



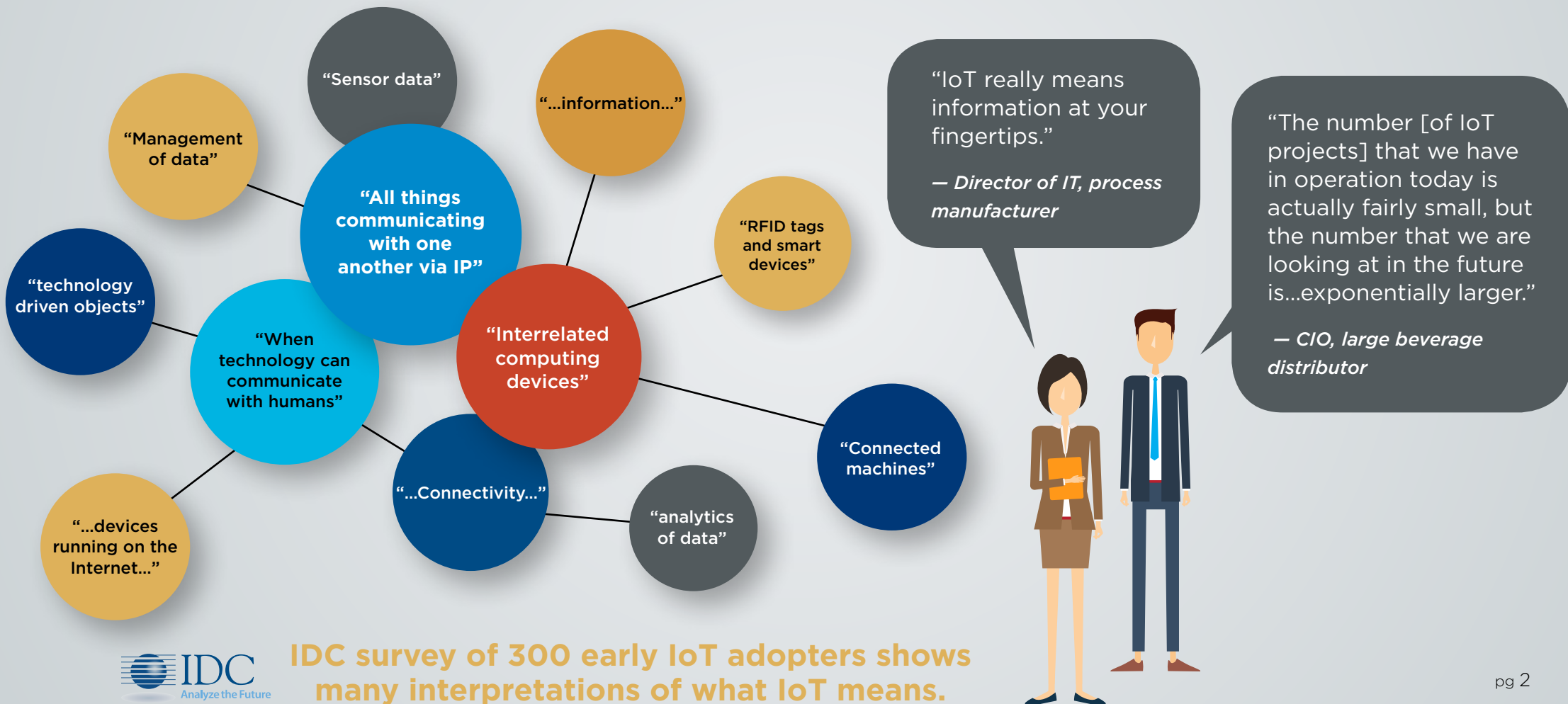
Internet of Things

State of the Market

An IDC InfoBrief, Sponsored by Red Hat | September 2016

Organizations see IoT through many lenses

IDC defines IoT as a network of uniquely identifiable end points (or 'things') that communicate bi-directionally without human interaction using IP connectivity.



