



How Cogence Influences the State of the Industry

13 March 2019



Mission + Purpose

Cogence (Latin)

"To drive together" or "Thinking that is well organized"

The purpose of the Alliance is to bring Owners and Developers, Architects and Engineers, Construction Managers and Contractors, and Allied Industry Professionals together to advocate and be a resource for improved project delivery.

For more information visit us at www.cogence.org



Agenda

- Cogence to Date
- Cogence Tomorrow

Waste

Innovation

What's Happening in 2019



Thank you to our Founding Board

2019 Board



Owner:

- » Pen Wolf, Cleveland Clinic
- » Walter Jones, MetroHealth
- » Sean McDermott, Cleveland Metro Parks

Architect:

- » Sherm Moreland, Design Group
- » Bryan Wahl, Bostwick Design

• Engineer:

- » Gary Hribar, Osborne
- » Pat Klanac, PTA Engineering

• Construction Manager:

- » Phil Kerber, Whiting Turner
- » Chris Halapy, Shook Construction

Trade Contractor:

- » Armando Francisco, Lake Erie Electric
- » Layne Kendig, Relmac

• Industry Affiliate:

- » Pam Neckar, Bostwick Design
- » Jeff Appelbaum, PMC

• Emerging Leader:

- » Jennifer Storey, Stantec
- » Chris Orlando, VOC

Northwest OH Chapter:

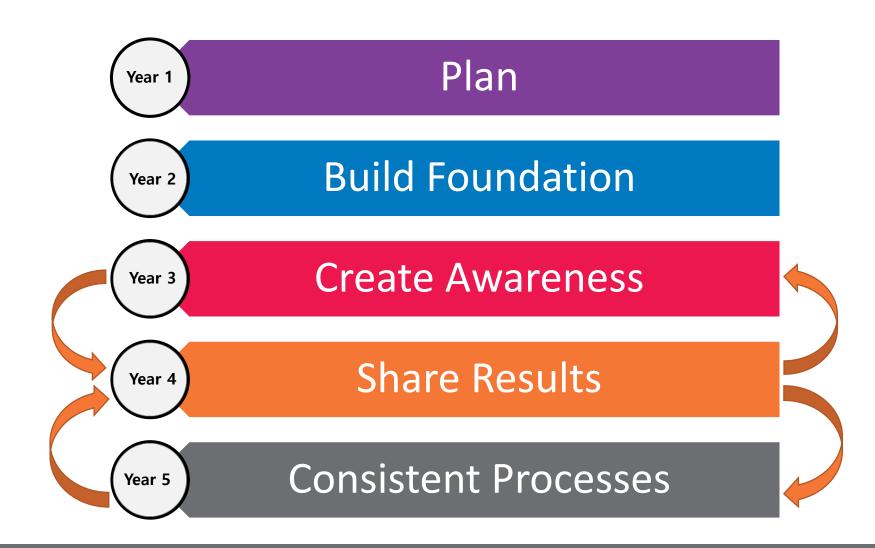
- » Brain Swope, BGSU
- » April Smucker, ProMedica
- » Dean Niese, Mannik Smith Group
- » Tim Meyer, Lathrop
- » Mark Crawford, JohnnieGreen
- » Tim Petro, TTL Associates

Central OH Chapter:

- » Jeff Ortman, HAWA Incorporated
- » Tom Garske, Borror Construction
- » Hennifer Horvath, Design Group
- » Ed Keener, Korda/Nemeth Engineering
- » Stephen Metz, SMBH Engineers
- » Randy Sleeper, Burner Borporation
- » Monica Wangler, Hammes Company
- » Tim Gusler, Messer Construction
- » Angela Kolosky, Design Group



Strategic Focus

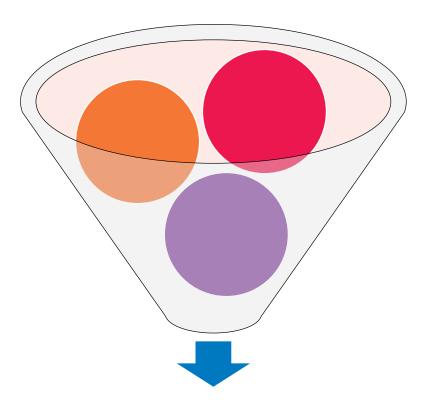




Cogence Strategy

Project Delivery Best Practices

- Improve outcomes
- Reduce risk
- Capitalize on strengths



Industry Best Practice



2016 Recap



Build Foundation

General

- Brand
- Website
- Strategic Objectives Set
- Partnership Levels:
 - » Owners: 26
 - » Architects: 10
 - » Engineers:10
 - » Construction Mangers: 11
 - » Trade Contractors: 20
 - » Affiliates:11
 - » Total: 88

