IDC FutureScape: Worldwide IT Industry 2017 Predictions Latin America Impact

Q&A with the
IDC Latin America 2017 Predictions Team

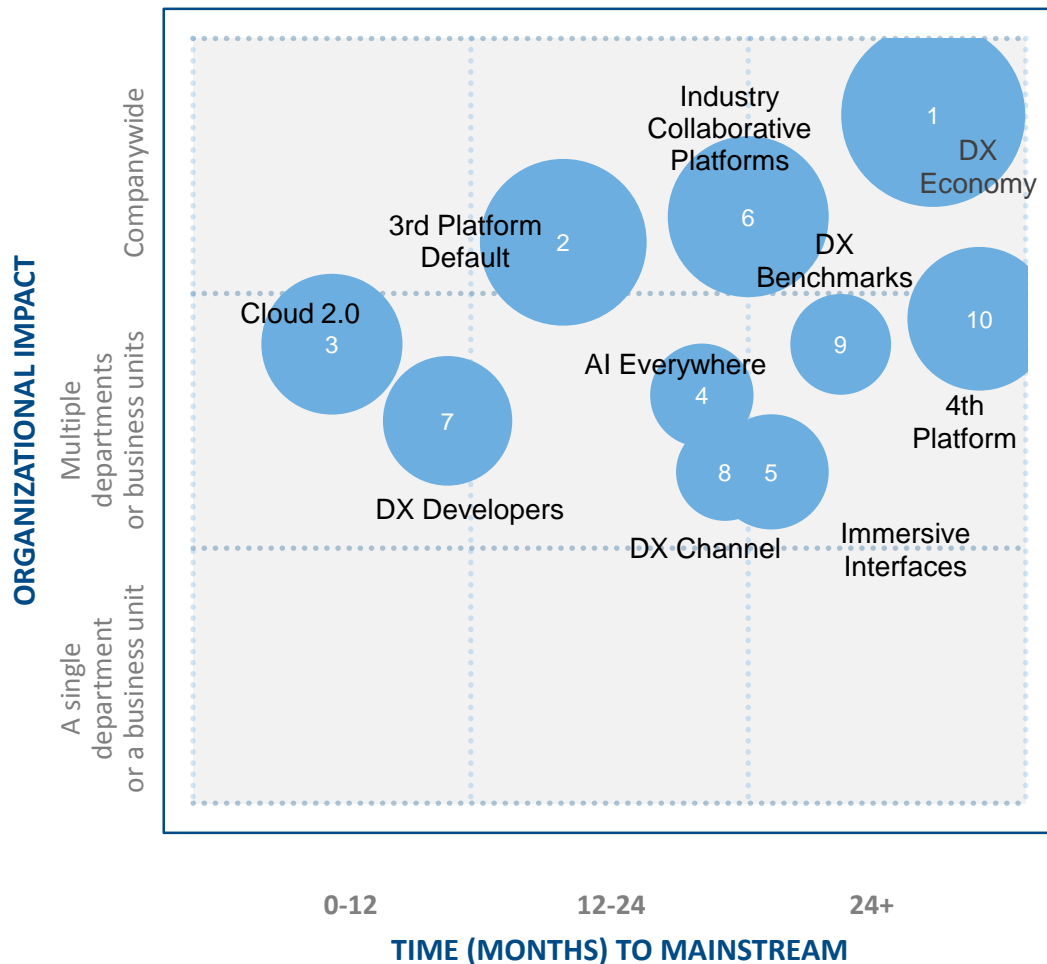December, 2016

Latin America IT Industry Predictions Team 2017

Bold = **Q&A** participants

- **Ricardo Villate**
- **Diego Anesini**
- **Luciano Crippa**
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- **Jay Gumbiner**
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- Diego Valer
- Jose Daniel Zegarra

IDC FutureScape:
IT Industry 2017 Latin America Implications

IDC FutureScape

ORGANIZATIONAL IMPACT

Companywide

Multiple departments or business units

A single department or a business unit

Industry Collaborative Platforms

3rd Platform Default

Cloud 2.0

DX Economy

DX Benchmarks

AI Everywhere

4th Platform

DX Developers

DX Channel

Immersive Interfaces

0-12   **12-24**   **24+**

TIME (MONTHS) TO MAINSTREAM

1 By 2020, 40% of Latin America's top 3000 companies will see the majority of their business depend on their ability to create digitally enhanced products, services, and experiences

2 By 2020, 3rd Platform technologies and services will drive nearly 40% of IT spending — growing at twice the rate of the total it market

3 By 2020, 55% of all enterprise IT Infrastructure and software spending will be for cloud-based offerings; the cloud will morph to become distributed, trusted, intelligent, industry focused, and channel mediated

4 By 2020, 10% of all Digital Transformation initiatives, and 60% of all effective IoT efforts, will be supported by Cognitive/AI capabilities

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6 By 2019, the Number of Industry Collaborative Clouds in Latin America will double to more than 50 across many industries; most of these will come from partnerships between top cloud vendors or public and private industry collaboration efforts.

