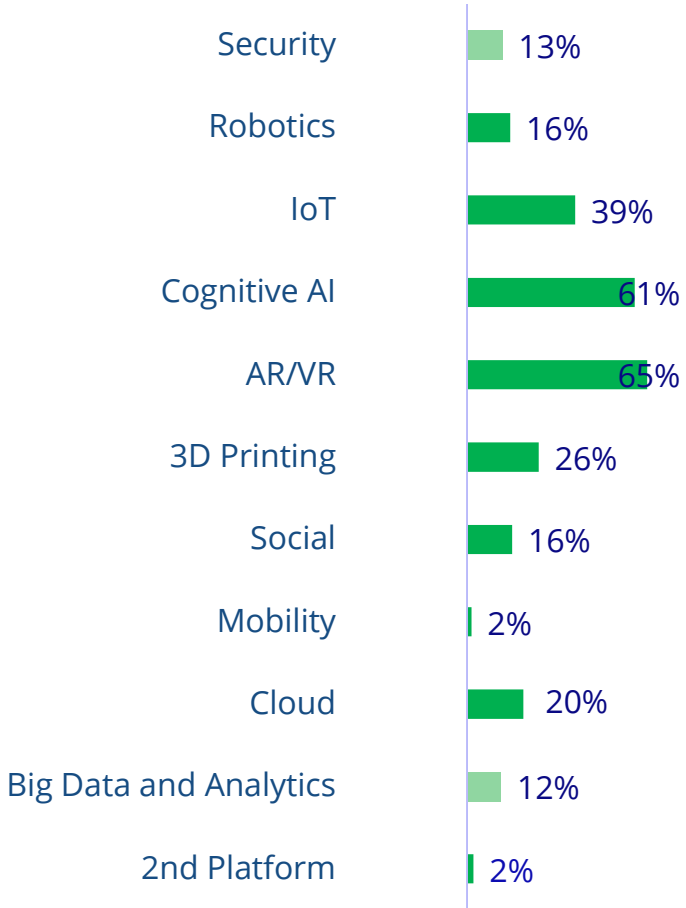2017-2022 CAGR
+1.4%

3rd Platform
2017-2022 CAGR
+6.7%

Source: IDC Worldwide Blackbook Third Platform Edition, Oct 2018

*IMF, World Economic Outlook Database, October 2018

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Chile 2019 Outlook

2019 Growth Rates (US$ constant)

Category	Growth
Security	13%
Robotics	16%
IoT	39%
Cognitive AI	61%
AR/VR	65%
3D Printing	26%
Social	16%
Mobility	2%
Cloud	20%
Big Data and Analytics	12%
2nd Platform	2%

Scenario

- 2019 will see the first budget created by the current administration of Sebastian Piñera to take effect
- Expansion in datacenters by both global hyperscalers and local providers will continue

2019 GDP %: 3.4*
2019 Inflation: 3.0%*
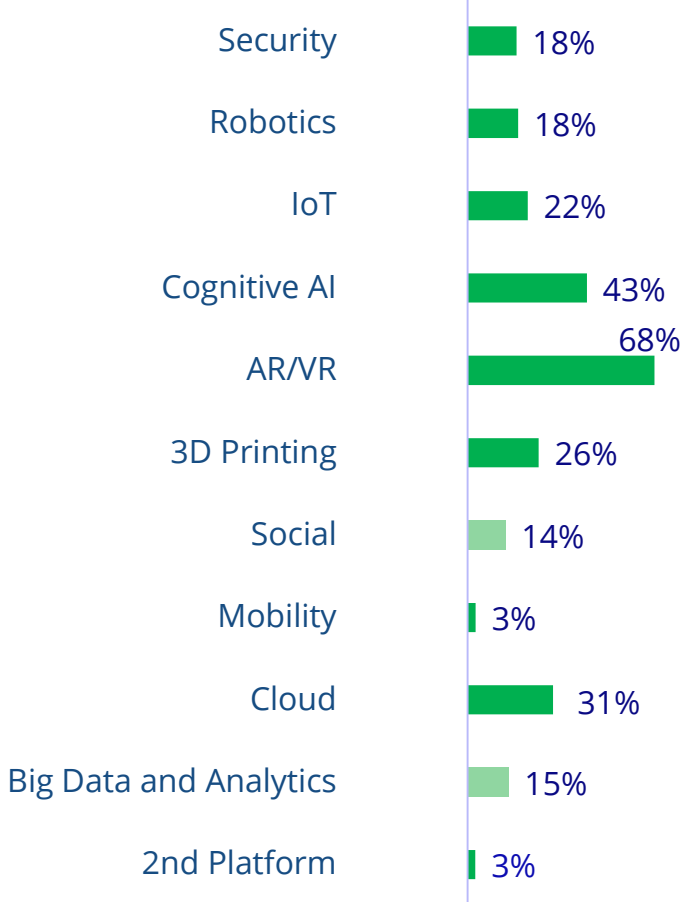2019 Unemployment: 6.5%*

2nd Platform
2017-2022 CAGR
+2.2%

3rd Platform
2017-2022 CAGR
+8.6%

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Argentina 2019 Outlook

2019 Growth Rates (US$ constant)

Category	Growth
Security	18%
Robotics	18%
IoT	22%
Cognitive AI	43%
AR/VR	68%
3D Printing	26%
Social	14%
Mobility	3%
Cloud	31%
Big Data and Analytics	15%
2nd Platform	3%

Scenario

- 2019 will be a year of presidential elections in the country, which historically leads to a slowdown in the economy and volatile exchange rates

- Software and services sectors should see continued strength as the devalued Peso allows companies to take advantage of a qualified workforce, at lower prices in US$

2019 GDP %: -1.6*
2019 Inflation: 32%*
2019 Unemployment: 9.4%*

2nd Platform
2017-2022 CAGR
+3.5%

3rd Platform
2017-2022 CAGR
+6.6%

Source: IDC Worldwide Blackbook Third Platform Edition, Oct 2018

*IMF, World Economic Outlook Database, October 2018

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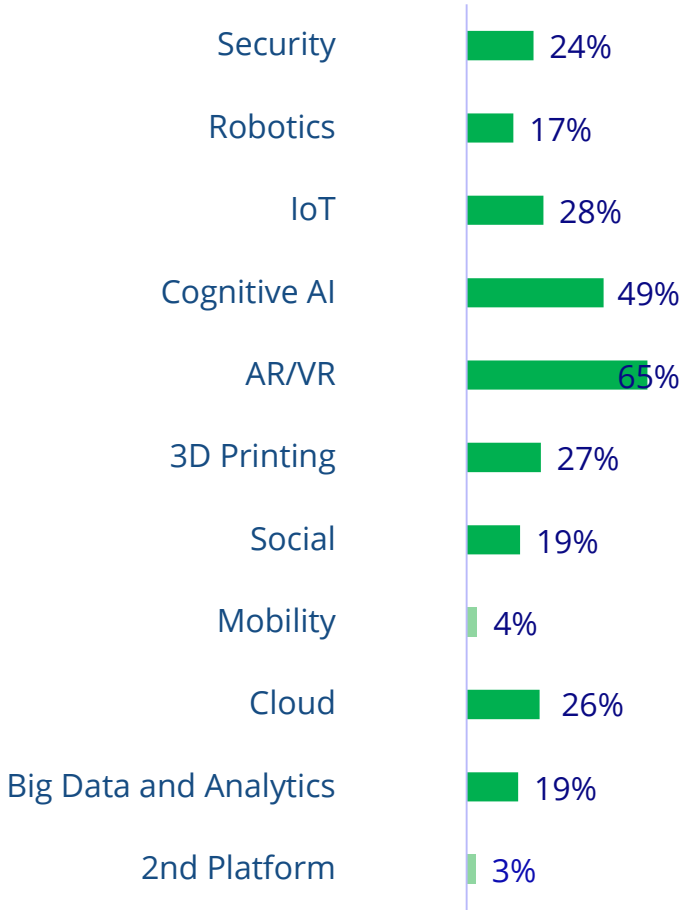# Colombia 2019 Outlook

2019 Growth Rates (US$ constant)

Category	Growth
Security	24%
Robotics	17%
IoT	28%
Cognitive AI	49%
AR/VR	65%
3D Printing	27%
Social	19%
Mobility	4%
Cloud	26%
Big Data and Analytics	19%
2nd Platform	3%

Scenario

- 2019 is expected to be a year of recovery with a high level of investments in infrastructure and connectivity to catch up with a back-log of projects.

