

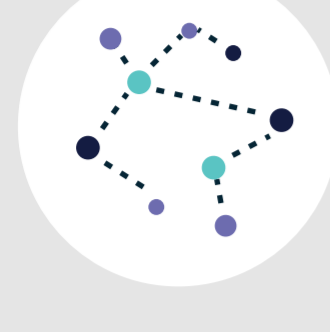
# Entering THE ERA OF CONNECTION

Technology is **RADICALLY CHANGING** the way buildings and infrastructure are designed, built and used.

## WE'RE GOING DIGITAL IN A FLASH

Amount of data in 2015

Amount of data in 2020



The digital universe will grow **50 times**, year-over-year, between now and 2020.



Studies predict that more than **50%** of information technology will move to the cloud within the decade.

## WHAT'S CHANGING? EVERYTHING!

1

### INTELLECTUAL

### Means of Production

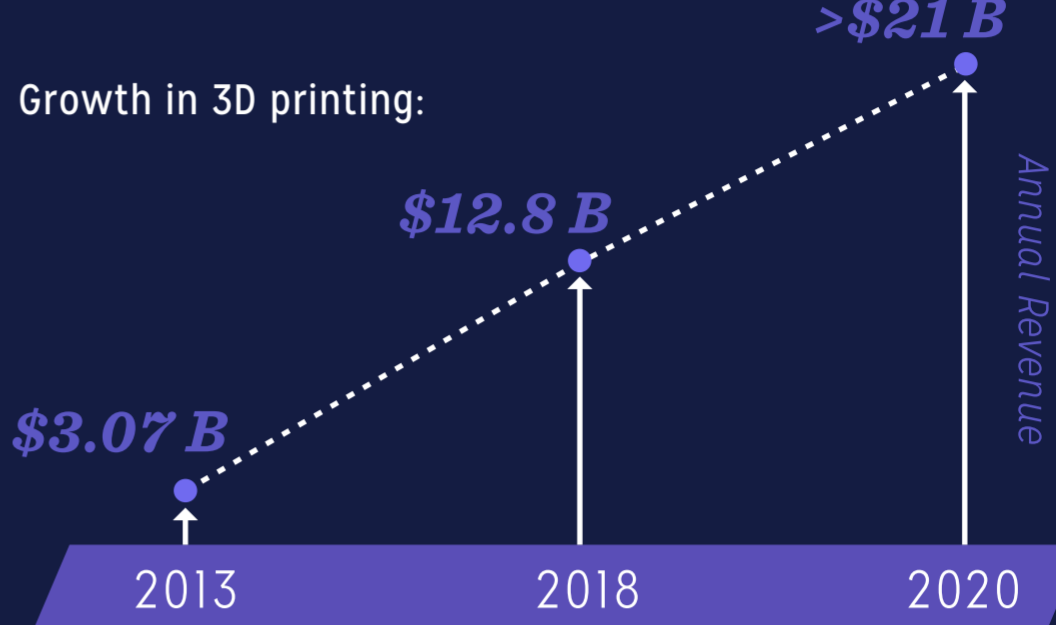
### PHYSICAL



Cities have increasingly been using civic crowdsourcing platforms to build more efficiently and intelligently.

