The Digital County – Taking the Technology Bull by the Horns

WCA Webinar

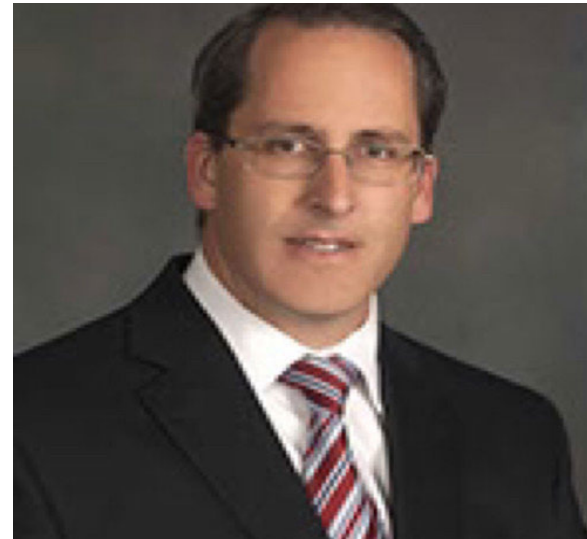**January 21st, 2019**

What We Will Talk About Today

- What is the Great Transformation?

- How will it Impact Government?

- What is the Digital County Effort?

- What are Key Outcomes?

- Where is the Journey Going?
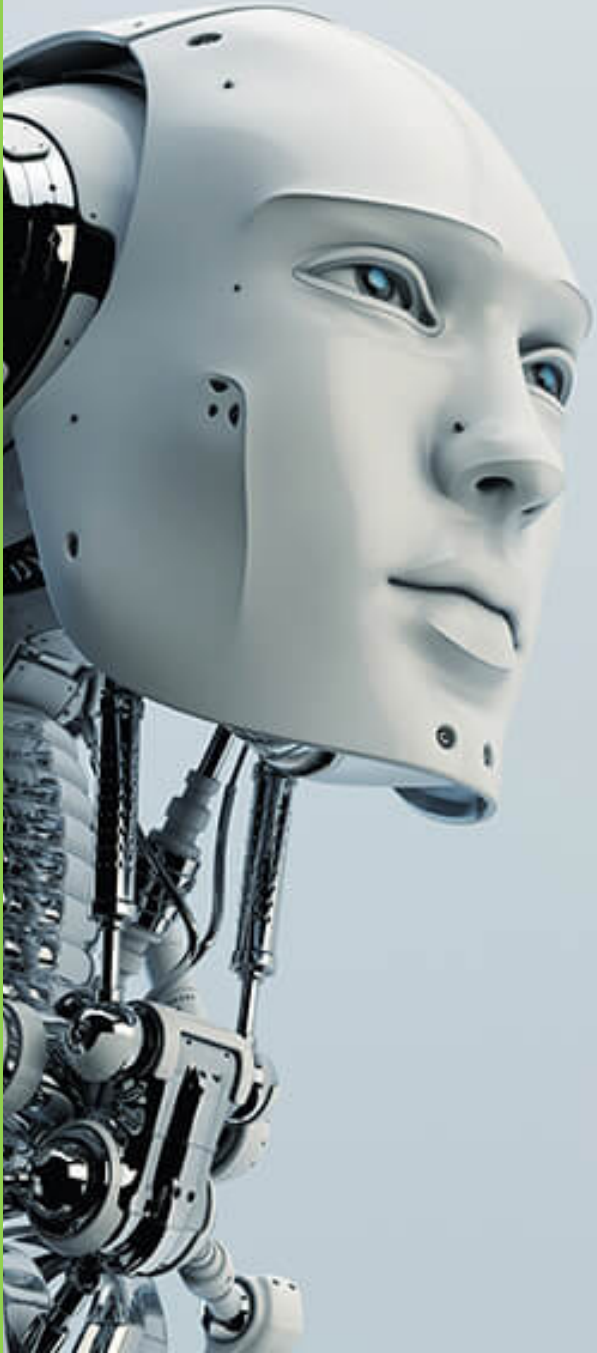
Presenters

Oliver Buechse

Founder of My Strategy Source

co-Founder of Advancing AI Wisconsin

Troy Streckenbach

Brown County Executive

Member of the Board of Directors of Advancing AI Wisconsin

What is the Great Transformation?