Programs

- Risks
- Communication
- Leadership
- Contracts
- Financial Management





Create Awareness

General

- Advocacy Presentations
- Cogence Awards
- Chapter Structure
- Partnership Levels:
 - » Owners: 21
 - » Architects:9
 - » Engineers:9
 - » Construction Mangers:11
 - » Trade Contractors:13
 - » Affiliates:13
 - » Total: 76

Programs

- Financial Risks
- Project Management
- Cogence GMP
- Town Hall
 - » Mike Isaacon, Producer
 - » Transformational Teams, Ellen Burts-Cooper
 - » Cogence GMP
 - » Successful Case Studies
 - » Owner Panel



2018 Recap



Share Results

General:

- Northwest OH Chapter
- Emerging Leaders
- Central OH Start Up Team
- Website Update
- Partnership Levels:
 - » Owners:20
 - » Architects:14
 - » Engineers:10
 - » Construction Mangers:12
 - » Trade Contractors:14
 - » Affiliates: 10
 - » Total: 80

Programs:

- Team Building, Ellen Burts-Cooper
- Quality
- Planning to Fail
- Town Hall
 - » Appreciative Inquiry, David Cooperrider
 - » Progressive Design Build, Beck Group
 - » Digital Future of CA
 - » Augmented Reality
 - » Cogence Quality
- Early Engagement Roundtable



What part of Cogence Due You Value?

- Thought provoking Industry-wide roundtable discussion
- Application of roundtable topics to business
- Large conference forum learning opportunities
- Networking



Eliminate Industry Waste



Waste: Objective

- Create a common understanding of industry waste
- Identify concerning forms of waste or "value stream"
- Prioritize waste forms to inform further programs



Waste: Value Stream

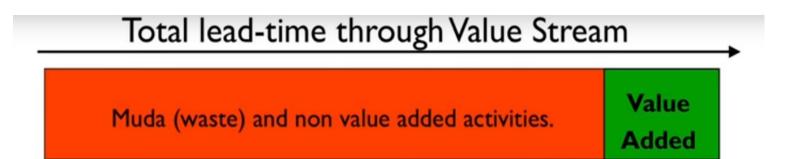
Value Streams: series of work steps to build Solutions, creating a continuous flow of value to a customer.

3 Types of Work in a Value Stream

- » **Value-Added Work:** Work that changes the "product" or adds important information into the value stream; is done correctly the first time; and the customer is willing to pay for it.
- » Non-Value Added or Incidental Work: Work that has no value to the customer, but is necessary by the process in place.
- » Pure Waste



Waste: Value Stream



Traditional improvement focus (make VA twice as fast)

Muda (waste) and non value added activities.



Waste elimination focus

Muda (waste) and non value added activities.

Value Added



Waste: Types

- Transportation: Movement that offers no value.
- Waiting: Periods of inactivity for people, material or information.
- Motion: Movement of people that does not add value to the process.
- Inventory: WIP effects space it takes up and lead times within the process
- Over-processing: Doing more work than the customer values.
- Defects: Product or informational (design) errors or rework.
- Overproduction: Producing more than the process is ready for
- Additional types of waste: Under-utilization of Talent or Technology



Waste: Activity

What waste forms concern you?

- Openly discuss
- Assign a scribe and reporter
- Compile by type





Industry Innovation





DILLIUN

Connected People



Revenue Opportunity



25+ MILLION

Apps



25+BILLION

Embedded and Intelligent Systems



50 TRILLION

GBs of Data



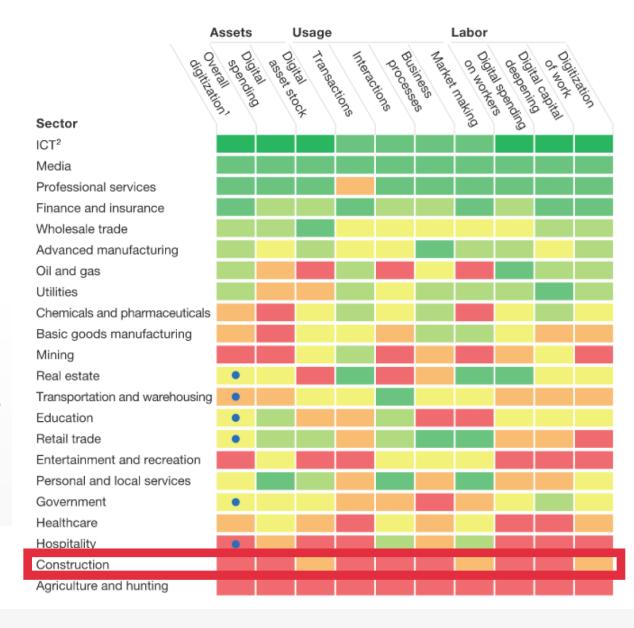
Source: Mario Morales, IDC

HOW DOES CONSTRUCTION STACK UP?



