



CIO Trend Report 2017

Info-Tech Research Group, Inc. is a global leader in providing IT research and advice. Info-Tech's products and services combine actionable insight and relevant advice with ready-to-use tools and templates that cover the full spectrum of IT concerns.

Introduction

The business has taken over technology adoption decisions. This is the result of IT's difficulty in adopting the last set of mega-trends known as the "SMAC-stack" – Social, Mobile, Analytics, and the Cloud.

Without a keen awareness of how trends impact the business, the IT department will always be relegated to the confines of the server room. The problem is that the next latest and greatest technology is always on the horizon. But just as one seems like it's about to rise, it fizzles and another "hot" trend emerges.

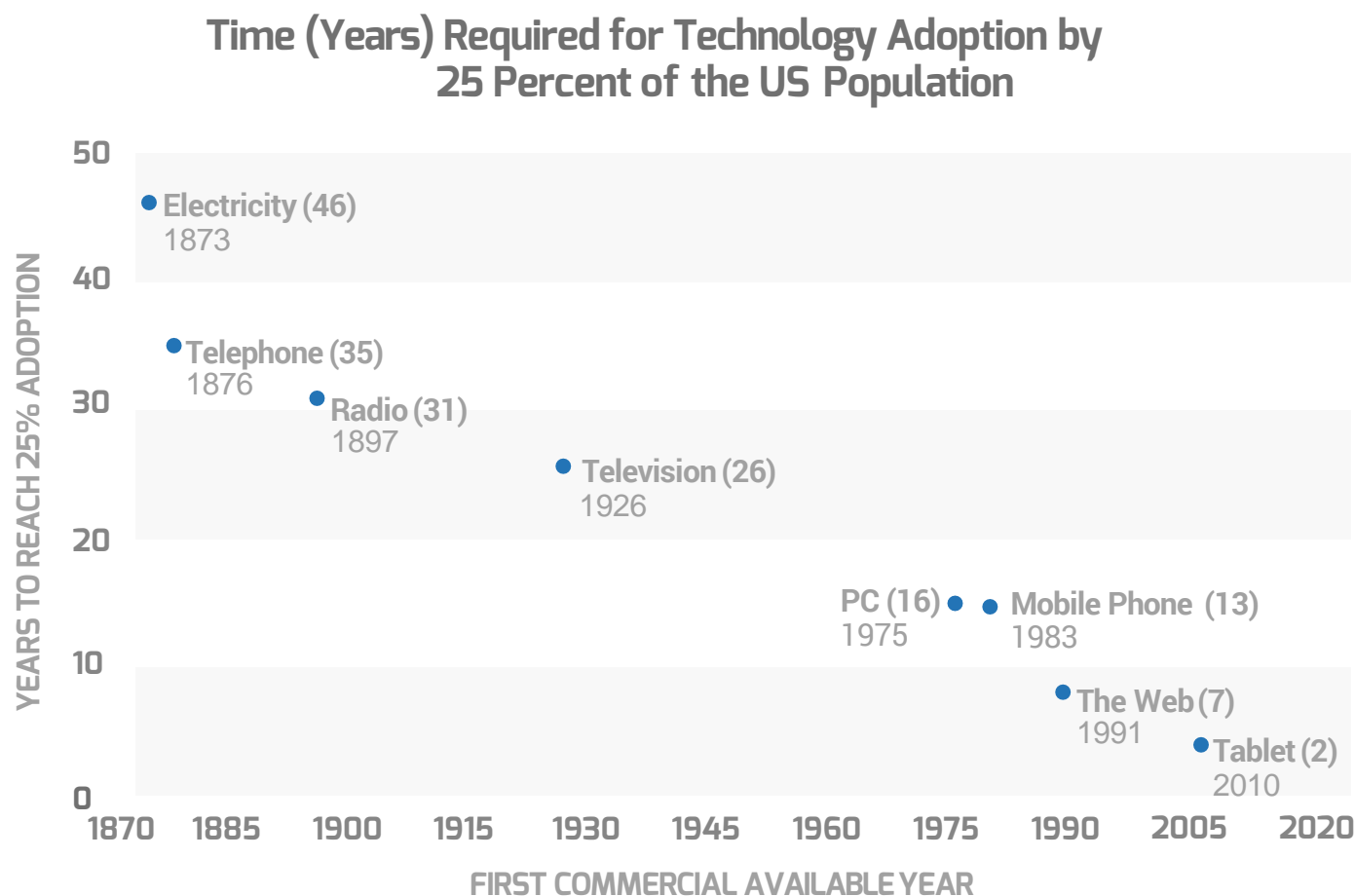
Trend reports can provide an academic outlook of what is happening in the technology landscape, but not much else. CIOs need a framework to develop concrete insight into what the future is likely to bring, and how to act upon it.