Waves of Digital Disruption are Posing a Challenge

Edge Computing

5G Wireless

3D and 4D Printing

Autonomous Transportation

Augmented and Virtual Reality

Artificial Intelligence, Blockchain, Internet of Things

The Cloud, Digitization of Content, Accelerating Device Capabilities

The Internet, e-Commerce, Mobile Devices and Social Media

Microchips, Mainframes, Personal Computers

In the U.S., a new wave of investment in automation may reach $8 trillion. By the end of 2020s, automation may eliminate 20-25% of current jobs (Bain, 2018)
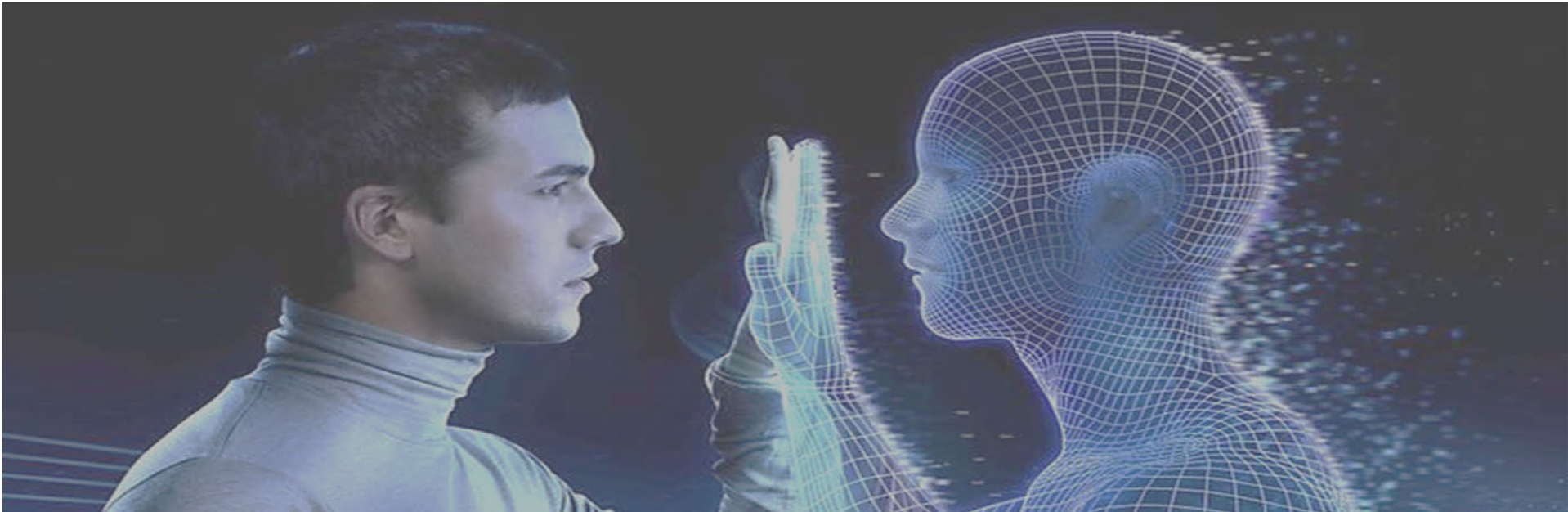
What is Artificial Intelligence?