CONSTRUCTION IS ONE OF THE LEAST DIGITIZED SECTORS

Construction is towards the bottom of the list when it comes to technology adoption, with only agriculture and hunting beneath it.



McKinsey Global Institute industry digitization index; 2015 or latest available data

Relatively low digitization

Relatively high digitization

Digital leaders within relatively undigitized sectors

CONSTRUCTION - INNOVATION & DIGITAL TRANSFORMATION

Why is Digital Transformation Inevitable

How Do You Create Competitive Advantage

Case Study - The EDGE

Where do we Rank as an INDUSTRY Cogence Survey

MOORE'S LAW



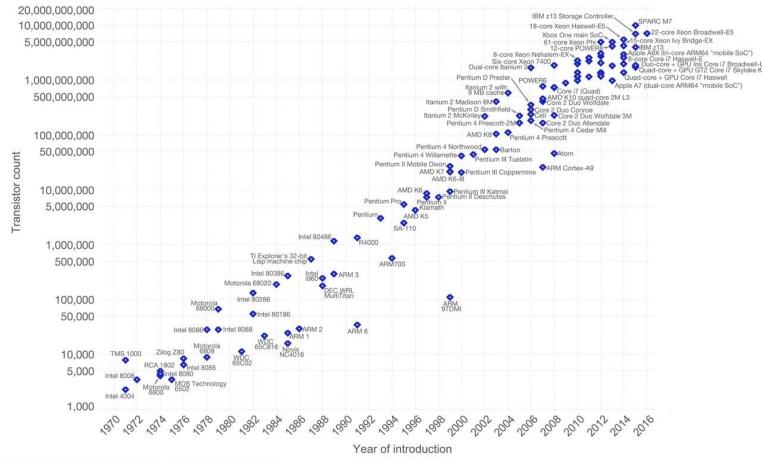
Moore's law refers to the observation that the number of transistors in a dense integrated circuit doubles approximately every two years. Moore's law is an observation or projection and not a physical or natural law.

Moore's prediction proved accurate for several decades, and has been used in the semiconductor industry to guide long-term planning and to set targets for research and development.

Moore's Law - The number of transistors on integrated circuit chips (1971-2016)

Our World in Data

Moore's law describes the empirical regularity that the number of transistors on integrated circuits doubles approximately every two years. This advancement is important as other aspects of technological progress – such as processing speed or the price of electronic products – are strongly linked to Moore's law.



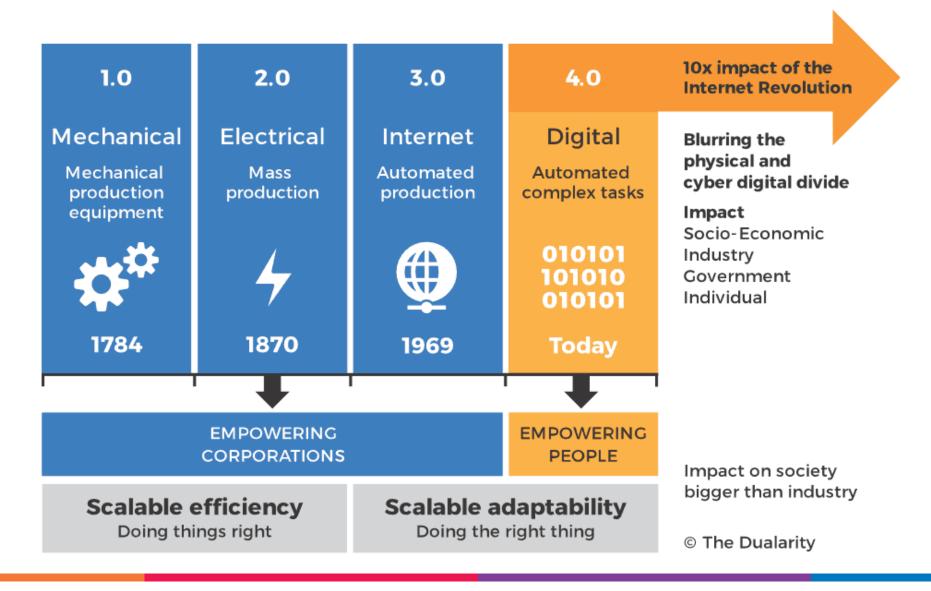
Data source: Wikipedia (https://en.wikipedia.org/wiki/Transistor_count)
The data visualization is available at OurWorldinData.org. There you find more visualizations and research on this topic

Licensed under CC-BY-SA by the author Max Roser.