7 By year-end 2017, over 40% of the Top 3,000 companies in Latin America will have dedicated digital transformation and innovation teams

8 By 2020, Over 50% of Cloud Services Providers' Cloud Revenue Will Be Mediated by Channel Partners/Brokers

9 DX Benchmarks Define New Leaders — By 2020, all enterprises' performance will be measured by a demanding new set of DX-driven benchmarks, requiring 20–100% better business performance

10 By 2020, 1/3 of Health/Life Sciences and Consumer Products companies will begin developing the first wave of products and services tightly integrating 3rd Platform technologies with the human body.
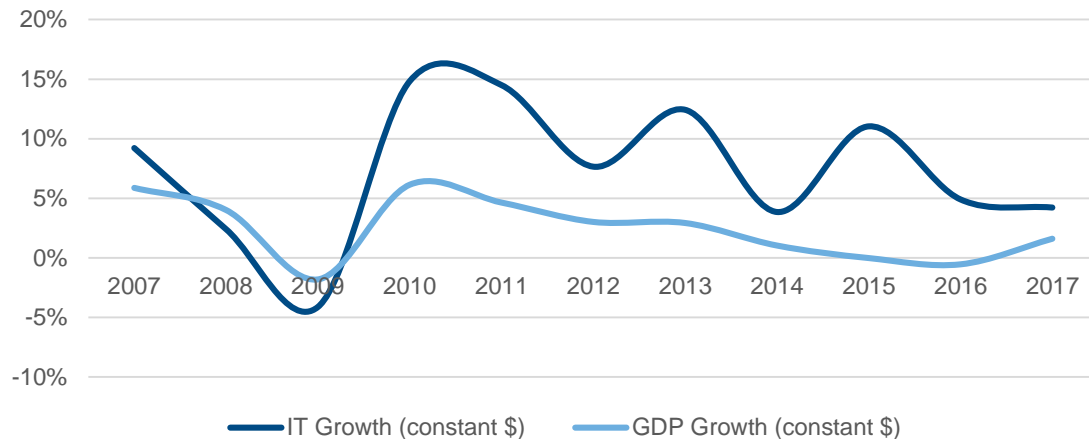
Note: The size of the bubble indicates complexity/cost to address. Source: IDC, 2016
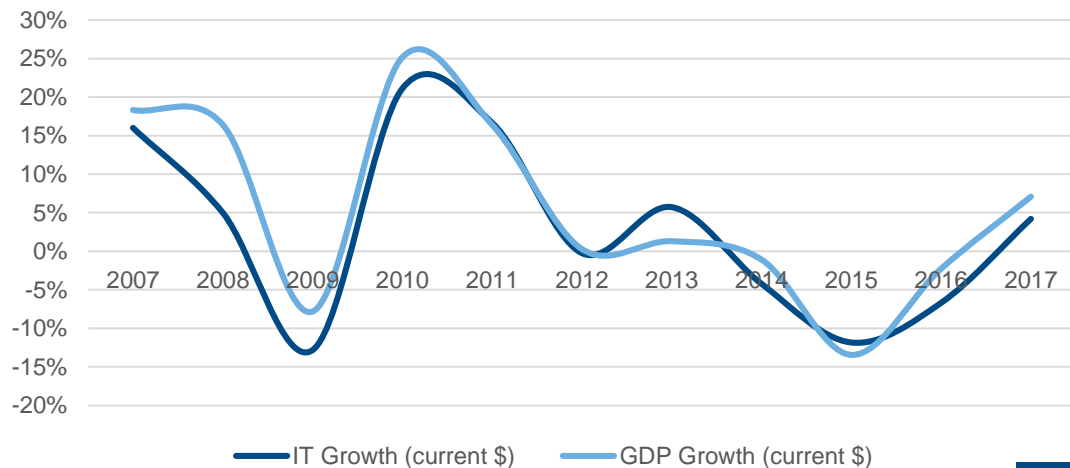
IDC Analyze the Future

Digital Transformation At The Heart of Economic transformation

- IT spending in dollars of that year grows at similar rates to that of the economy

- Total ICT spending in Latin America will reach 274.2 billion dollars in 2017, 3.9% more than in 2016 at constant dollar rates.