- 'Orange' economy initiative could spur on investments in software, apps and video game development and technology-based innovation, among other areas.

2019 GDP %: 3.5*
2019 Inflation: 3.3%*
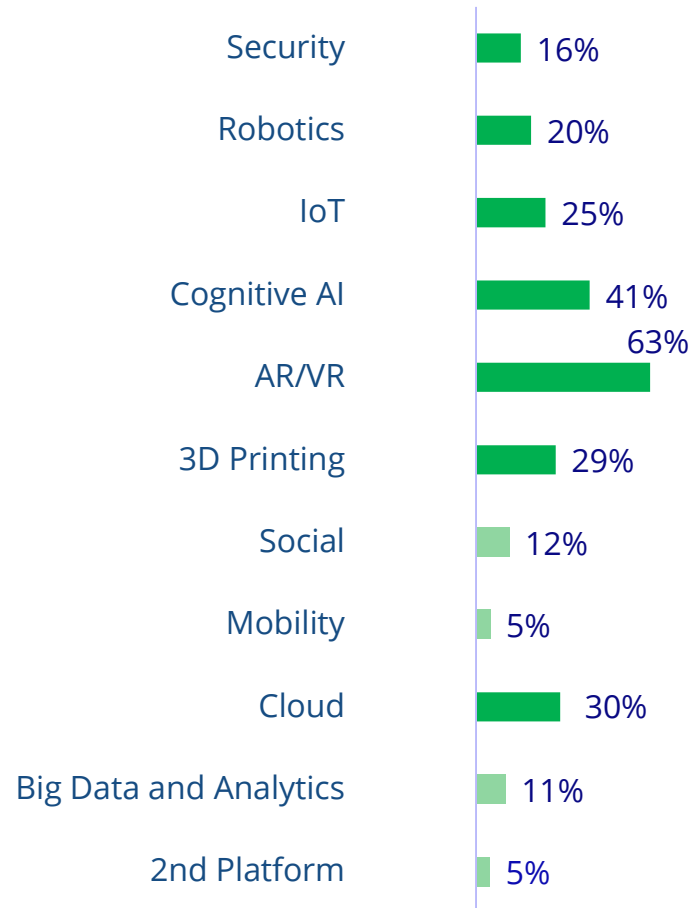2019 Unemployment: 9.1%*

2nd Platform
2017-2022 CAGR
+4.5%

3rd Platform
2017-2022 CAGR
+8.7%

Source: IDC Worldwide Blackbook Third Platform Edition, Oct 2018

*IMF, World Economic Outlook Database, October 2018

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Peru 2019 Outlook

2019 Growth Rates (US$ constant)

Category	Growth
Security	16%
Robotics	20%
IoT	25%
Cognitive AI	41%
AR/VR	63%
3D Printing	29%
Social	12%
Mobility	5%
Cloud	30%
Big Data and Analytics	11%
2nd Platform	5%

Scenario

- President Vizcarra's approval ratings at a high number not seen for a Peruvian president in recent memory
- The economy is expected to show the fastest growth of the major South American economies

2019 GDP %: 4.1*
2019 Inflation: 2.0%*
2019 Unemployment: 6.8%*

2nd Platform
2017-2022 CAGR
+5.2%

3rd Platform
2017-2022 CAGR
+8.1%

Source: IDC Worldwide Blackbook Third Platform Edition, Oct 2018

*IMF, World Economic Outlook Database, October 2018

Rest of Latin America 2019 Outlook

2019 Growth Rates (US$ constant)

| IT Spending: US$15.2 B (+2.7%) | Telecom Services: US$37 B (+4.7%) |

Technology	Growth
Security	15%
Robotics	19%
IoT	24%
Cognitive AI	42%
AR/VR	65%
3D Printing	27%
Social	25%
Mobility	5%
Cloud	22%
Big Data and Analytics	9%
2nd Platform	0.6%
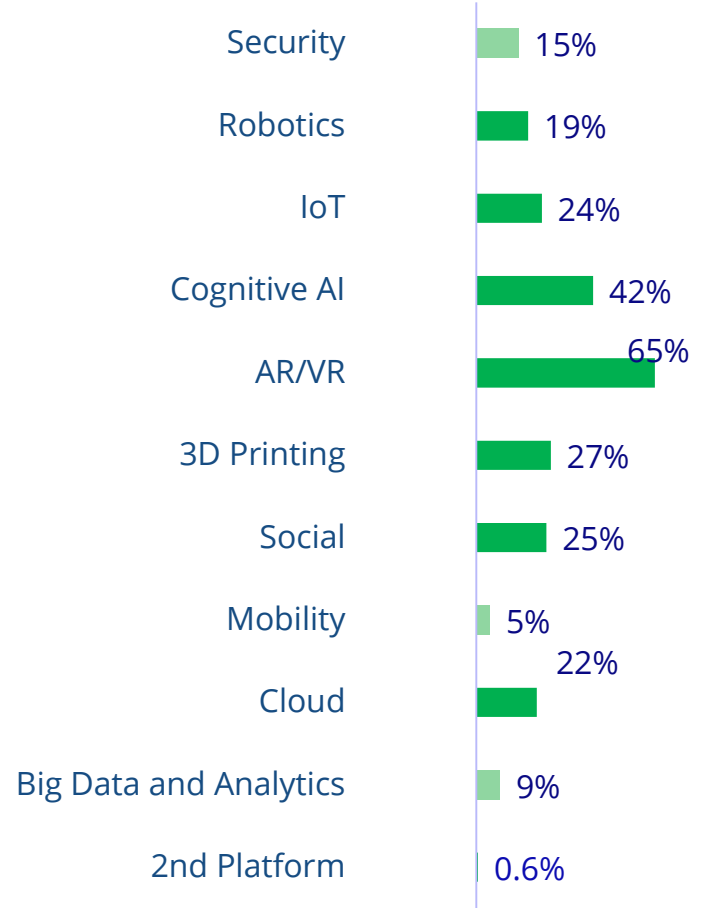
Country	2019 GDP Growth Forecast
Panama	6.8
Dominican Republic	5.0
Bolivia	4.2
Paraguay	4.2
Honduras	3.6
Guatemala	3.4
Costa Rica	3.3
Uruguay	3.2
El Salvador	2.3
Jamaica	1.5
Trinidad and Tobago	0.9
Ecuador	0.7
Nicaragua	-1.0
Venezuela	-5.0

2nd Platform
2017-2022 CAGR
+0.7%

3rd Platform
2017-2022 CAGR
+6.1%

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Three Chapters of the 3rd Platform Era

Chapter 1 | 2007+
Experimentation

Chapter 2 | 2015+
Multiplied Innovation

Chapter 3 | 2022+
Autonomy

Digital Transformation

DEVELOPERS   INDUSTRY CLOUDS

Augmented & Virtual Reality   Internet of Things   Cognitive/ AI   Robotics

Next Gen Security

INNOVATION ACCELERATORS   3D Printing

Mobility   Big Data/ Analytics   Cloud   Social

3rd Platform

SCALING INFRASTRUCTURE

IDC FutureScape:
Worldwide & Latin America Implications

Higher

COST/COMPLEXITY TO ADDRESS

Digitized Economy 3rd Platform IT

Hyperagile Apps

Innovation Explosion

Multicloud

Expanding Trust

Cloud + AI @Edge

AI = New UI

Specializat ion/Vertica lization

New Developers

Lower

2019   2020   2021   2022   2023   2024

PREDICTION TIMING

Source: IDC, 2018

1. By 2022, 50%+ of Latin American GDP Will Be Digitized, with Growth in Every Industry Driven by Digitally Enhanced Offerings, Operations, and Relationships and Almost $380 billion in IT-Related Spending in 2019–2022