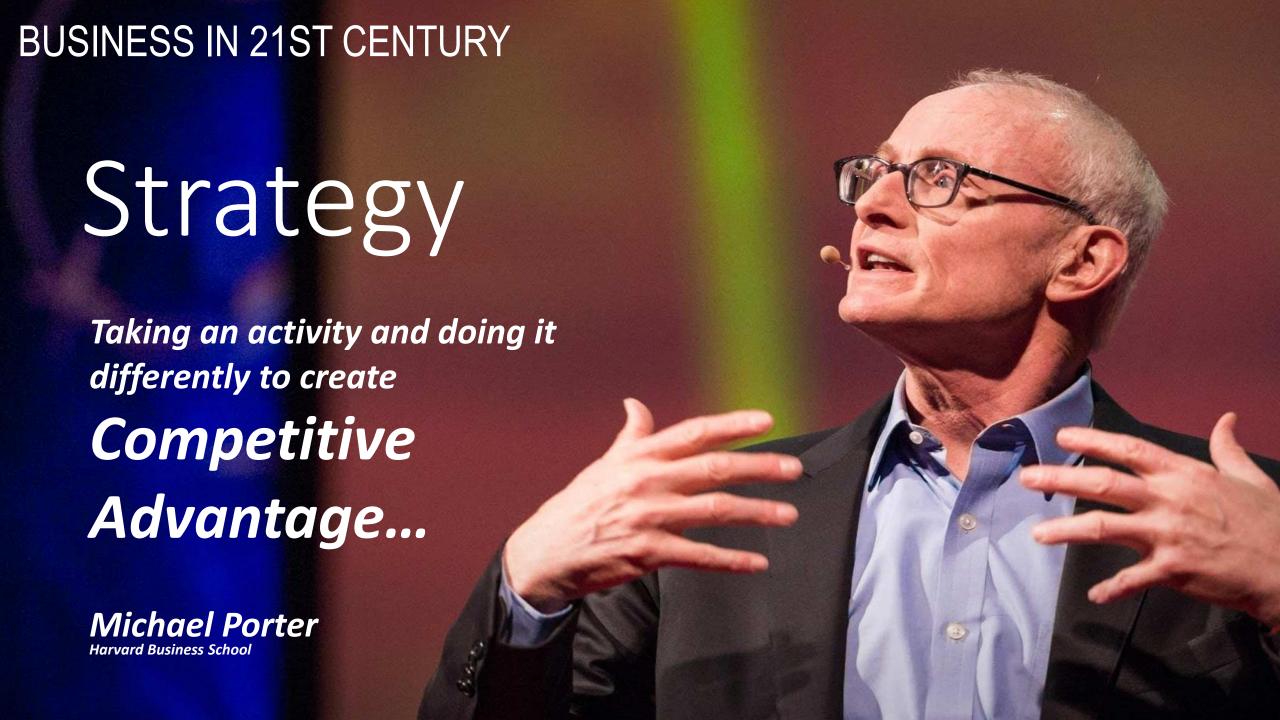


WELCOME TO THE INDUSTRIAL REVOLUTION 4.0









BUSINESS IN 21ST CENTURY







They focus on YOU



1. Control –Gives Us Command Over Life



2. Competence – Makes Us Smarter



3. **Connected** – Bigger Than Ourselves

Deci & Ryan 1979, Paolillo 2015

21ST CENTURY TECHNOLOGY REQUIREMENTS

"LOW VOLTAGE"



Computers, Laptops, Tablets



Access Control



VoIP Phones



Security Surveillance



Wi-Fi Access Points



Video Conferencing



Building Automation (smart buildings)



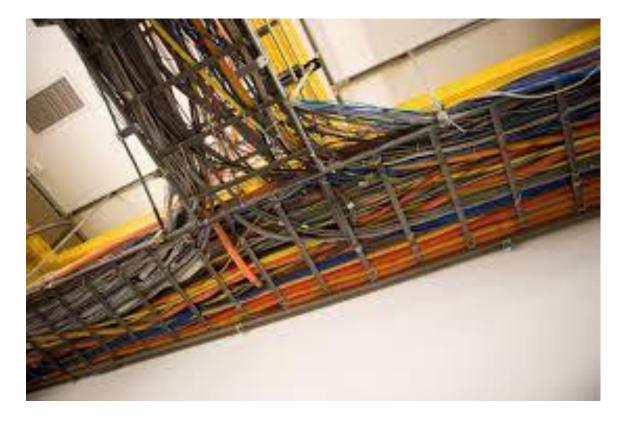
Video

ALSO: Internet of Things, BYOD. Streaming, Cloud Services, Distributed Antenna Systems for cell phone coverage, Sound Masking, Life Safety Systems, Digital Signage, Automated Parking...what's coming next year?