- Those companies that invest during the economic downturn are the same companies that show greater results and higher profitability after the rebound.
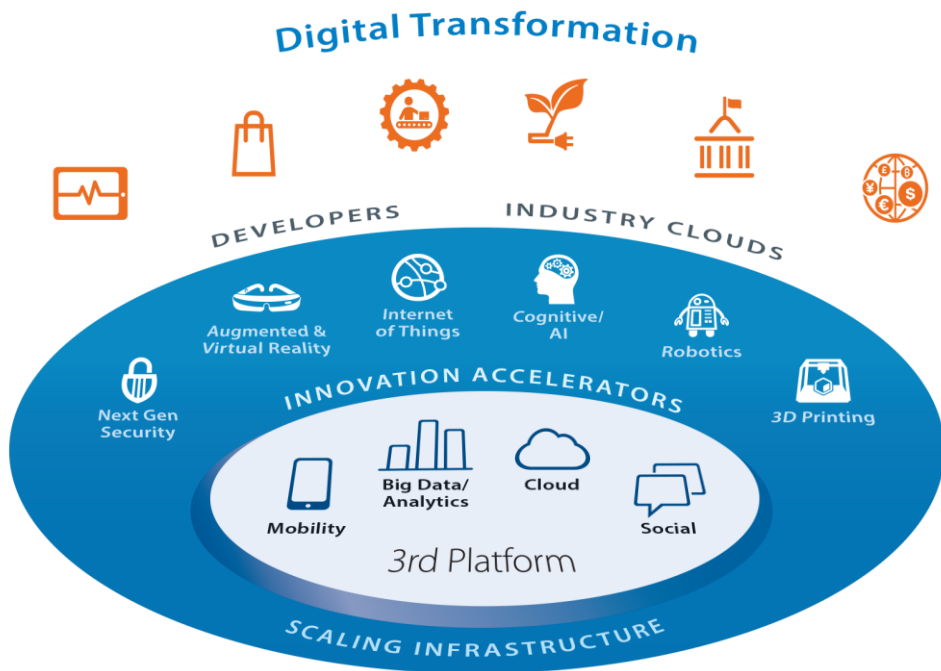
Latin America IT vs. GDP Growth (constant $)

IT Growth (constant $) — GDP Growth (constant $)

Latin America IT vs. GDP Growth (current $)

IT Growth (current $) — GDP Growth (current $)

Key Themes: 2017-2020

Digital Transformation

DEVELOPERS   INDUSTRY CLOUDS

Augmented & Virtual Reality
Internet of Things
Cognitive/AI
Robotics

INNOVATION ACCELERATORS

Next Gen Security
3D Printing

Mobility
Big Data/Analytics
Cloud
Social

3rd Platform

SCALING INFRASTRUCTURE

Source: IDC

DX at macroeconomic scale

Economic Transformation in Emerging Markets

3rd Platform pillars go "2.0"

Innovation Accelerators scale up

4th Platform over the horizon

Everything is speeding up

Consumer scale a must for all

Ecosystems as important as IP

Dawn of the DX Economy

Digital Transformation (DX)

Using **3rd Platform** technologies to create value and competitive advantage through:
- New/Enhanced Offerings
- New Business Models
- New Relationships

Prediction 1

By 2020, 40% of Latin America's top 3000 companies will see the majority of their business depend on their ability to create digitally-enhanced products, services and experiences.

By the end of 2018, **revenue growth** from information-based products will grow 50+% for 1/3 of the top 3000 companies in the region

By 2020, 1/5 of CEOs and COOs of the Top 3000 companies will have spent at least 5 years in a **tech leadership** role.

In 2020, regional **spending on DX initiatives** will reach $22 billion, more than 2X larger than 2016.

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3rd Platform Dominates – and Evolves
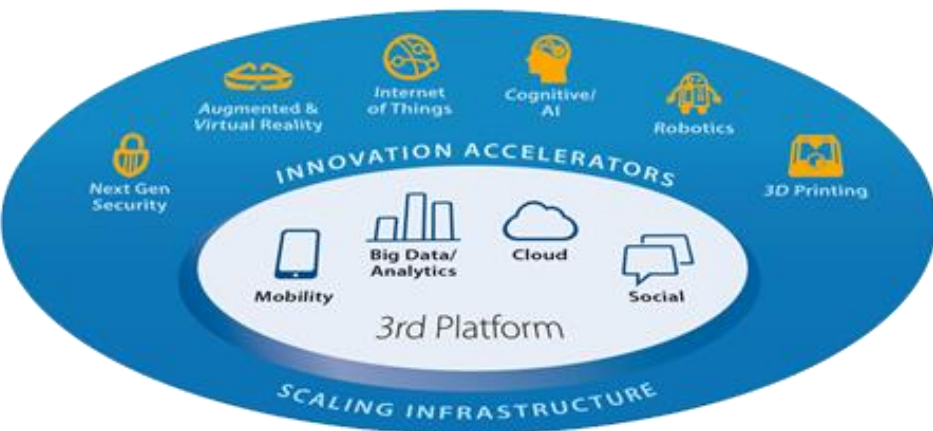
Prediction 2

By 2020, 3rd Platform technologies & services will drive nearly 40% of IT spending – growing at over 5X the rate of the total market.