2. By 2022, almost 70% of All IT Spending in Latin America Will Be on 3rd Platform Technologies, as Over 75% of All Enterprises Build "Digital Native" IT Environments to Thrive in the Digital Economy

3. By 2022, Over 20% of Organizations' Cloud Deployments in Latin America Will Include Edge Computing and 15% of Endpoint Devices and Systems Will Execute AI Algorithms

4. By 2020, 60% of All New Apps in Latin America Will Feature Microservices Architectures That Improve the Ability to Design, Debug, Update, and Leverage Third-Party Code; 25% of All Production Apps Will Be Cloud Native

5. By 2022, a New Class of Professional Developers Producing Code Without Custom Scripting Will Expand the Developer Population by 15%, Accelerating Digital Transformation

6. From 2018 to 2023 — with New Tools/Platforms, More Developers, Agile Methods, and Lots of Code Reuse — close to 30 Million New Logical Enterprise Apps Will Be Created by Latin American developers

7. By 2022, 15% of Public Cloud Computing Will Be Based on Non-x86 Processors (Including Quantum); by 2022, Organizations Will Spend More on Vertical SaaS Apps than Horizontal Apps, especially for those that leverage a local or regional competitive advantage over global firms.

8. By 2024, AI-Enabled User Interfaces and Process Automation Will Replace a Quarter of Today's Screen-Based Apps in Latin America; by 2022, 25% of Enterprises Will Use Conversational Speech Tech for Customer Engagement

9. By 2022, in Latin America, 20% of Servers Will Encrypt Data at Rest and in Motion, Over 20% of Security Alerts Will Be Handled by AI-Powered Automation, and More than 5 Million People in the region, will Have Blockchain-Based Digital Identities

10. By 2022, the Top 4 Cloud "Megaplatforms" Will Host 70% of IaaS/PaaS Deployments in Latin America, But by 2024, 80% of the top 1000 companies in Latin America Will Mitigate Lock -In Through Multicloud/Hybrid Technologies and Tools

Prediction 1: Digitized Economy

By 2022, 50%+ of Latin American GDP will be digitized, with growth in every industry driven by digitally enhanced offerings, operations, and relationships and almost $380 billion in IT-related spending in 2019–2022

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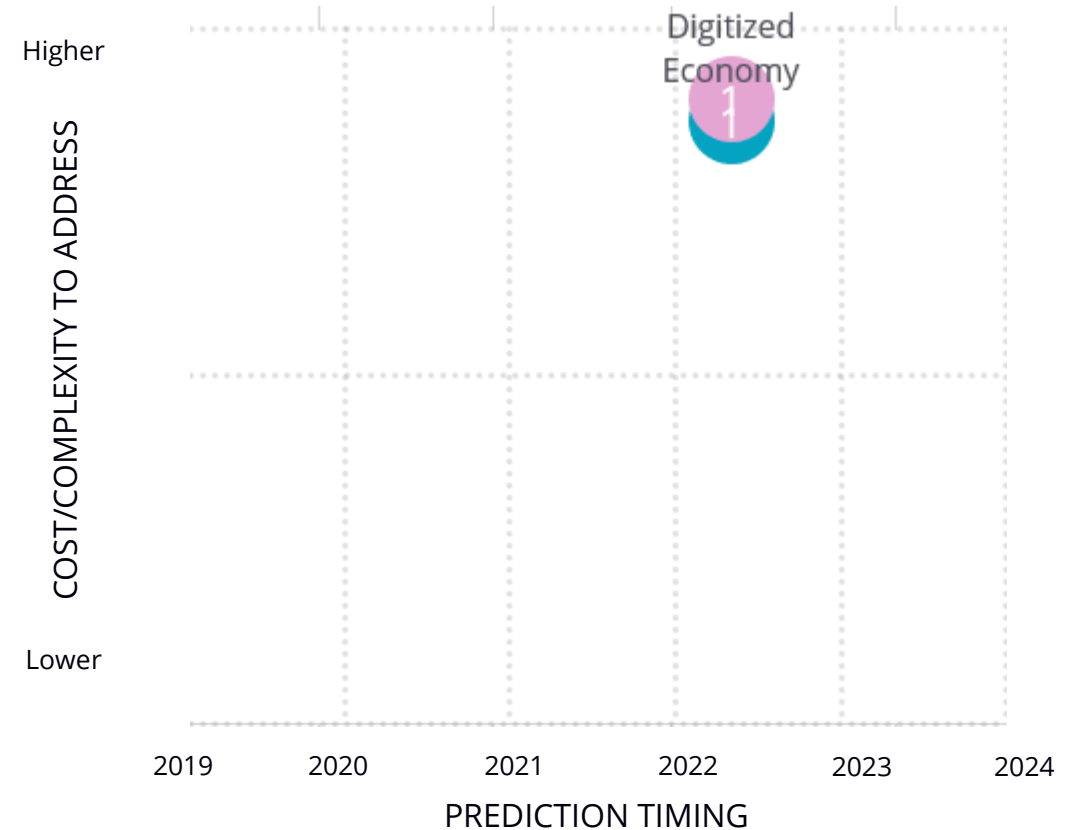
Prediction #1: Digitized Economy

By 2022, 50%+ of Latin American GDP Will Be Digitized, with Growth in Every Industry Driven by Digitally Enhanced Offerings, Operations, and Relationships and Almost $380 Billion in IT-Related Spending in 2019–2022

IT and Business Impact	- Business leaders in every enterprise will put digital transformation at the top of the priority list. "Digital thinking" must be an integral part of every business leader's skill set — not delegated to the organization's IT leadership. - Digitization is not confined to just one part of the enterprise (like customer-facing functions or online commerce organizations); it is transforming major aspects of enterprises' offerings, operations, and relationships.
Guidance for Technology Buyers	- Build a single enterprise wide business strategy built around digital transformation. - Build your long-term digital road map by envisioning your strategy, building your road map by horizon, and identifying and prioritizing use cases. - Break your DX strategic initiatives into bite-size chunks (use cases) when developing your DX road map. - Develop a fully integrated, increasingly "digital native" enterprise-wide technology architecture.

Prediction 2: 3rd Platform IT

By 2022, almost 70% of All IT Spending in Latin America Will Be on 3rd Platform Technologies, as Over 75% of All Enterprises Build "Digital Native" IT Environments to Thrive in the Digital Economy