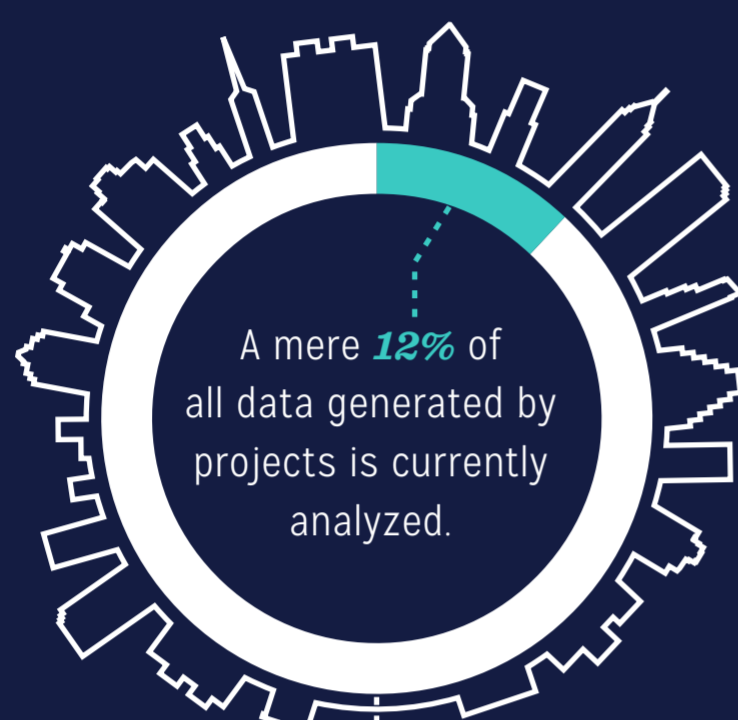
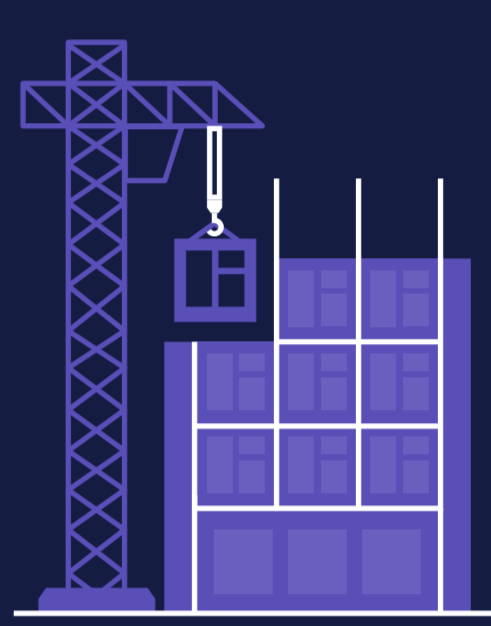
**City of Chicago: Providing non-private data to the public in a usable way.** Crowdsourcing efforts have yielded a number of app proposals, ranging from a 311 service tracker to a tool displaying real-time subway delays.

Growth in 3D printing:



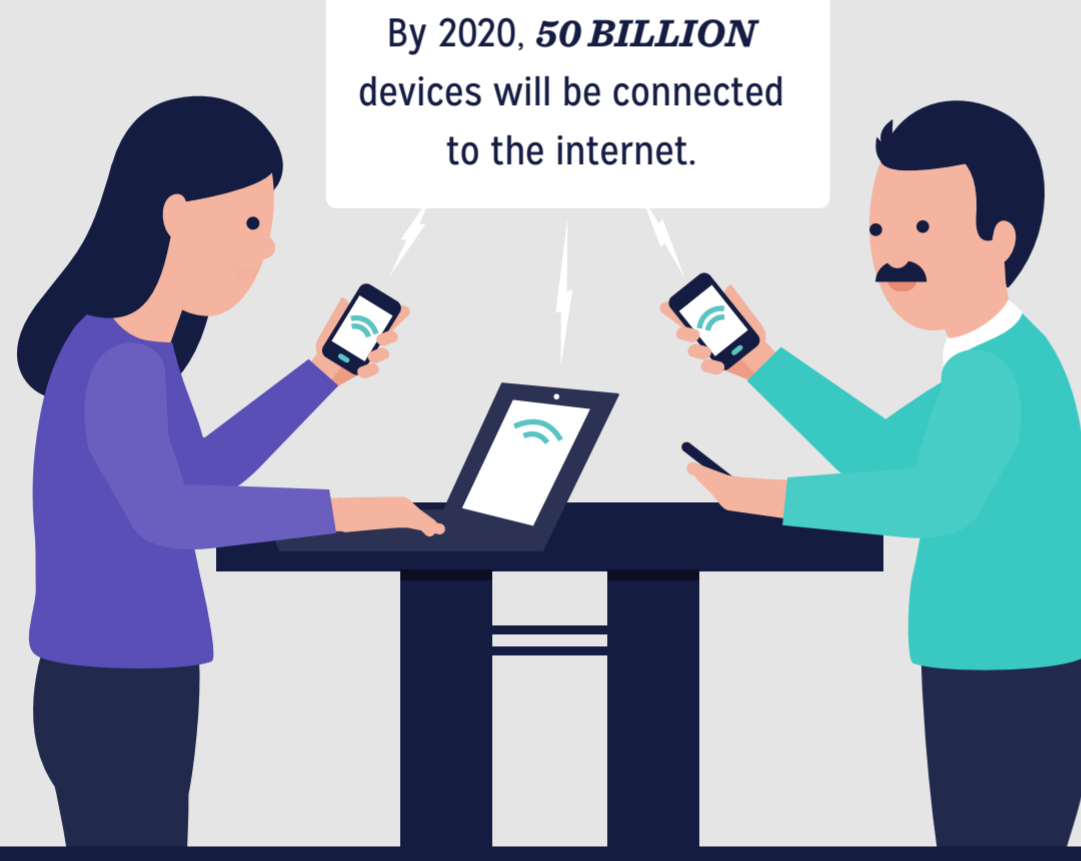
Pre-fabrication and modularization are improving productivity:

- 66% decrease in project schedule
- 65% decrease in project budgets
- 77% decrease in construction site waste



In the Era of Connection, we need to gain data-driven insights from the other **88%**.