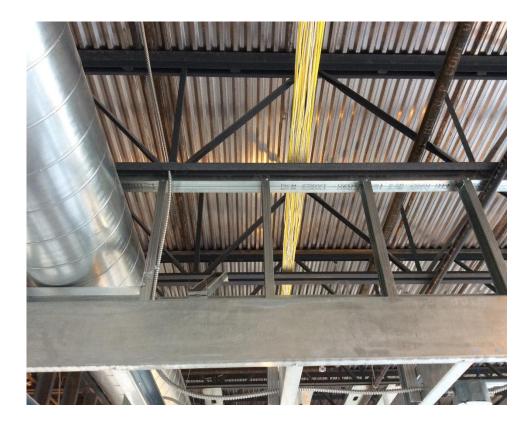




A TALE OF TWO CEILINGS



COPPER - TRAYS NEEDED

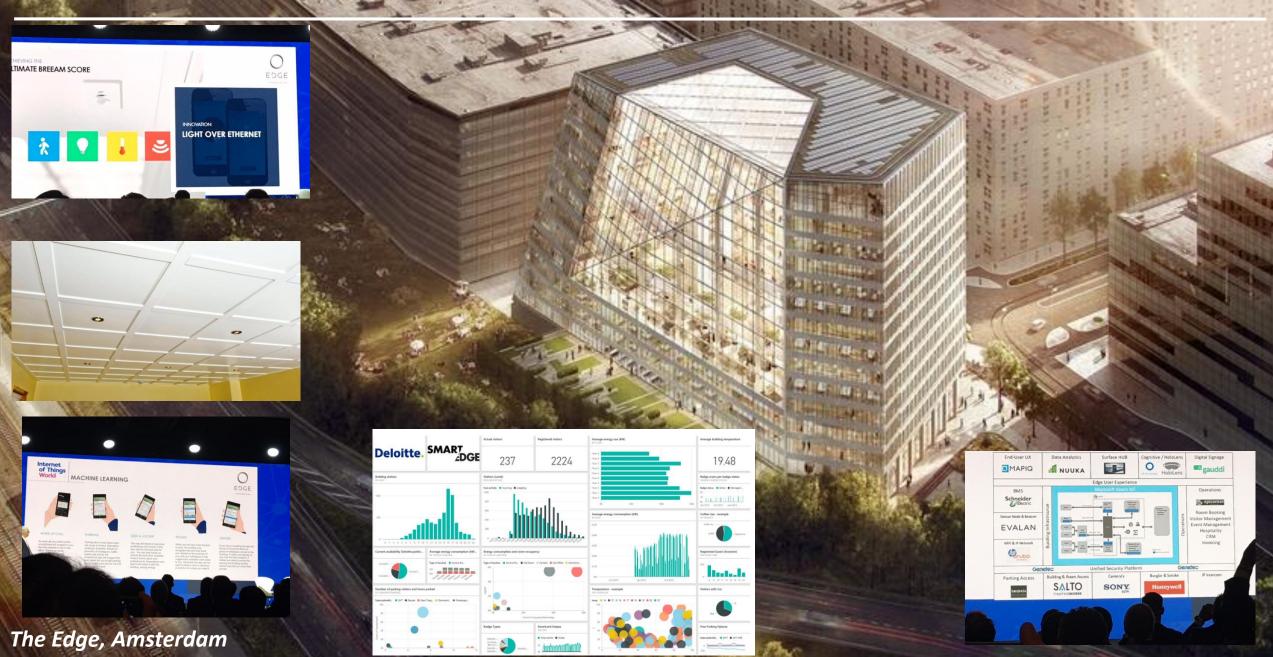


FIBER - NO TRAYS

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FUTURE of CONSTRUCTION - OaaS Outcomes as a Service