Many organizations are moving past trials and into larger deployments



72%

or more of organizations in the manufacturing, retail and transportation segments have deployed IoT - well above the average



53%

of organizations who have already deployed IoT solutions are looking to expand their investment **in the next 24 months**

THOSE ORGANIZATIONS PLANNING TO DEPLOY WILL DO SO **IN THE NEXT 12 MONTHS**



More than half of government organizations are still in the planning phase, as opposed to deployment



Organizations understand the benefits and opportunities that IoT brings

The concept of IoT is moving beyond just being connected to be connected and intelligent

Government and healthcare organizations cite improved customer experience as a key driver for their investment, whereas retail and transportation are looking to gain visibility to end-point behavior.

Provides opportunity for:

- Increased productivity and efficiencies
- Improved customer experience
- Faster decision making
- Process automation
- Competitive differentiation



97%

of organizations are using the IoT data:

- ✓ To improve customer experience
- ✓ To understand endpoint behavior
- ✓ To determine product reliability and performance
- ✓ As an input to R&D
- ✓ To collect real time operational data

“[The challenge] is proving to the organization that we’re able to collect this data and actually use it in a meaningful way...”

— CIO, large beverage distributor



IT and Line-of-Business need to work together

Lines-of-Business and IT need to collaborate—in planning, implementation, and maintenance

40%

or more of projects are now executive sponsored initiatives



“[IoT initiatives] usually will start in R&D. Then they go through an executive team which is usually someone on the IT side, someone in R&D, executives, logistics, manufacturing and then our COO as well.”

— Director of IT, process manufacturer



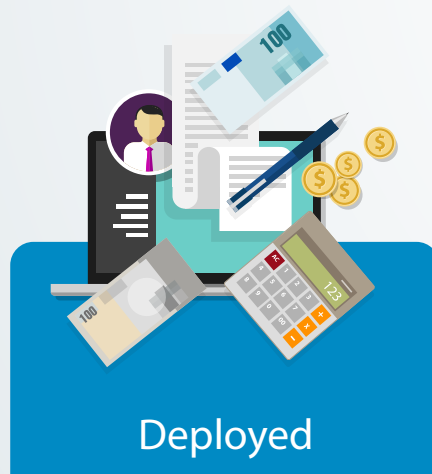
60%

of Retail deployments were driven by executive sponsorship

Budget is another story...

It's not just about the upfront costs, but the ongoing cost to manage and maintain the connected solution. In the private sector, the budget is shared in different ways between IT and LOB, but in the government it's split.

Budget availability



For organizations that have a **CULTURE OF INNOVATION** IoT budget is readily available



Security remains the top concern for organizations



“The security of IoT [should] not be trusted to others.”
— CIO, large white goods manufacturer



... ORGANIZATIONS' APPROACH TO IOT SECURITY, HOWEVER, IS UP FOR DEBATE.

28.1

Security policies are in place only for current types of IoT data

28.1

A tired approach to security where smart devices, intelligent gateways and back end data stores are each secured individually

28.8

Security processes are integrated into the IoT workflow from a data perspective through the entire lifecycle

Organizations need to determine how they will manage all the IoT-generated data

1/3 of organizations want to use a consistent approach to how they manage and interpret their IoT data.

48%



of organizations that have deployed or will deploy IoT plan to use existing analytics tools for IoT generated data

“Data by itself is worthless, but data connected through a business solution is really invaluable.”

— CIO, large white goods manufacturer

Where to store IoT data?