### 2 Nature of Demand



By 2020, **50 BILLION** devices will be connected to the internet.

- Eco-friendly construction should grow to **\$245 BILLION** in total revenue by 2016.
- Connected cities will drive a **\$1.5 TRILLION** global potential in segments of energy, transportation, healthcare, building, infrastructure, and governance.
- 89%** of the U.S. is willing to purchase at least one kind of product that has a positive impact on the environment.

### 3 Characteristics of Products



**44%** of U.S. car buyers say they would consider buying a self-driving car in the next decade.



**\$20 BILLION** is expected to be spent on sensor technology alone. Compact, connected sensors and actuators will interact with consumer electronics, household appliances, and the general infrastructure.



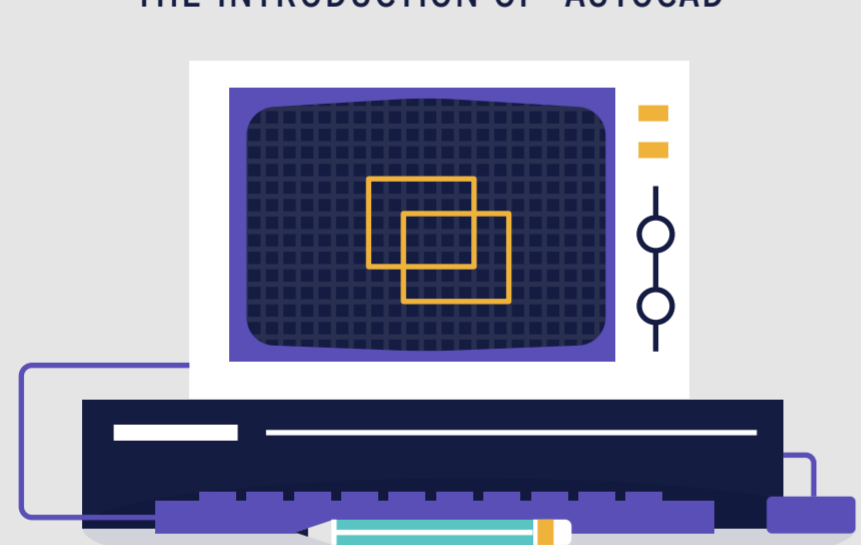
In 2016, cities will spend **\$39.5 BILLION** on smart city technologies.

## LEADING THROUGH CHANGE



### ERA OF DOCUMENTATION

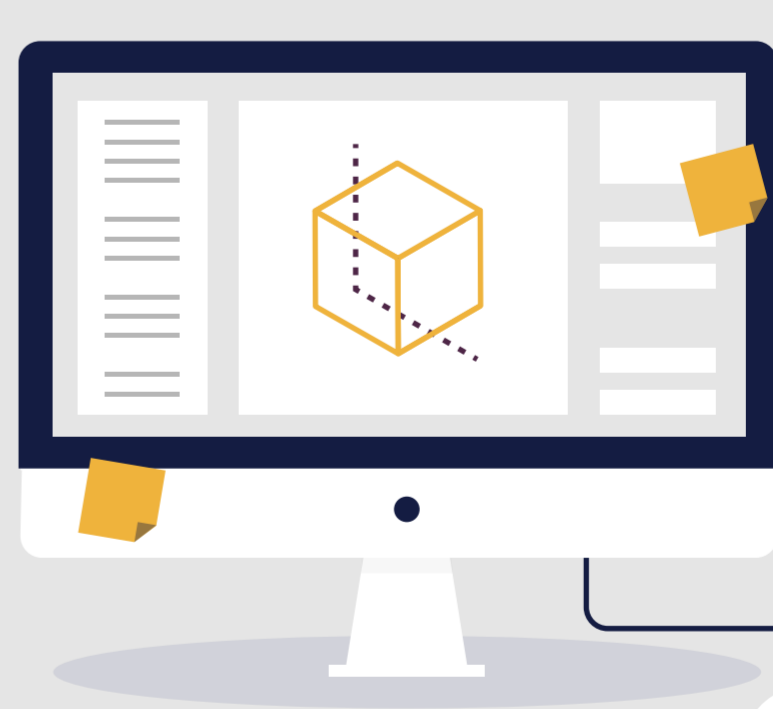
THE INTRODUCTION OF AUTOCAD®



- 1981** AutoCAD® debuts in 1981. There are approximately **19.3 million** CAD users worldwide.
- Realistically share drawings through geometry, diagrams, and text for the first time.
- 1986** AutoCAD® is now used worldwide by a wide range of industries