Source: IDC, 2018
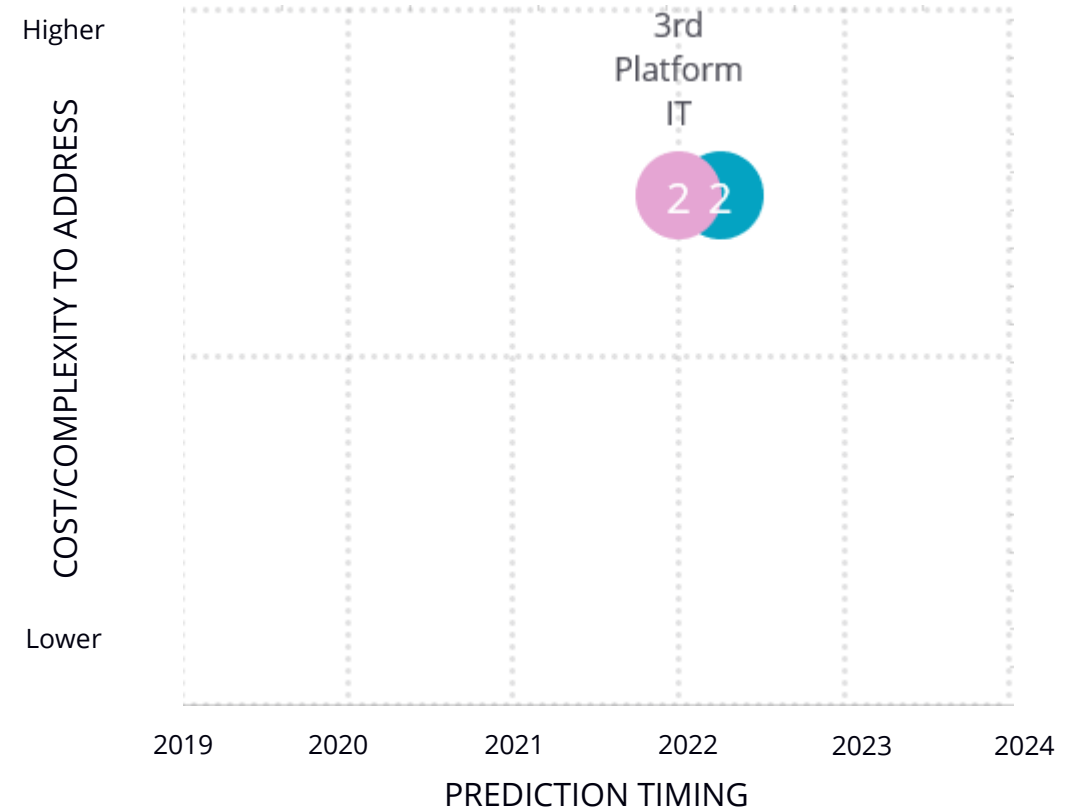
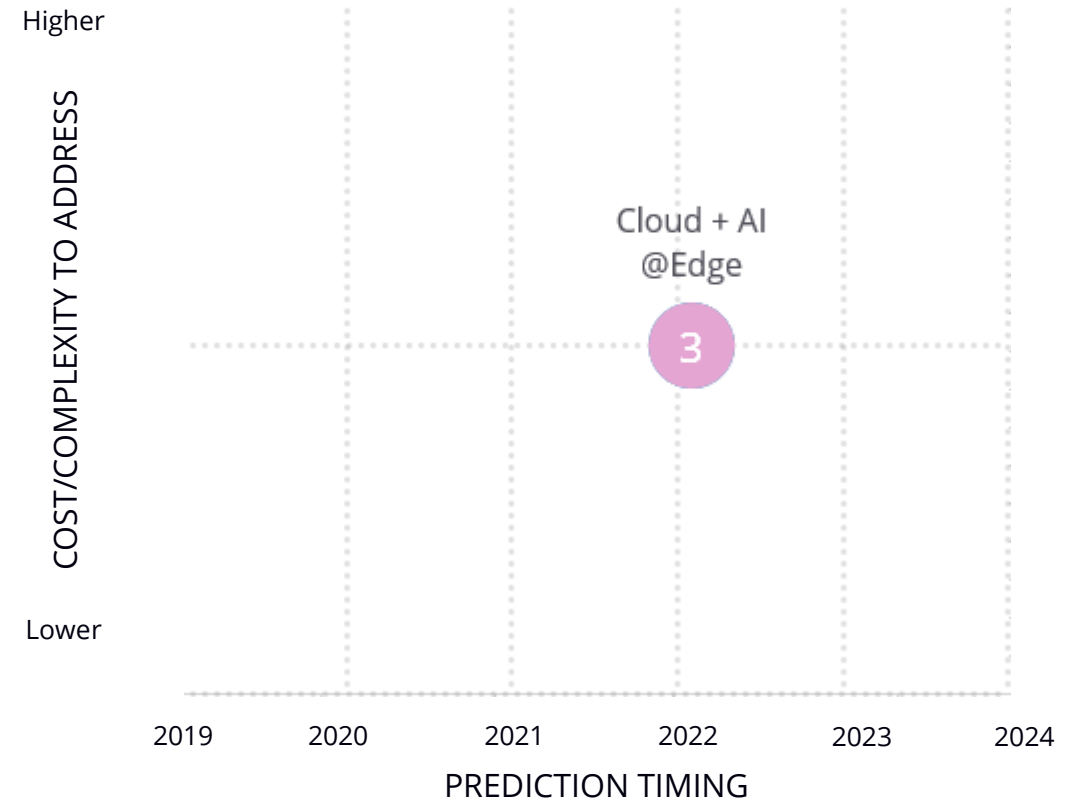# Prediction #2: 3rd Platform IT

By 2022, almost 70% of All IT Spending in Latin America Will Be on 3rd Platform Technologies, as Over 75% of All Enterprises Build "Digital Native" IT Environments to Thrive in the Digital Economy

IT and Business Impact	• Enterprises' IT budget splits between 2nd and 3rd Platform technologies and services must start looking like the industrywide spending split. • "Cloud first" should now be the strategy for all mainstream enterprises, not just leading-edge or digital-native organizations. • Trusted IT suppliers may no longer be the right fit, depending on their 3rd Platform (and digital transformation) capabilities. Some incumbents will struggle and even fail.
Guidance for Technology Buyers	• Rethink the "build versus buy" strategies around your IT requirements: The long-term trend is skewing toward external sourcing (buy) for many technology categories and this will help the channel partner and system integrator ecosystem in Latin America. Organizations should be looking to regularly review the build/buy mix. • Work hand in hand with the digital and business teams to redefine the way processes link to the services being delivered by the platform. This will be critical given the data-driven nature of the digital economy.

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Prediction 3: Cloud and AI @ the Edge

By 2022, Over 20% of Organizations' Cloud Deployments in Latin America Will Include Edge Computing and 15% of Endpoint Devices and Systems Will Execute AI Algorithms
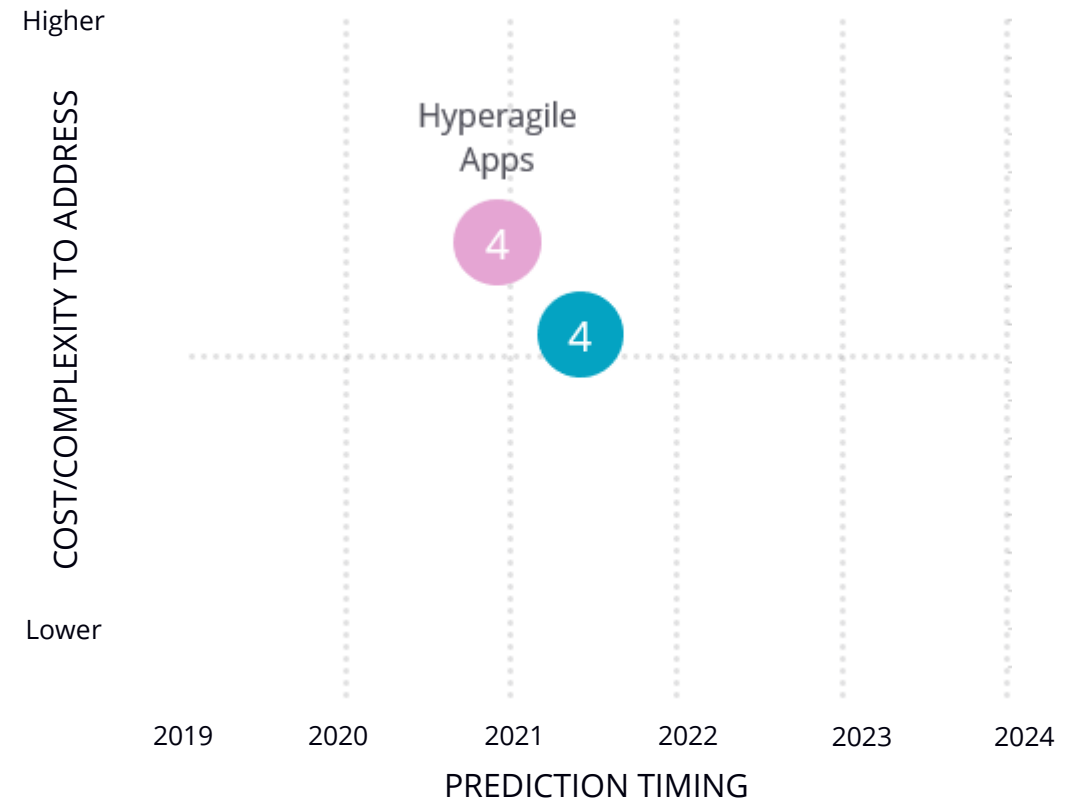
Higher