DIGITAL MASTERY FRAMEWORK

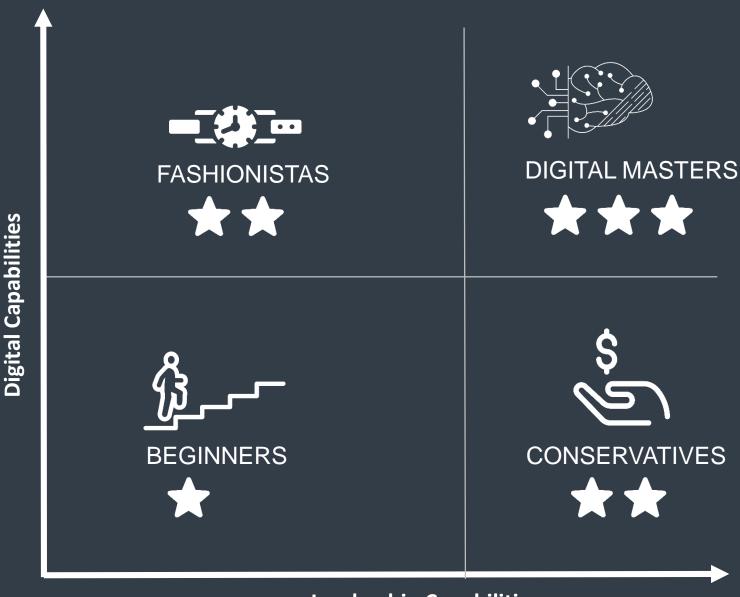
Digital Capabilities

The ability to incorporate digital technologies:

- Mobile
- Social Media
- Analytics
- lot
- Other Technologies

Into the organization's business processes:

- Customer Experience
- Operations
- Business Models



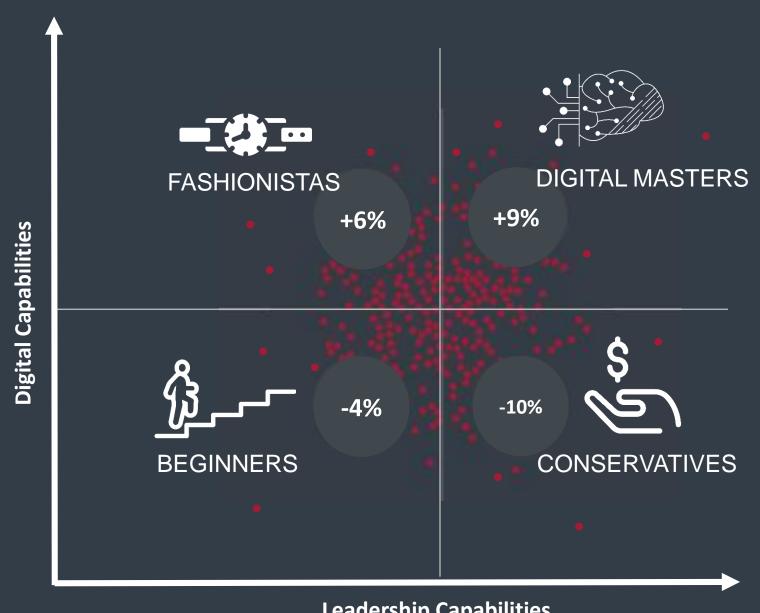
Leadership Capabilities

The ability to drive transformation in the business repeatedly.

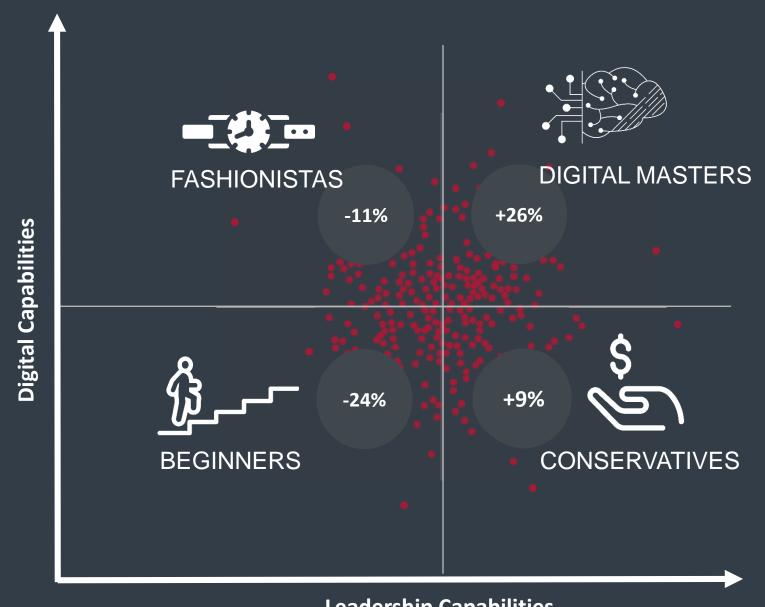
This includes:

- Vision
- Engagement governance
- IT leadership skill

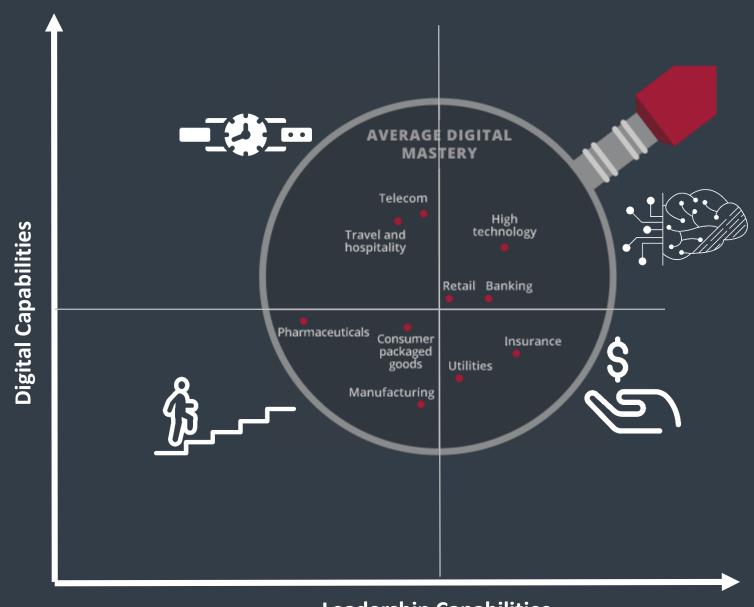
REVENUE GENERATION EFFICIENCY



PROFITABILITY



AVERAGE DIGITAL MASTERY



WHERE DO YOU FIT IN?

TOTAL SCORE DIGITAL CAPABILITIES

TOTAL SCORE LEADERSHIP CAPABILITES

Fashionistas

- Some digital features in silos (i.e. social)
- No overarching vision
- Underdeveloped coordination
- Digital culture may exist in silos

Digital Masters

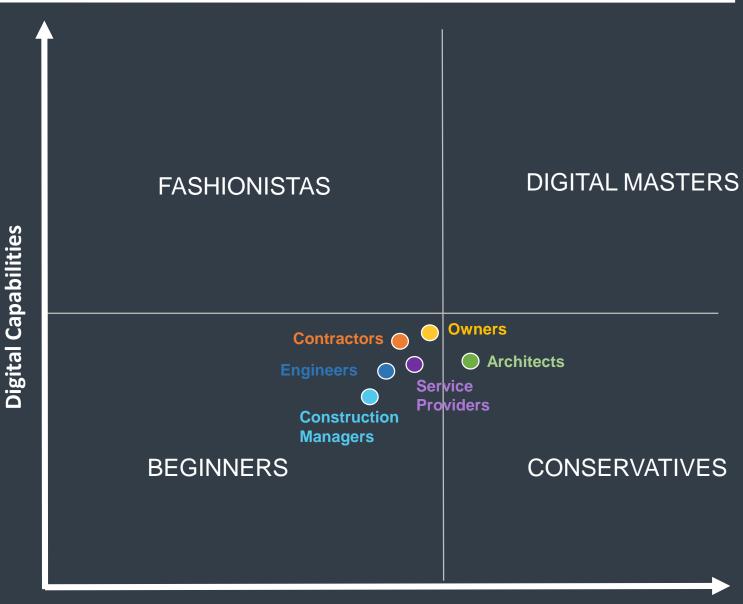
- Overarching digital vision
- Many digital initiatives generating measurable value
- Strong digital governance
- Solid digital culture

Beginners

- Management skeptical of the business value of advanced digital technologies
- May be carrying out some experiments
- Immature digital culture

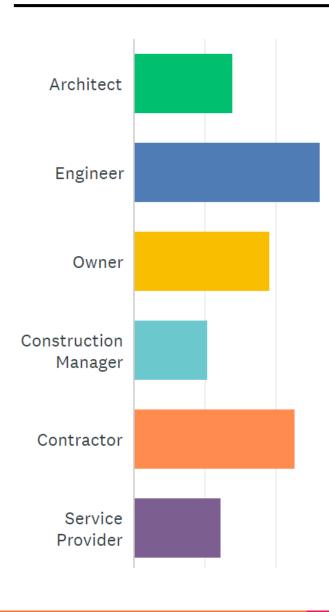
Conservatives

- Digital vision exists, but underdeveloped
- Dominated by traditional digital capabilities, few advanced ones
- Strong governance
- Taking active steps to build digital skills and culture



Leadership Capabilities

SURVEY: DIGITAL TRANSFORMATION JOURNEY



Q19 Leadership
Digital initiatives are assessed through a common set of key performance indicators.