### ERA OF OPTIMIZATION

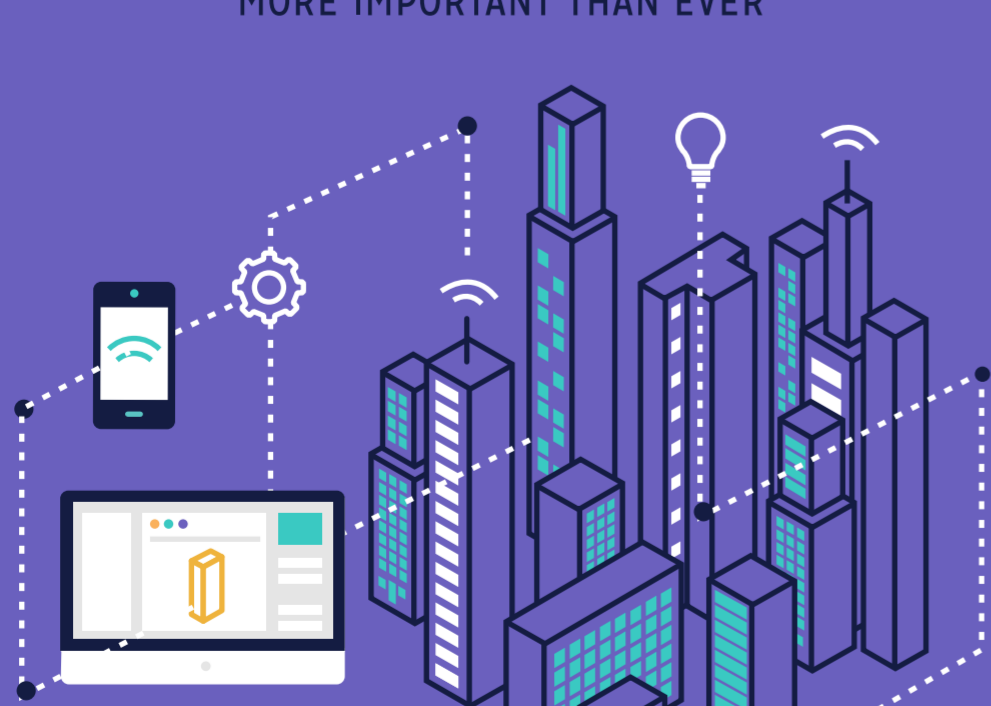
THE ACCELERATION OF BIM



- 3/4** of all contractors surveyed report a positive ROI on their BIM investments.
- 2007** BIM adoption in North America grew from **28% to 71%** between 2007 and 2012.
- In the U.K. **93%** of owners (public and private sector) will require or encourage BIM on new projects.
- In the U.S. **68%** of owners (public and private sector) will require or encourage BIM on new projects.

### ERA OF CONNECTION

THE TIME TO EMBRACE BIM IS MORE IMPORTANT THAN EVER



- 2016**
- CONNECTING TEAMS** Project-centric BIM workflows connect teams to data and to each other across the project lifecycle.
- CONNECTING INSIGHT** Data-driven BIM draws massive amounts of information to help buildings and infrastructure adapt to their environment.
- CONNECTING OUTCOMES** Outcome based BIM technology helps generate a virtually infinite number of design alternatives.
- CONNECTING PROJECTS** Interconnected design-build BIM processes help minimize barriers, reduce waste, and improve quality.

AUTODESK CONNECTS YOUR FUTURE WITH INTEGRATED WORKFLOWS ACROSS THE LIFECYCLE OF BUILDINGS AND INFRASTRUCTURE.

LEARN MORE ABOUT BIM IN THE ERA OF CONNECTION: [WWW.ERAOFCONNECTION.COM](http://WWW.ERAOFCONNECTION.COM)

**#ERAOFCONNECTION**

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