COST/COMPLEXITY TO ADDRESS

Cloud + AI @Edge

3

Lower

2019   2020   2021   2022   2023   2024

PREDICTION TIMING

Source: IDC, 2018

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17

Prediction #3: Cloud and AI @ the Edge

By 2022, Over 20% of Organizations' Cloud Deployments in Latin America Will Include Edge Computing and 15% of Endpoint Devices and Systems Will Execute AI Algorithms

IT and Business Impact	• By 2020, 44% of Latin America's medium and large organizations' IT budgets will be located in the cloud (mainly driven by third party public and private cloud). Of the remaining in-house investments, one out of five dollars will be invested in private cloud inside companies' premises. • AI services are among the first — and most transformational — of public cloud capabilities being deployed across the distributed/edge cloud foundation. In Latin America, 11% of medium and large organizations already have AI within their top IT initiatives, and this is expected to double over the next four years.
Guidance for Technology Buyers	• Carefully select cloud service providers that share and support a distributed cloud vision — providing services that enable execution across provider facilities, on-prem facilities, and edge locations. • Expect any endpoint devices that your business currently interacts with to become intelligent and compute intensive, and craft your business and IT plans accordingly • When IT is managing services across a variety of locations, remote monitoring and automation are imperative to keep operating costs under control.

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Prediction 4: Hyperagile Apps

By 2020, 60% of All New Apps in Latin America Will Feature Microservices Architectures That Improve the Ability to Design, Debug, Update, and Leverage Third-Party Code; 25% of All Production Apps Will Be Cloud Native
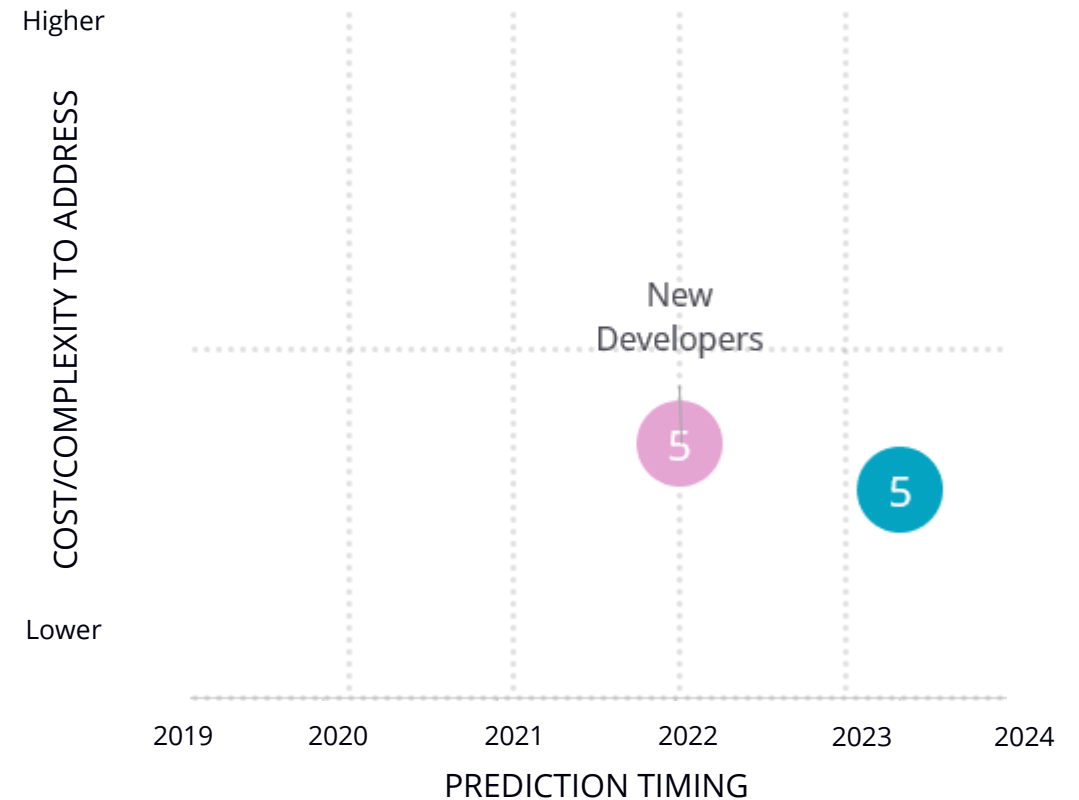
Higher

COST/COMPLEXITY TO ADDRESS

Hyperagile
Apps

4

4

Lower

2019   2020   2021   2022   2023   2024

PREDICTION TIMING

Prediction #4: Hyperagile Apps

By 2020, 60% of All New Apps in Latin America Will Feature Microservices Architectures That Improve the Ability to Design, Debug, Update, and Leverage Third-Party Code; 25% of All Production Apps Will Be Cloud Native

IT and Business Impact	• With containers and microservices, complexity to track and manage systems dependencies is set to increase in in-house environments, perpetuating old challenges related to IT operations management • Traditional IT and digital development teams are gradually unified, while in the past they have been kept as two separated strategic IT clusters, as part of a two-speed IT policy.
Guidance for Technology Buyers	• Build cohesion and convergence of interests and KPIs between development and IT operations. Transform DevOps in line with new cloud-native capabilities and development approaches. • Work with the business to prioritize legacy and greenfield workloads to determine the technical feasibility and strategic importance. Not every workload should be converted to cloud native. • Ensure there is clear commitment from the business to engage in such major IT transformation, beyond budget allocations. This will help to minimize friction with operational business units affected by the modernization.

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Prediction 5: New Developers

By 2022, a New Class of Professional Developers Producing Code Without Custom Scripting Will Expand the Developer Population by 15%, Accelerating Digital Transformation

