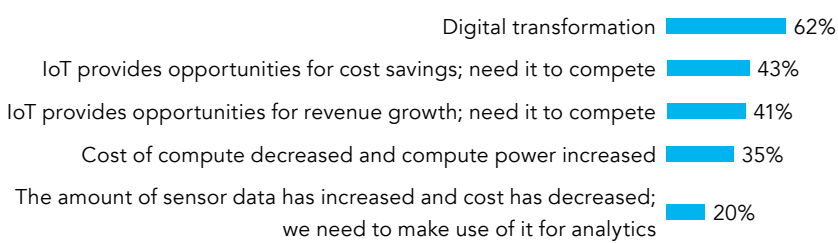# TDWI INFOGRAPHIC

IOT IN THE ENTERPRISE: A SNAPSHOT

Organizations are using IoT for a range of use cases, from sensing air quality to autonomous vehicles, designing factories of the future to disaster response. A recent TDWI survey of about 100 respondents either using IoT today or planning to do so soon sheds light on how enterprises are planning to use or currently using IoT, what challenges they face, and how often they need to visualize their ever-changing data from IoT sources.

WHAT'S DRIVING IOT ADOPTION?

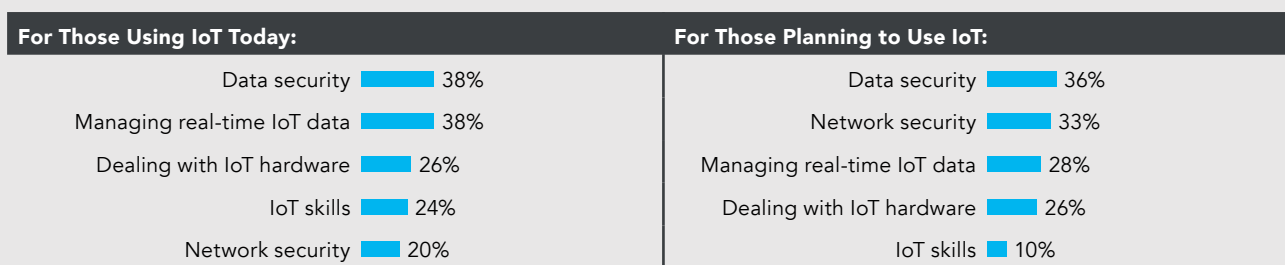Digital transformation is the top driver for IoT among those currently deploying IoT today or planning to shortly.

Please rank the following macro trends/business forces that have contributed to your need to analyze IoT data *(% ranked as very important or important)*

Digital transformation	62%
IoT provides opportunities for cost savings; need it to compete	43%
IoT provides opportunities for revenue growth; need it to compete	41%
Cost of compute decreased and compute power increased	35%
The amount of sensor data has increased and cost has decreased; we need to make use of it for analytics	20%

IOT CAN BE CHALLENGING

Despite its popularity, IoT isn't without challenges. Among the top problems is data security, no matter whether you're using IoT today or plan to shortly.
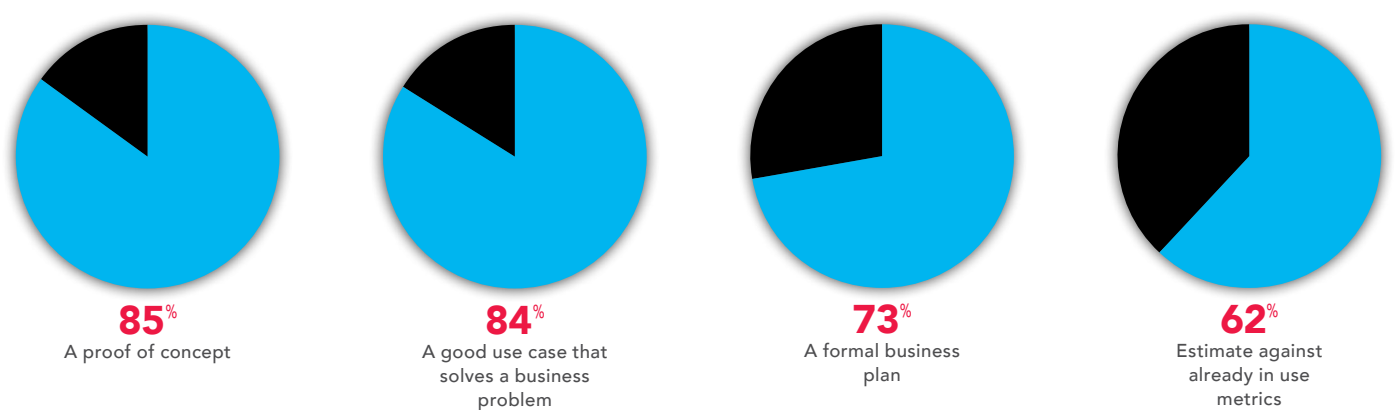
What are the top 3 challenges you have faced/believe you will face with your IoT efforts?