The **"4 pillars"** will evolve:

- **Mobility** – IoT, 5G, wireless power
- **Cloud** – Cloud 2.0
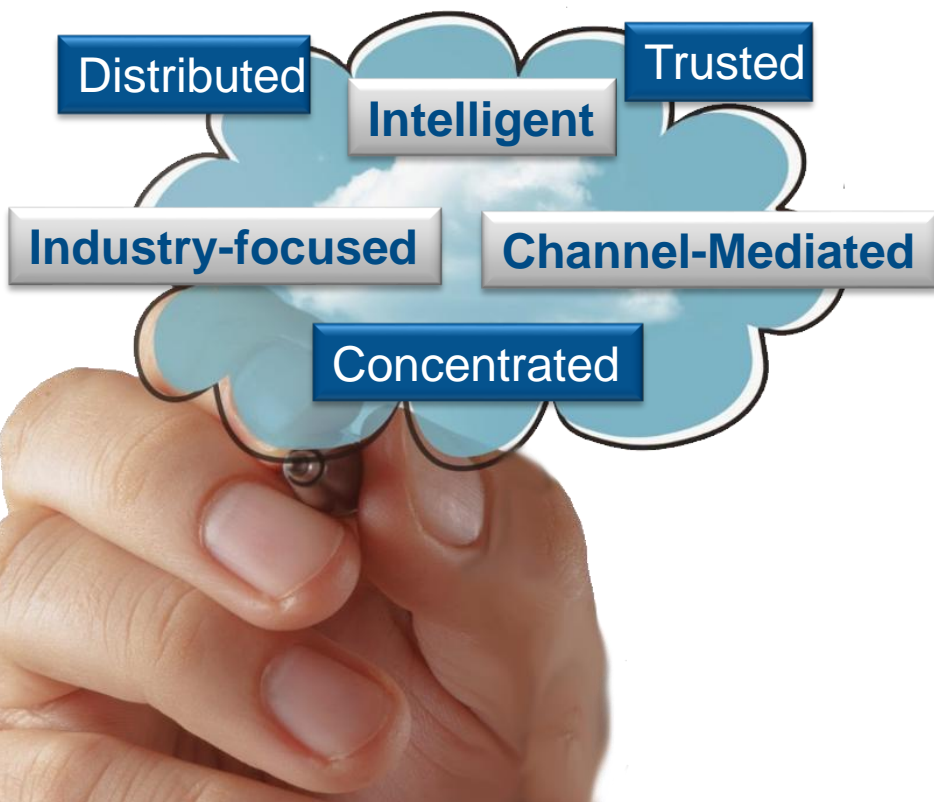- **Big Data** – Cognitive/AI
- **Social** – Immersive, with AR/VR

Innovation Accelerators will mainstream:

- **Cognitive/AI**
- **IoT**
- **AR/VR**

Get Ready for "Cloud 2.0"

Distributed

Intelligent

Trusted

Industry-focused

Channel-Mediated

Concentrated

Prediction 3

By 2020, 55% of Enterprise IT Infrastructure and Software will be for Cloud-based offerings.

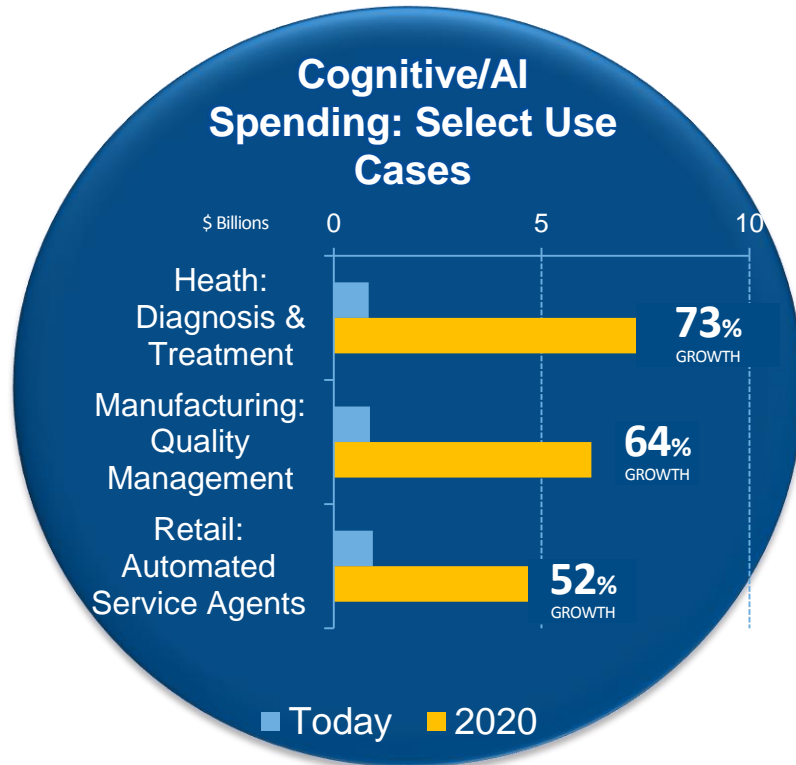| Distributed	Trusted	Concentrated
• 50+% **off-prem** by 2018 in the region • 85% **multicloud** by 2018 • 43% of IoT processed **at the edge** in 2019	• By 2020, Cloud = "**secure**" • Cloud-based **encryption**, **threat analytics**, **block chain**, **compliance**	• By 2020, the **Top 5 Cloud Iaas/PaaS** players globally will control at least 75% share (vs about 50% in 2016)