**EXECUTIVE
BRIEF**

The speed of technology adoption has been **steadily increasing**, and will continue to do so.

86%

of business executives anticipate that the pace of technology change will continue to increase at an unprecedented rate in their industry over the next three years.



Sources: Singularity & Pew Research Center, Accenture, 2016

**EXECUTIVE
BRIEF**

The SMAC stack is the new foundation

Social, Mobile, Analytics, and Cloud are now mainstream technologies

191 million social media users
in the United States in 2017

Sources: Statista & eMarketer, 2016

SMAC

The SMAC stack is the new foundation

Social, Mobile, Analytics, and Cloud are now mainstream technologies

4.61 billion mobile phone users worldwide

Sources: Statista & eMarketer, 2016

SMAC

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Social, Mobile, Analytics, and Cloud are now mainstream technologies

The Global Business Analytics market to grow from \$40.8 billion (USD) in 2014 to **\$66.7 billion** in 2019

Sources: Statista & eMarketer, 2016

SMAC

The SMAC stack is the new foundation

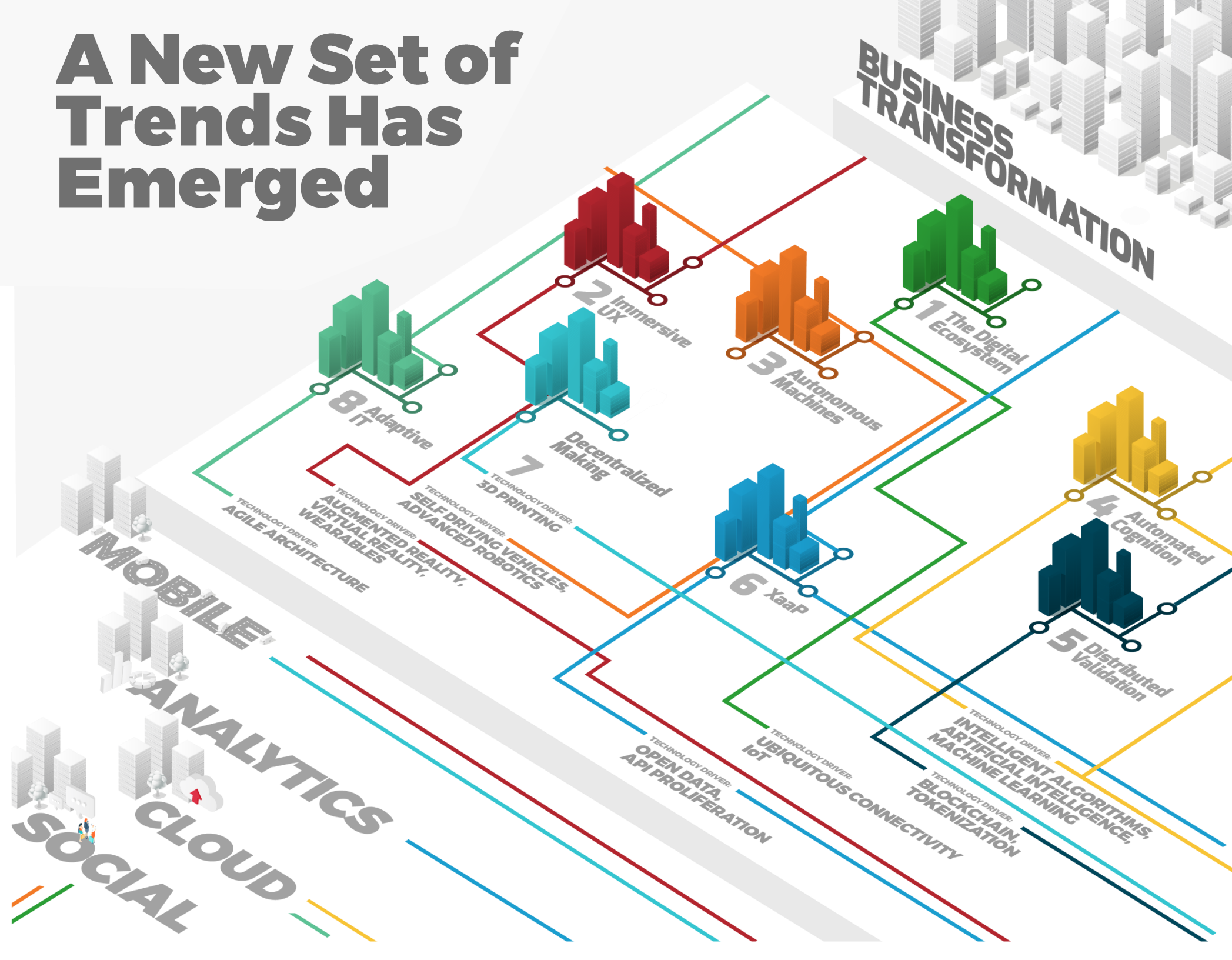
Social, Mobile, Analytics, and Cloud are now mainstream technologies

\$138 billion (USD) in revenue will be generated worldwide in the public cloud market by 2017

Sources: Statista & eMarketer, 2016

SMAC

A New Set of Trends Has Emerged



01

THE DIGITAL ECOSYSTEM

New service bundles, cost reduction strategies, ways for users to self-manage, and opportunities for collaboration are on the horizon as a result of the insight gleaned from the ability not just to understand what we are doing, but how we are doing it.