For Those Using IoT Today:		For Those Planning to Use IoT:	
Data security	38%	Data security	36%
Managing real-time IoT data	38%	Network security	33%
Dealing with IoT hardware	26%	Managing real-time IoT data	28%
IoT skills	24%	Dealing with IoT hardware	26%
Network security	20%	IoT skills	10%

WHAT IT TAKES TO KICKSTART IOT

What's the most popular impetus to get your IoT project off the ground? A good use case or POC will definitely help.
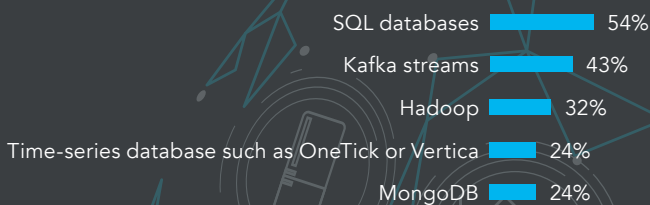
What will it take to get IoT off the ground?

- **85%** A proof of concept
- **84%** A good use case that solves a business problem
- **73%** A formal business plan
- **62%** Estimate against already in use metrics

GETTING CONNECTED WITH IOT

Good old-fashioned SQL server databases are still the way most enterprises are connecting with IoT data.

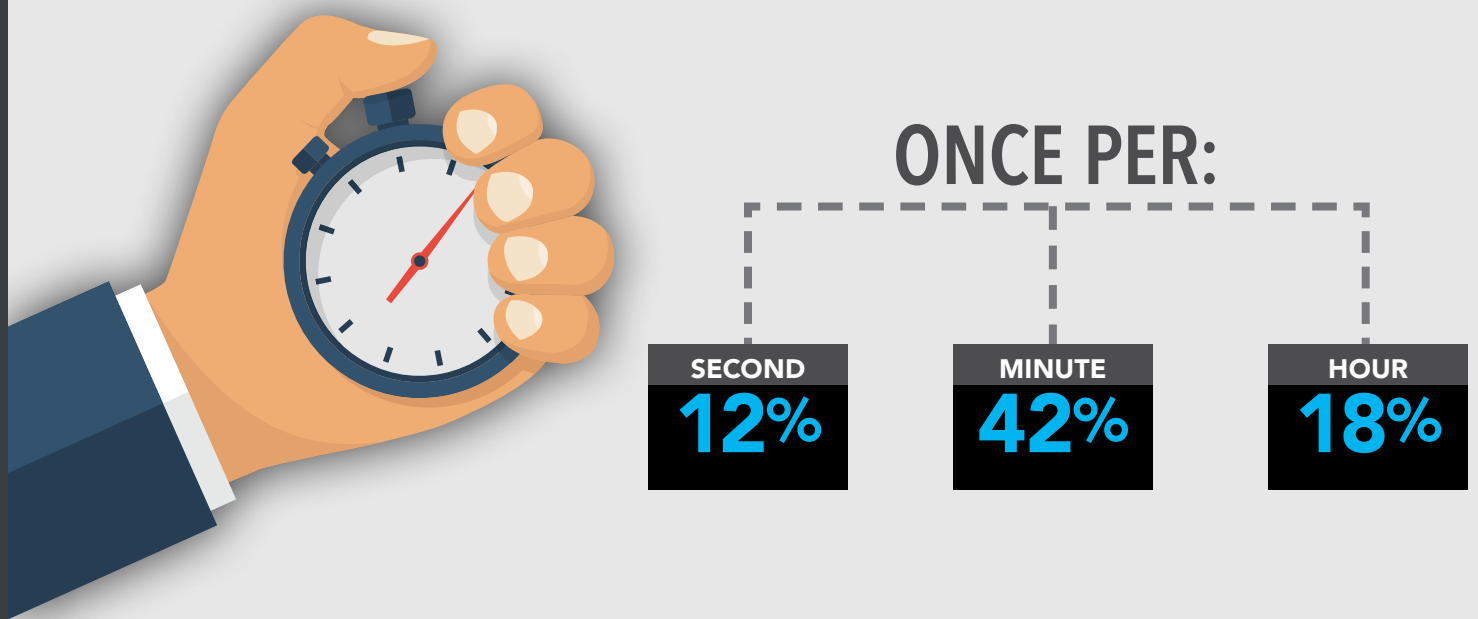**How does your company connect to its real-time IoT data for visualization?**
(Respondents could select multiple answers. Only results for enterprises currently using IoT are shown.)

SQL databases	54%
Kafka streams	43%
Hadoop	32%
Time-series database such as OneTick or Vertica	24%
MongoDB	24%

MINUTE-BY-MINUTE MONITORING

Three-quarters of respondents said it would be critical to visualize real-time IoT data as it is being generated. We asked respondents how frequently they need to see IoT data.

When you think about real-time IoT data for your organization, what is the most common frequency with which you'd need it for visualization purposes?

ONCE PER:

SECOND	MINUTE	HOUR
12%	42%	18%