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AI, Everywhere

Cognitive/AI Spending: Select Use Cases

$ Billions

Heath: Diagnosis & Treatment		**73**% GROWTH
Manufacturing: Quality Management		**64**% GROWTH
Retail: Automated Service Agents		**52**% GROWTH

■ Today ■ 2020

Prediction 4

By 2020, 10% of DX initiatives – and 60% of IoT initiatives – will be supported by Cognitive/AI capabilities.

By 2025, 75% of **developer teams** will include Cognitive/AI functionality in one or more applications/ services.

By 2019, over 110 million **consumer devices** with embedded intelligent assistants will be installed in U.S. households.

In 2017-2020 9 of the Top 10 Cognitive/AI use cases will be **industry-focused**, account for 85% of Top 10 investment.

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Immersive Interfaces Catch Fire

IDC FutureScape

Prediction 5

In 2017, 1 out of 10 consumer-facing Latin America top companies will experiment with AR/VR as part of their marketing efforts.

In 2018, the monthly active user base of **consumers** using mobile augmented reality apps will exceed 30M in Latin America.	By 2020, over 20% of commercial media on Facebook will be 360^0/VR, as **Social goes "immersive"**. Dark horse scenario: 20% of <u>all</u> social media is 360^0 by 2020.	In 2019, companies will deploy ear-worn wearables, with AI-enabled **voice interface**, as digital assistants for customer-facing roles.

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10

Industry Collaborative Clouds Surge

A cloud-based platform through which multiple companies in an industry collaborate in some fashion towards a common goal, such as improving industry insight and/or capability.

Industry Collaborative Cloud Market

Prediction 6

By 2019, the number of Industry Collaborative Clouds will double to more than 50.

By 2020, almost 60% of enterprises will actively participate in **compliance Clouds**.	By 2020, 30% of the top 3000 companies in the region will be **suppliers of digital services** through Industry Collaborative Clouds.	90%+ of Industry Collaborative Clouds will partner with a **Cloud mega-platform provider**.

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DX Developer Teams, Communities

Prediction 7

By year end 2019, over 60% of the top 3,000 companies in Latin America will have dedicated digital transformation/innovation teams.

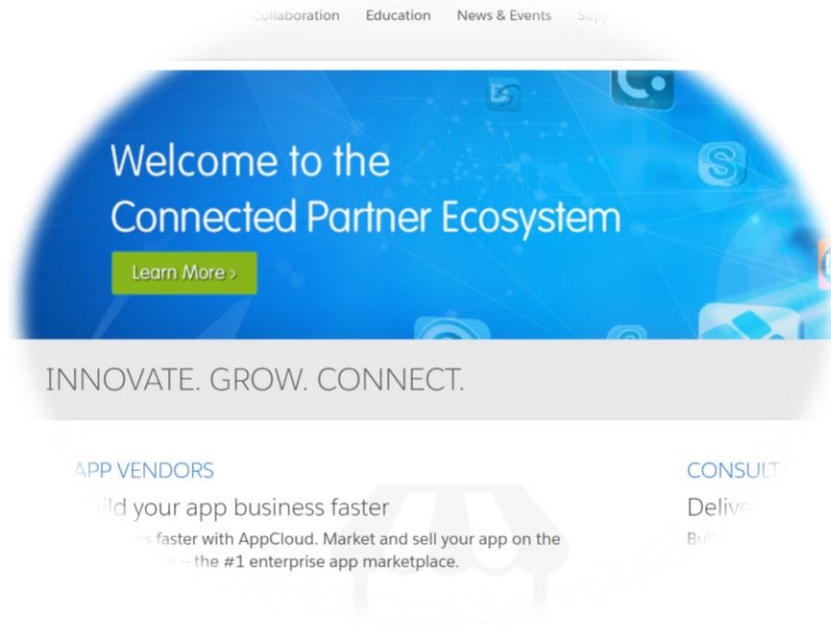| By 2019, enterprises pursuing DX strategies will expand their **developer teams** by 2-3X	By 2019, more than 20% of the value of software will be monetized through **"things"** and **consumer and business services**.	By 2020, DX teams will source 80%+ of their solution components from **open source communities**.

The DX Channel Arrives

Prediction 8

By 2020, over 50% of Cloud services providers' revenues will be mediated by channel partners/brokers.

By 2020, **major IT distributors** will have transitioned at least 1/3 of their business from hardware sales to cloud services sales/brokering	By 2019, most **Cloud service providers outside of the Top 10** will offer brokered access to their leading competitors' cloud services.	By 2020, the "cloud broker" landscape serving SMBs will become **highly verticalized**, offering cloud-based business services.