Higher

COST/COMPLEXITY TO ADDRESS
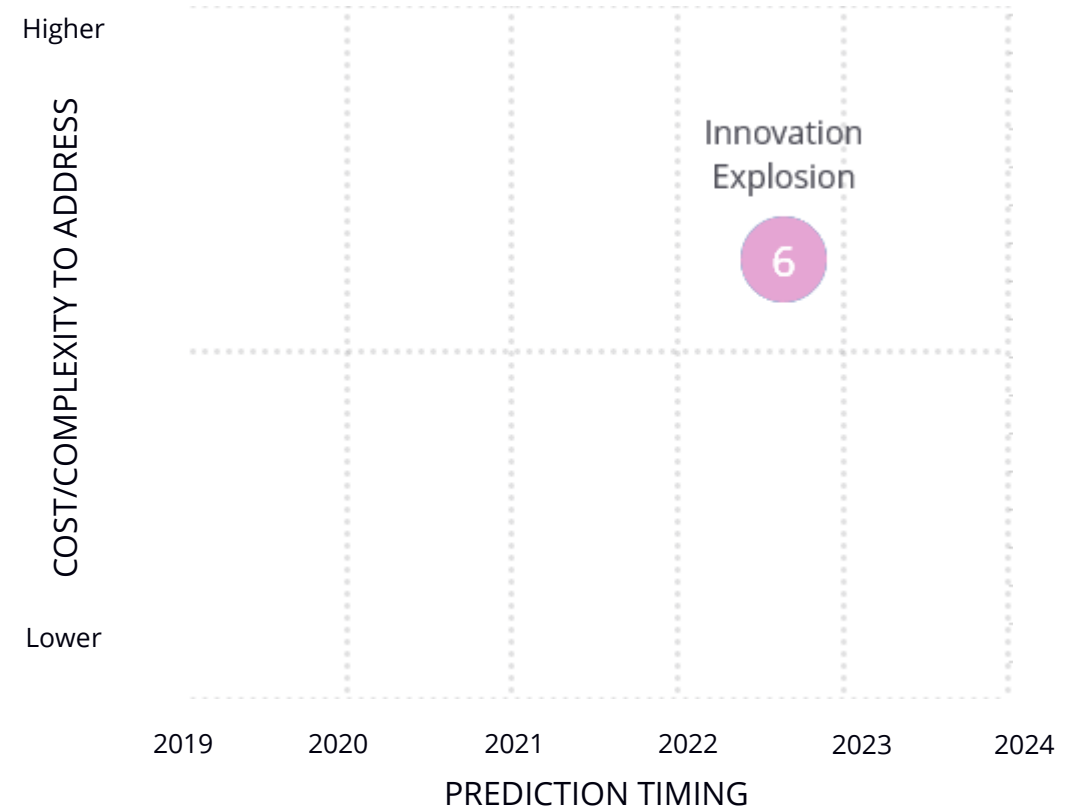
New Developers

5

5

Lower

2019   2020   2021   2022   2023   2024

PREDICTION TIMING

Prediction #5: New Developers

By 2022, a New Class of Professional Developers Producing Code Without Custom Scripting Will Expand the Developer Population by 15%, Accelerating Digital Transformation

IT and Business Impact	• Every enterprise's ability to compete in the digitized economy will be defined by how well they expand their own population of digital innovators, beyond traditional coders, to meet rapidly expanding market demands. • Traditional protocols and procedures may be insufficient to enable productive collaboration between developers that produce code using custom scripting and those that do not. • New developers within the enterprise will put stress on existing access policies to data and other corporate resources.
Guidance for Technology Buyers	• Understand and serve the development-related needs of this new class of developers with respect to topics such as access to company data, automated deployment, application monitoring, and the implementation of security. • Proactively define governance protocols to ensure that development is performed using consistent, repeatable processes as well as recognized, widely understood development principles. • Consider identifying a liaison between this new class of developers and corporate IT. to ensure that they have appropriate levels of access to organizational systems and databases.

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Prediction 6: Innovation Explosion

From 2018 to 2023 — with New Tools/Platforms, More Developers, Agile Methods, and Lots of Code Reuse — close to 30 Million New Logical Enterprise Apps Will Be Created by Latin American developers

Higher

COST/COMPLEXITY TO ADDRESS

Innovation Explosion

6

Lower

2019   2020   2021   2022   2023   2024

PREDICTION TIMING

Prediction #6: Innovation Explosion

From 2018 to 2023 — with New Tools/Platforms, More Developers, Agile Methods, and Lots of Code Reuse — close to 30 Million New Logical Enterprise Apps Will Be Created by Latin American developers

IT and Business Impact	• Development times are becoming dramatically reduced, shortening time to value and driving entirely new metrics for project volumes, release frequency, and more. • The business applications facing the consumer / client are the applications that have the highest adoption because of efforts to have a new set of application aligned with digital transformation strategy; these applications grow at a compound growth rate of 25% (2018-2023). • Organizations that do not leverage the benefits of ML and AI for DevOps to enable responsiveness to changing technology and business dynamics will be left behind.
Guidance for Technology Buyers	• Adopt agile/DevOps tools and approaches as the default across your enterprise. • Get started now with learning about repository-based solutions that can be integrated with applications being developed. • Learn the pros and cons of various open source software licensing models and what those licenses allow an organization to do and what actions are prohibited or forced.

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Prediction 7: Specialization/Verticalization

By 2022, 15% of Public Cloud Computing Will Be Based on Non-x86 Processors (Including Quantum); by 2022, Organizations Will Spend More on Vertical SaaS Apps than Horizontal Apps, Especially For Those That Leverage A Local Or Regional Competitive Advantage Over Global Firms.

Higher

COST/COMPLEXITY TO ADDRESS

Specializat ion/Vertica lization

7
7

Lower

2019   2020   2021   2022   2023   2024

PREDICTION TIMING

Source: IDC, 2018

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Prediction #7: Specialization/Verticalization

By 2022, 15% of Public Cloud Computing Will Be Based on Non-x86 Processors (Including Quantum); by 2022, Organizations Will Spend More on Vertical SaaS Apps than Horizontal Apps, Especially For Those That Leverage A Local Or Regional Competitive Advantage Over Global Firms.

IT and Business Impact	• Organizations have an unprecedent selection of vertical solutions that are closely aligned with how their business and workflows operate. Industry-specific applications usually require fewer customizations, reducing the time to value for lines of business. • As more vertical best-of-breed products emerge, integration with other applications and platforms within organizations' technology portfolios will become front and center, since ease of integration and time to implement are always vital evaluation metrics when selecting an application.
Guidance for Technology Buyers	• Take advantage of accelerators available as options in the public cloud today. • Seek out vertical SaaS applications to give your business a competitive edge. Their streamlined workflows, user interfaces, and usability will help you increase ROI on your application while also allowing you to serve customers more efficiently. • Use vertical applications from vendors with deep domain expertise. Their applications are more likely to eliminate extraneous features and have better industry-optimized data models.