3.7/7 Somewhat Disagree

Q18 Leadership Roles and responsibilities for governing digital initiatives are clearly defined. 3.8/7 S Somewhat Disagree

Q14 Leadership
There are possibilities for everyone in the company to take part in the conversation around digital transformation.

5.8/7 Agree





Digital Capabilities

Digital Capabilities	
	Score
We are using digital technologies (such as mobile, social media, analytics, and the IoT) to understand our customers better.	
We use digital methods to market our products and services.	
We sell our products and services through digital channels.	
We use digital methods to provide customer service.	
Technology is allowing us to link customer-facing and operational processes in new ways.	
Our core processes are automated.	
We have an integrated view of key operational and customer information.	
We use analytics to make better operational decisions.	
We use digital technologies to increase the performance or added-value of our existing products and services.	
We have launched new business models based on digital technologies.	
TOTAL SCORE DIGITAL CAPABILITIES	

Rate the extent to which you agree with each of the following statements about your organization.

Use a scale 1 to 7

1 = strongly disagree

4 = neutral

7 = strongly agree



Leadership Capabilities

Leadership Capabilities	
	Score
Senior executives have a transformative vision of the digital future of our company.	
Senior executives and middle managers share a common vision of digital transformation.	
There are possibilities for everyone in the company to take part in the conversation around digital transformation.	
The company is promoting the necessary culture changes for digital transformation.	
The company is investing in the necessary digital skills.	
Digital initiatives are coordinated across silos such as functions or regions.	
Roles and responsibilities for governing digital initiatives are clearly defined.	
Digital initiatives are assessed through a common set of key performance indicators.	
IT and business leaders work together as partners.	
The IT unit's performance meets the needs of the company.	
TOTAL SCORE LEADERSHIP CAPABILITES	

Rate the extent to which you agree with each of the following statements about your organization.

Use a scale 1 to 7

- 1 = strongly disagree
- 4 = neutral
- 7 = strongly agree



Innovation: Activity

At your company:

- What is an innovation strength?
- What digital capability are you most proud?
- What is the biggest Leadership Strength?
- What innovation topics would you like Cogence to explore?





Industry Transformation



Growth Objective

Create industry wide focus on collaboration to improve project delivery.





How will we Grow? Continue doing what is working:

- Stay true to our mission
- Foster engagement
- Focus on Roundtables
 - » Attendance and participation
 - » Maintain open dialogue format
 - » Develop topics applicable to all

- Keep a balanced voice
- Gain industry attention
- Break down barriers
- Provide access to resources



How will be grow? Increase our focus on:

- Learning from other Industries
- Broadening our reach
 - » Markets
 - Increase diversity of partnership: Building Industries
 - Include Developers
 - Geographic locations: Develop criteria for expansion
 - » Depth of Industry
 - Those who put "barriers" in place
 - Trade
- Balance and intention



What's Happening: General

Northeast Ohio

- » 2019 Roundtable Theme:
 Increasing Productivity
- » Partnership Drive: Owners and Trade Contractors

Northwest Ohio

- » 2019 Roundtable Theme:
 Regional Drivers
- » Partnership Drive: Owners and Architects

Central Ohio

- » Kick off February 2019
- » 2019 Roundtable Themes: *Understanding Risk*
- » Partnership Drive: All



What's Happening: General

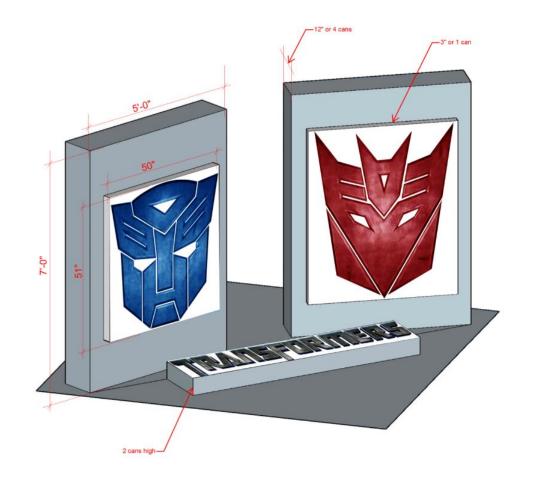
- Cogence GMP Educational Sessions: Summer 2019
- Cogence Emerging Leaders:
 - » Can-struction
 - » Mentoring
 - » Programs
- 2020 Al Summit

- Advocacy: Cogence review of OFCC contract document.
- Communication: Plan development
- Resource:
 - » Capturing program content
 - » Sharing case studies



Housekeeping

2019 Partnership Dues Invoice went out via Email





Next Program: Collaborative Scheduling

Bring an Owner

8 May 2019