New DX Enterprise Benchmarks for All

DIGITAL LEADERSHIP	DIGITAL OMNI-EXPERIENCE	DIGITAL INFORMATION	DIGITAL OPERATING MODEL	DIGITAL WORKFORCE
33%	**35%**	**100%**	**20%**	**50%**
of CEOs will have technology leadership experience	improvement in Net Promoter score when customers own their experience	growth of revenue from information-based products	of operational processes will be self healing	reduction in management layers

Prediction 9

By 2020, all enterprises' performance will be measured by a demanding new set of DX-driven benchmarks, requiring 20-100% better business performance

4th Platform On the Horizon

The 4th Platform: integration of digital technologies with human biosystems, and the use of digital technologies to engineer biological systems at the cellular and subcellular level.

Direct Neural Interfaces

The Future of Our Digital Senses — Augmented sensing

Embedded/Injectable Tech — MIT and Microsoft Research made a 'smart' tattoo that remotely controls your phone

Augmented identity

Augmented memory & cognition

The U.S. Military Is Developing Brain Implants To Help Restore Memory

3D Printed Guides Used for Complex Nerve Regeneration, May Treat Spinal Injuries

Augmented bio-structure

Augmented mobility

This $40,000 Robotic Exoskeleton Lets the Paralyzed Walk

Prediction 10

By 2020, 1/3 of Health/Life Sciences and CP companies will begin to develop the first products and services **tightly integrating 3rd Platform technologies with the human body**.

"Augmented Humanity" offerings will be mainstream in the mid-2020s.

R&D/Innovators stage: now – 2021
Early Adopters stage: 2021-2026
Early Mainstream stage: 2026 -

