

Infrastructure Trend Report

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.

Overview

Change is here to stay. As technologies continue to evolve, enterprises often struggle to adapt at the pace the marketplace demands. Determining how to react to new technologies is of critical importance, but all too often the hype surrounding shiny new tech can hinder the strategic decision making that a proper deployment of that technology requires.

Info-Tech's 2018 Infrastructure Trend Report aims to help infrastructure and operations (I&O) managers cut through the hype surrounding the discussion of new technologies and focus on how these technologies matter for I&O and what they should do about them.

To identify the topics for the 2018 Trend Report, Info-Tech employed a combination of primary and secondary research. We began by compiling a long list of trends, based on what the buzz was about, and then narrowed that down to five trends using input from a survey of Info-Tech analysts. Info-Tech analysts considered the trends from the perspectives of their popularity and their likely impact on Infrastructure and Operations in the near- to medium-term future.

Overview

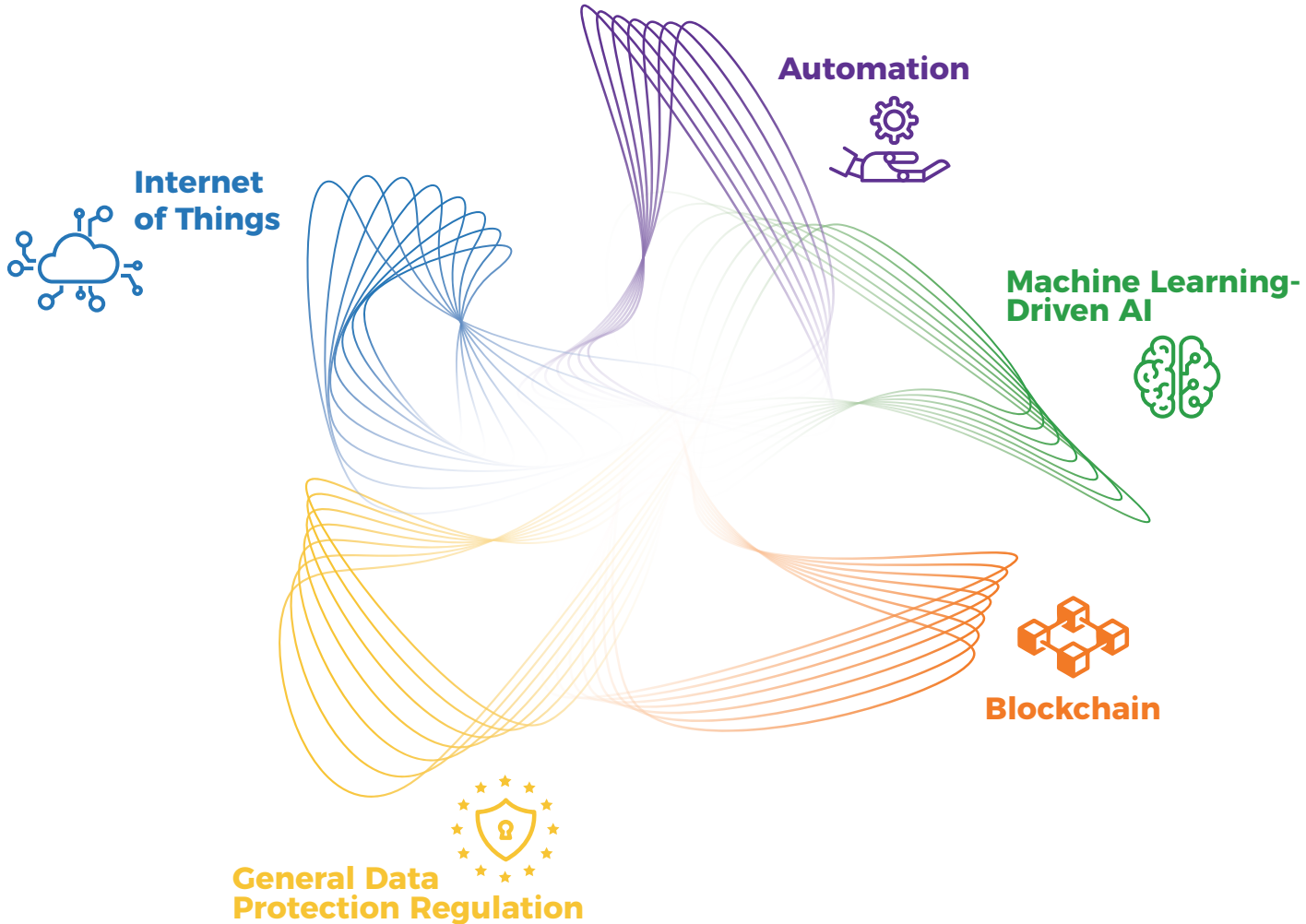
After identifying the trends, we undertook deeper secondary research into each topic, drew on our in-house expertise, and conducted research interviews with experienced industry practitioners.

Many of these trends are not new – some have been around, or even trending, for quite some time. But each trend, to varying degrees, has experienced a heightened level of interest over the past year or so and is worth considering with respect to its probable impact as technology evolves.