02

IMMERSIVE UX

The external environment, through devices, can now be re-rendered and fitted with an overlay of information that technology users can observe and interact with. This environment can also be totally immersive, where users no longer view what is external, and their reality becomes virtual.

03

AUTONOMOUS MACHINES

Machines represent the opportunity for humankind to eventually stop having to do any activities deemed to be undesirable on the basis of physical difficulty, repetition, monotony, and danger. Augmenting the human physical capability can lead to immense benefit in terms of increased productivity and locomotion.

04

AUTOMATED COGNITION

The business is demanding real-time responses to increasing amounts of data; this is where the need for an extension of the human mind comes from. Outsourcing analysis and interpretation of information to a machine is the response to the human mind's finite ability to process and react to data in an expedient manner.

05 DISTRIBUTED VALIDATION

From the trend toward peer reviewing goods and services online to the social sourcing of news media and information, there is a growing comfort with and appetite for leveraging the collective crowd to help make individual decisions. This could replace our current system for processing transactions, moving assets, and any and all other cases where an institution is an intermediary.

06 XaaP (EVERYTHING AS A PLATFORM)

When an organization decides to engage with its competitive environment as a platform, it has made a decision to be humble. The decision to become a platform is essentially an acknowledgement that not only might you not know how to solve all your most pressing problems, but you also might not even know what your problems are.

07 DECENTRALIZED MAKING

Conventional construction and creation is being challenged. The world of complex logistics, centralized manufacturing and the waste it creates coupled with the desire for more flexibility have given rise to a new trend toward decentralized making.

08 ADAPTIVE IT

Business needs have become very diverse and groups are consuming technology in different patterns. As such, an adaptive IT operating model must support and enable multiple groups of technology service consumers, while continuously pivoting to meet changing business conditions and needs.

HOW OUR REPORT IS STRUCTURED

01 Trend Description

Each trend is provided with a description and key statistic to demonstrate scale and impact.

There is a new set of trends to consider. Stop getting left behind.

02 Signals & Drivers

The technology forces that drive each trend are discussed in detail.

Just because a trend is popular doesn't mean that it matters. Monitor signals to separate fad from fact and focus on what matters.

03 Outlook

Timing, impact, and forward-looking analyses are featured in each trend.

Impact and timing are industry dependent. Understand your industry's context to determine what to focus on next.

04 Case Study

Each trend features a case study that provides an example and gives context to what adoption could mean.

No two organizations are the same. Take a minimum-viable approach when considering trend adoption.

05 Risk & Uncertainty

Each trend is complemented with an analysis of risk and the most important, least certain variables.

Know the risks involved before undertaking to adopt a trend. Focus on a trend's critical uncertainties to determine the art of the possible.

06 Scenario Analysis

Each trend is provided with a set of scenarios and tactics that address them.

You can do anything, but you can't do everything. Choose tactics based on the scenarios that are most plausible and relevant to your context.

In the age of disruption, **plan to discover**

The role for the CIO moving forward into 2017 will be to help the organization become more proactive about competition and disruption. The CIO can accomplish this by doing the following:

- Scanning the organization's environment for signals in order to spot trends.
- Focusing on the critical uncertainties pertaining to any given trend and analyzing them to determine the art of the possible.
- Building agility into the organization's technology strategy to make room for discovery.

In 2017, IT can become a center of foresight and innovation for the organization, observing technology trends at their onset and helping shape business strategy.

40%

**of the Fortune 500
companies will be gone
in the next 10 years.**

Source: Deloitte, "Find Your Disruptive Advantage"

**"Build the strategy you
need for today. But plan
to expand it based on the
offerings you can deliver
tomorrow."**

– *Shane Saunderson,*
VP of IC/Things at Idea Couture

We applied the
**strategic foresight
methodology**, so can
you.

01 SIGNAL GATHERING

Begin with the analysis and gathering of market signals and statistics.

02 TRENDS & DRIVERS

Uncover the key causal technology forces driving each trend you discover.

03 SCENARIO BUILDING

Analyze the critical uncertainties associated with each trend to produce a set of plausible scenarios.

04 IDEATION

Use the scenarios as a canvas for ideation to develop a set of potential tactics to exploit each trend.

For more information on this methodology, see Info-Tech's blueprint: *Apply Strategic Foresight to Enable IT-Led Growth*

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