IDC — Analyze the Future

…to "Innovation Graph"
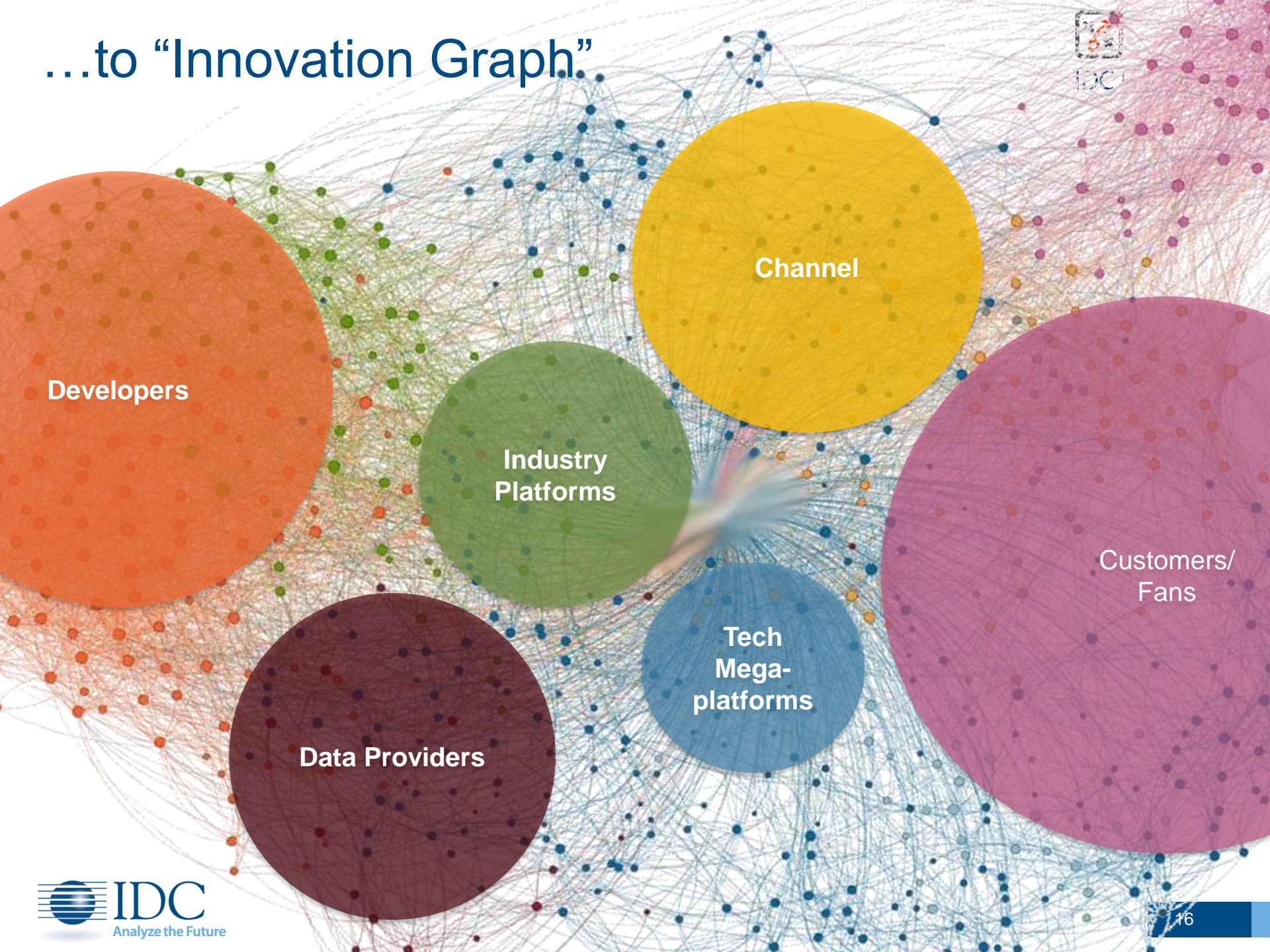
Channel

Developers

Industry
Platforms

Customers/
Fans

Tech
Mega-
platforms

Data Providers

IDC FutureScapes:
2017 Worldwide Predictions

Dawn of the DX Economy: New Rules, Roles & Requirements

Over the past five years, businesses have been reshaped by technology, new contenders have emerged, and the center of gravity has shifted to the customer.
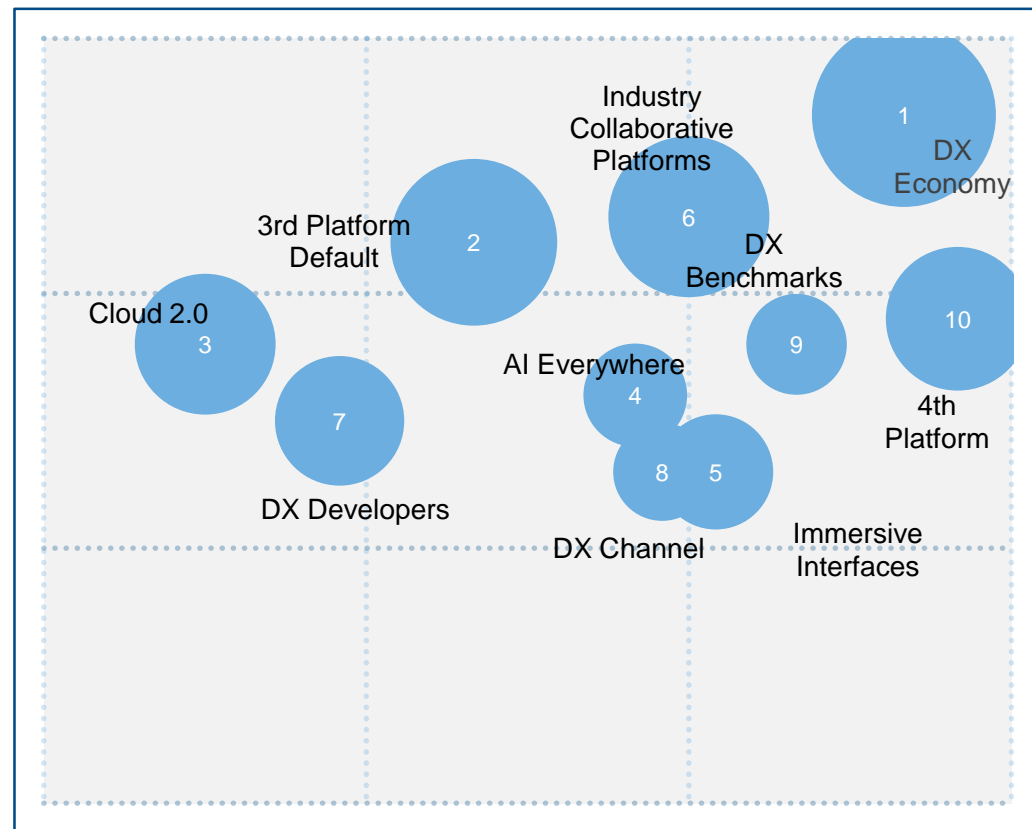
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IDC FutureScape: Worldwide Digital Transformation (DX) 2017 Predictions

IDC FutureScape: Worldwide CIO Agenda 2017 Predictions

IDC FutureScape: Worldwide CMO 2017 Predictions

IDC FutureScape: Worldwide 3D Printing 2017 Predictions

IDC FutureScape: Worldwide Analytics, Cognitive/AI, and Big Data 2017 Predictions

IDC FutureScape: Worldwide Cloud 2017 Predictions

IDC FutureScape: Worldwide Connected Devices 2017 Predictions

IDC FutureScape: Worldwide Consumer Technology 2017 Predictions

IDC FutureScape: Worldwide Datacenter 2017 Predictions

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IDC FutureScape: Worldwide HPDA 2017 Predictions

IDC FutureScape: Worldwide Imaging, Printing, Doc Solutions 2017 Predictions

IDC FutureScape: Worldwide Intelligent ERP 2017 Predictions

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IDC FutureScape: Worldwide Security Products & Services 2017 Predictions