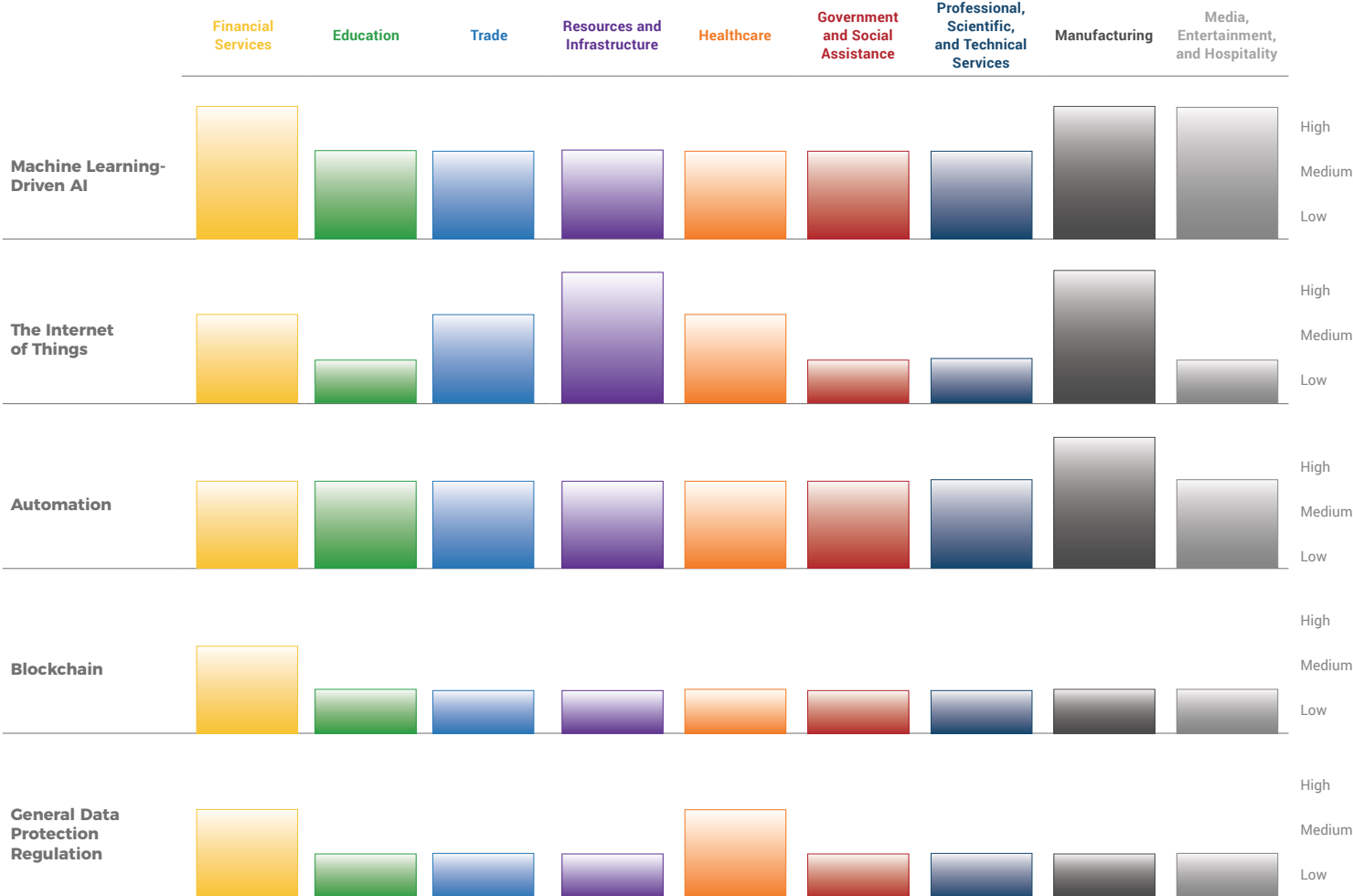
For each of five trends, we give Info-Tech's perspective on its impact and importance, provide data on its popularity, give some opinions of industry practitioners in text and video, and ultimately provide practical recommendations on what infrastructure and operations managers should do about it.

We hope that this report helps you orient your team to deliver more value to your organization in the year to come.

2018 Trends



Trend Impact





Practitioner Perspective

Managing Complexity

“IoT and AI together, and blockchain as well, represent a massive demand for computing throughput and telecommunications, mostly in a highly distributed and inter-connected fashion. The main consequences are increases in the needed capacity and complexity of the infrastructure itself, its heterogeneity, and its relations. Single points of failure will increase exponentially, to a point in which redundancy itself might not be practical or manageable to ensure availability. The need will be clearly there for self-healing infrastructure, and AI can not only be part of the problem – having created the demand – but also part of the solution, providing these self-healing mechanisms.

Researchers have examined the economics involved in testing a program to complete reliability, compared to programming it in a way in which the logic can recover from its own bugs. The latter is best, as the combination of logical paths quickly escalates to a point in which testing to complete reliability becomes impossible even with a relatively modest program.

The same concept will apply to a highly distributed and heterogeneous infrastructure that will evolve dynamically and interact in infinite ways that have not been anticipated. The tools to manage the increased complexity need to be there in the first place or infrastructure managers will face incredible stability, performance, and availability challenges.”

– Sergio Zanardo, Vice President, Information Technology