Prediction 8: AI=New UI

By 2024, AI-Enabled User Interfaces and Process Automation Will Replace a Quarter of Today's Screen-Based Apps in Latin America; by 2022, 25% of Enterprises Will Use Conversational Speech Tech for Customer Engagement
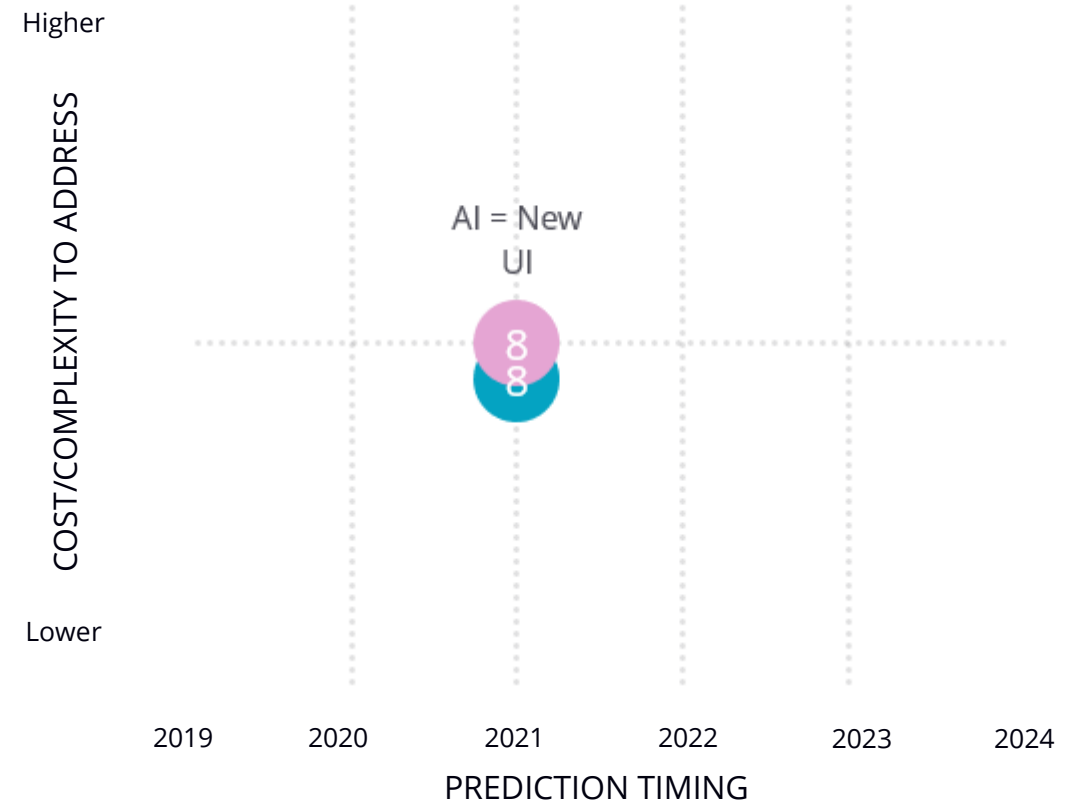
Prediction #8: AI=New UI
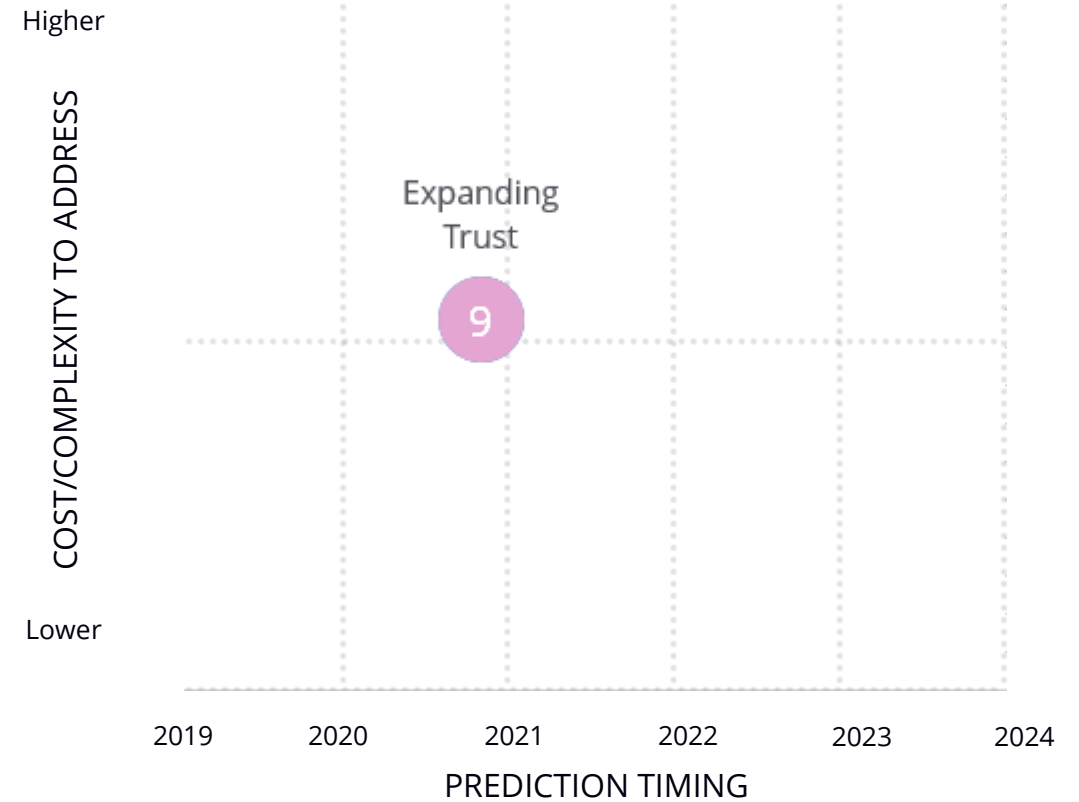
By 2024, AI-Enabled User Interfaces and Process Automation Will Replace a Quarter of Today's Screen-Based Apps in Latin America; by 2022, 25% of Enterprises Will Use Conversational Speech Tech for Customer Engagement

IT and Business Impact	• IT will be expected to become familiar with and begin using conversational AI platforms in developing the next generation of enterprise applications. • The conversational speech technologies area is morphing into a collection of complex integrated technologies. • Customer-facing departments' most valuable use cases will drive both internal adoption and external customer satisfaction. Data feeds and database access will need to reflect these requirements.
Guidance for Technology Buyers	• Develop a strategic plan for when and where voice-based conversational technologies should be utilized within the enterprise. Develop a short list of prospective vendors of conversational AI platforms to be used when prototyping these new types of interfaces. • Become familiar with robotic and intelligent process automation vendor capabilities and utilize these in planning for business process and task automation.

Prediction 9: Expanding Trust

By 2022, in Latin America, 20% of Servers Will Encrypt Data at Rest and in Motion, Over 20% of Security Alerts Will Be Handled by AI-Powered Automation, and more than 5 Million People in the Region, will Have Blockchain-Based Digital Identities

Higher

Lower

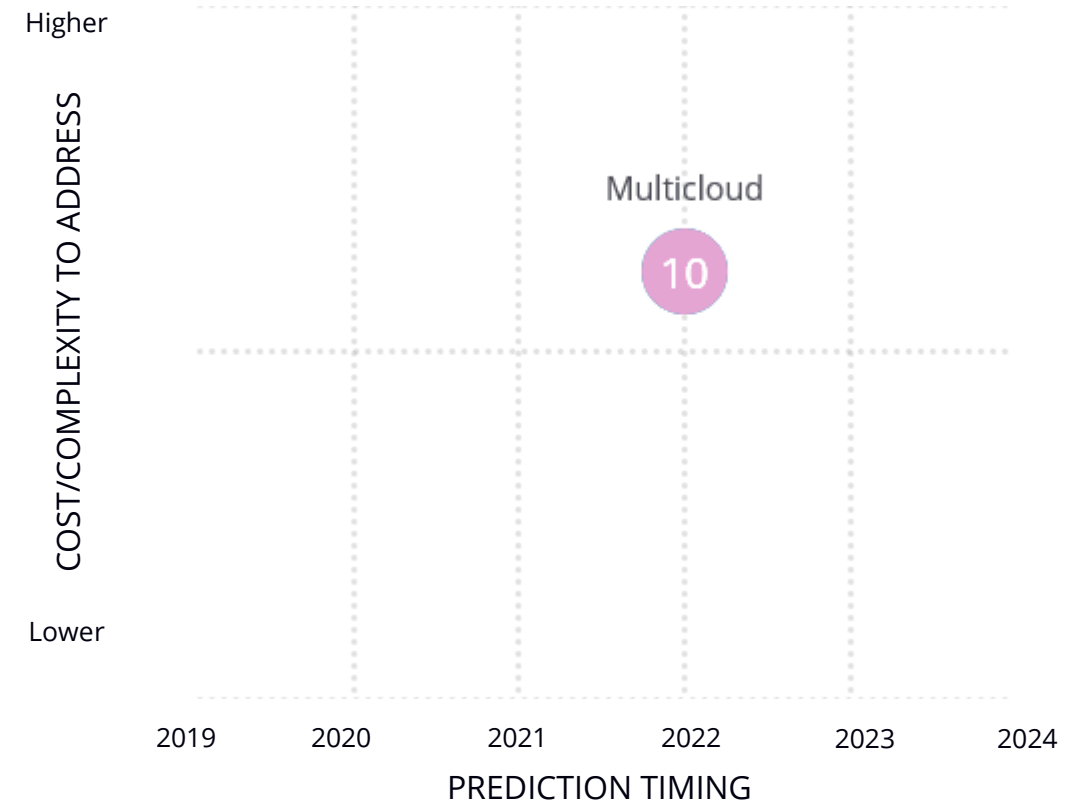COST/COMPLEXITY TO ADDRESS

Expanding Trust

9

2019   2020   2021   2022   2023   2024

PREDICTION TIMING

Prediction #9: Expanding Trust

By 2022, in Latin America, 20% of Servers Will Encrypt Data at Rest and in Motion, Over 20% of Security Alerts Will Be Handled by AI-Powered Automation, and More than 5 Million People in the Region, will Have Blockchain-Based Digital Identities

IT and Business Impact	• Pervasive encryption will simplify and strengthen the IT data protection mandate, increase compliance, and prevent various types of breaches. • No organization will be able to adopt pervasive encryption across its infrastructure all at once — this will be a gradual process, starting with the platforms that host the most sensitive data, then working outward to the systems that these platforms interact with. • The idea of an enterprise perimeter is dissolving, as it includes public and private cloud, mobile and contractor access, and the Internet of Things, which in many cases is machine-to-machine (M2M).
Guidance for Technology Buyers	• Be on the lookout for platforms (on-prem and in the cloud) that are launched with full encryption capabilities. Ask your main vendors whether — and when — such systems are on their road maps. • Work with consortiums and communities to build solutions. • Develop an initial response mechanism based upon the level of risks or severity — that is, if an asset is not critical, let the platform initiate an automated response, be it a patch or sending the miscreant to the VPN.