IDC FutureScape: Worldwide Services 2017 Predictions

IDC FutureScape: Worldwide Social and Customer Experience 2017 Predictions

IDC FutureScape: Worldwide Software Business Models and Monetization 2017 Predictions

IDC FutureScape: Worldwide Wearables/AR-VR 2017 Predictions

IDC FutureScape: Worldwide Connected Vehicle 2017 Predictions

IDC FutureScape: Worldwide Financial Services 2017 Predictions

IDC FutureScape: Worldwide Government 2017 Predictions

IDC FutureScape: Worldwide Healthcare 2017 Predictions

IDC FutureScape: Worldwide Manufacturing 2017 Predictions

IDC FutureScape: Worldwide Manufacturing Product /Service Innovation 2017 Predictions

IDC FutureScape: Worldwide Manufacturing Supply Chain 2017 Predictions

IDC FutureScape: Worldwide Mining 2017 Predictions

IDC FutureScape: Worldwide National Security & Public Safety 2017 Predictions

IDC FutureScape: Worldwide Oil & Gas 2017 Predictions

IDC FutureScape: Worldwide Operations Technology 2017 Predictions

IDC FutureScape: Worldwide Payments 2017 Predictions

IDC FutureScape: Worldwide Retail 2017 Predictions

IDC FutureScape: Worldwide Smart Cities 2017 Predictions

IDC FutureScape: Worldwide SMB 2017 Predictions

IDC FutureScape: Worldwide Telecom 2017 Predictions

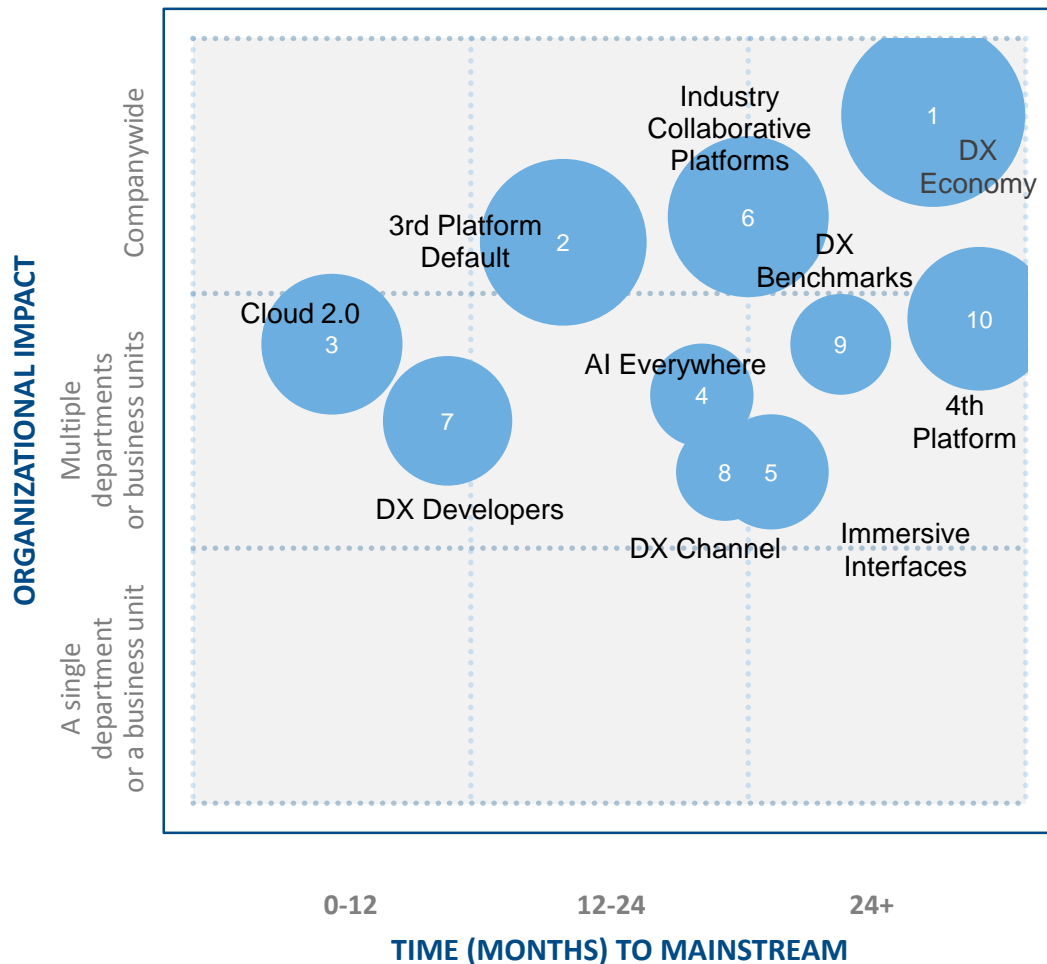IDC FutureScape: Worldwide Utilities 2017 Predictions

Our Q&A Team

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