On-premise Datacenter

Public Cloud

Deployed

69%

31%

Planning to deploy

60%

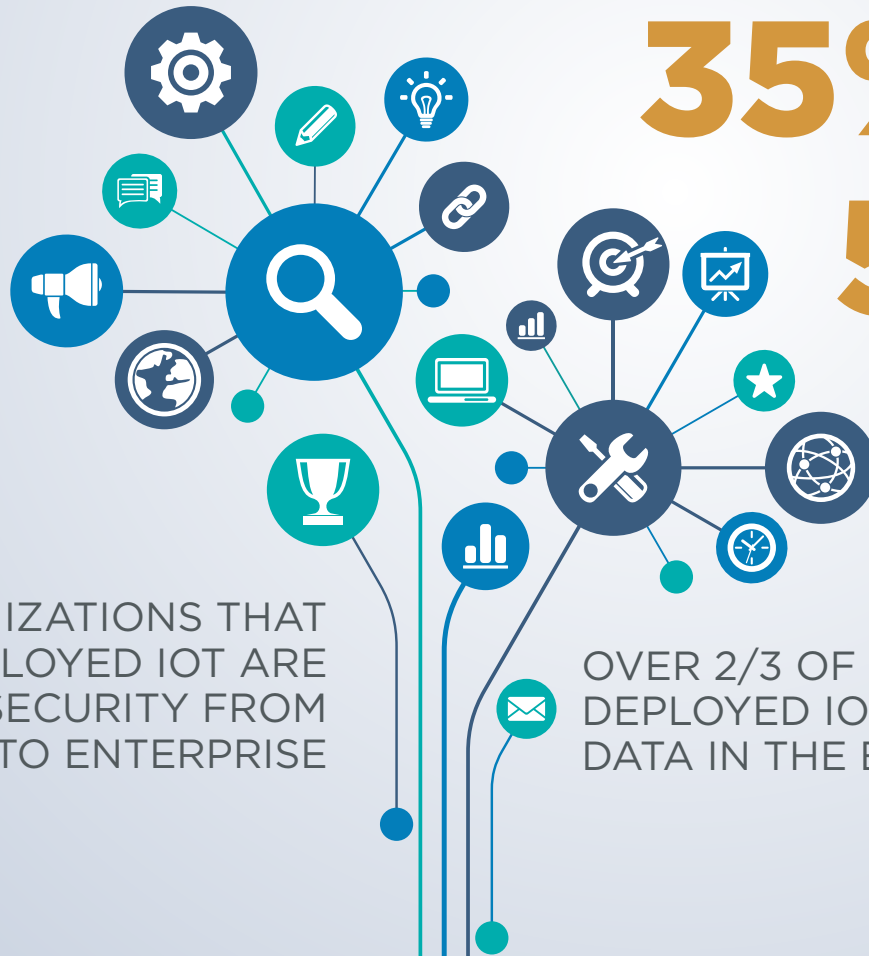
38%



IoT project success is determined by integrating security, data analytics, and KPIs into the plan

96%

of organizations that have deployed IoT believe they have a culture of innovation



35%

of organizations that have deployed IoT are investing in new analytics tools to collect, process and interpret IoT data

50%

of organizations that have deployed IoT believe they are ahead of their competition

99% OF ORGS THAT HAVE DEPLOYED IOT USE ROI/ KPIs TO MEASURE SUCCESS OF IOT PROJECT

64% OF ORGANIZATIONS THAT HAVE DEPLOYED IOT ARE INTEGRATING SECURITY FROM EDGE TO ENTERPRISE

OVER 2/3 OF ORGANIZATIONS HAVE DEPLOYED IOT PLAN TO STORE IOT DATA IN THE ENTERPRISE DATACENTER

Getting Started with IoT: Next Steps

- There is going to be a lot of IoT noise from the vendor community over the next few years. Make sure your organization partners with vendor(s) that will help guide the process from concept to deployment to maintenance.
- Examine your current IT infrastructure to see what can be repurposed or augmented to help support your IoT initiatives. IoT does not mean a complete rip and replace of IT capabilities. It requires a scalable, robust and secure environment for long term viability.
- As your organization stands up its IoT project, look for ways to create joint accountability to drive collaboration between the line of business stakeholders and the IT organization.



With Line of Business and IT working together, it is important that the vendor(s) your organization chooses will look to protect business process and IT infrastructure integrity. This is a delicate – but crucial – balance.

- IoT can be transformative for any business. All it takes is an innovative idea to start the ball rolling.