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Prediction 10: Multicloud

By 2022, the Top 4 Cloud "Megaplatforms" Will Host 70% of IaaS/PaaS Deployments in Latin America, But by 2024, 80% of the top 1000 companies in Latin America Will Mitigate Lock -In Through Multicloud/Hybrid Technologies and Tools
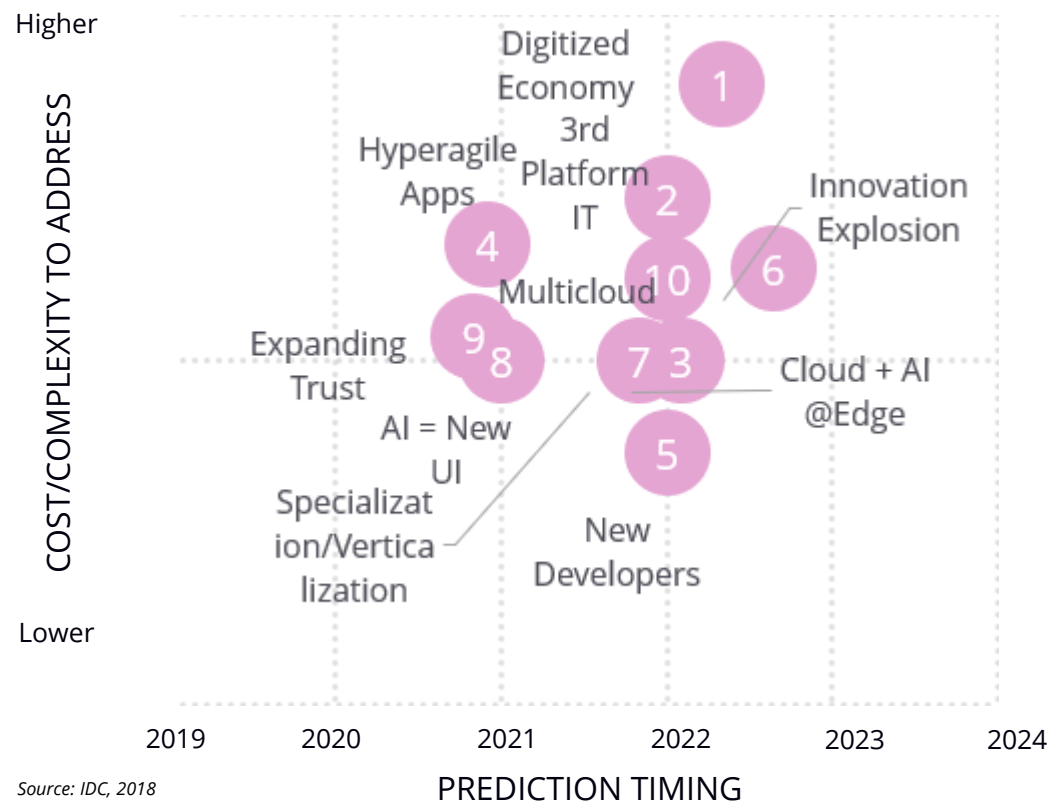
Higher

COST/COMPLEXITY TO ADDRESS

Multicloud

10

Lower

2019   2020   2021   2022   2023   2024

PREDICTION TIMING

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IT and Business Impact

- An integrated hybrid/multicloud management strategy will become a core capability over the next three years. Lack of an integrated strategy will result in suboptimal resource utilization, limited access to best-available technology innovations, longer problem identification and resolution cycle times, and limited vendor leverage.

- Designing hybrid applications that consume services on-premises and aboard multiple public cloud platforms requires application architects to think about the impact of distributed systems.

Guidance for Technology Buyers

- Create an integrated hybrid/multicloud management strategy that takes advantage of the unique properties of each of the public cloud megaplatforms
- Look for technologies that support open protocols that enable the deployment and delivery of capabilities in a distributed multicloud environment.
- Pick your cloud megaplatforms providers wisely. Keep functionality versus multiplatform support trade-offs high on your assessment list.

IDC FutureScape:
Worldwide & Latin America Implications

Higher

COST/COMPLEXITY TO ADDRESS

Digitized Economy 3rd Platform IT

Hyperagile Apps

Innovation Explosion

Multicloud

Expanding Trust

Cloud + AI @Edge

AI = New UI

Specialization/Verticalization

New Developers

Lower

2019 2020 2021 2022 2023 2024

PREDICTION TIMING

Source: IDC, 2018

1. By 2022, 50%+ of Latin American GDP Will Be Digitized, with Growth in Every Industry Driven by Digitally Enhanced Offerings, Operations, and Relationships and Almost $380 billion in IT-Related Spending in 2019–2022

2. By 2022, almost 70% of All IT Spending in Latin America Will Be on 3rd Platform Technologies, as Over 75% of All Enterprises Build "Digital Native" IT Environments to Thrive in the Digital Economy

3. By 2022, Over 20% of Organizations' Cloud Deployments in Latin America Will Include Edge Computing and 15% of Endpoint Devices and Systems Will Execute AI Algorithms

4. By 2020, 60% of All New Apps in Latin America Will Feature Microservices Architectures That Improve the Ability to Design, Debug, Update, and Leverage Third-Party Code; 25% of All Production Apps Will Be Cloud Native

5. By 2022, a New Class of Professional Developers Producing Code Without Custom Scripting Will Expand the Developer Population by 15%, Accelerating Digital Transformation

6. From 2018 to 2023 — with New Tools/Platforms, More Developers, Agile Methods, and Lots of Code Reuse — close to 30 Million New Logical Enterprise Apps Will Be Created by Latin American developers

7. By 2022, 15% of Public Cloud Computing Will Be Based on Non-x86 Processors (Including Quantum); by 2022, Organizations Will Spend More on Vertical SaaS Apps than Horizontal Apps, especially for those that leverage a local or regional competitive advantage over global firms.

8. By 2024, AI-Enabled User Interfaces and Process Automation Will Replace a Quarter of Today's Screen-Based Apps in Latin America; by 2022, 25% of Enterprises Will Use Conversational Speech Tech for Customer Engagement

9. By 2022, in Latin America, 20% of Servers Will Encrypt Data at Rest and in Motion, Over 20% of Security Alerts Will Be Handled by AI-Powered Automation, and More than 5 Million People in the region, will Have Blockchain-Based Digital Identities

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Learn More!

IDC FutureScape:
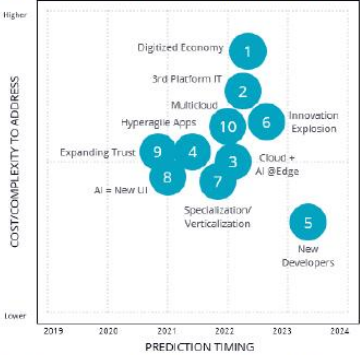*Worldwide IT Industry 2019 Predictions*
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