"Technologies that seem to emulate human thinking and action"

Like Human

- Uses natural language
- Perceives sensory input
- Learns from experience
- Executes nonroutine tasks

More Than Human

- Quickly analyzes high volumes of data
- Detects patterns more accurately
- Works 24/7
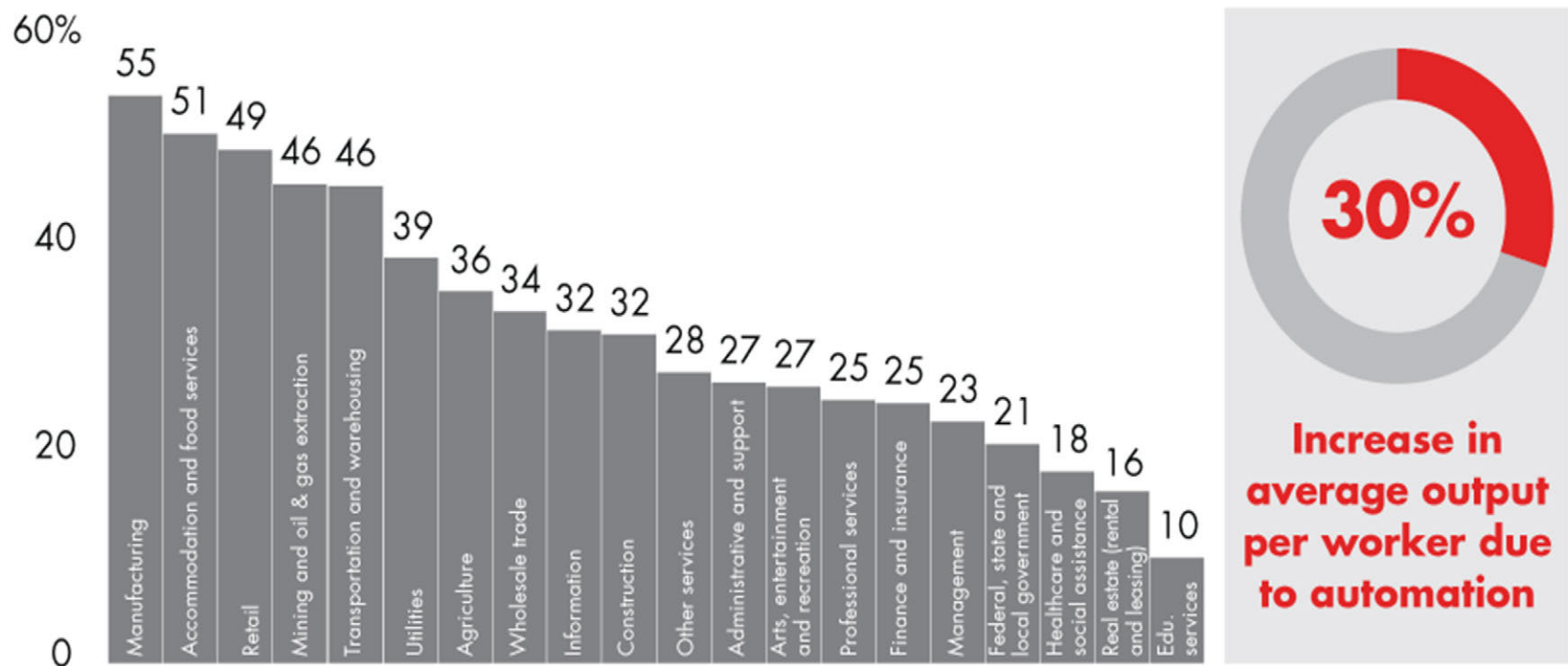- Doesn't get bored (yet)

Experts are Predicting Massive Change

"The speed of current breakthroughs has no historical precedent. When compared with previous industrial revolutions, the Fourth is evolving at an exponential rather than a linear pace. Moreover, it is disrupting almost every industry in every country." (Klaus Schwab, Founder and Executive Chairman, World Economic Forum).

Automation will improve productivity and address demographic worker shortages

Figure 18

▌ Productivity gains from automation will vary broadly across industries by about 10% to 55%

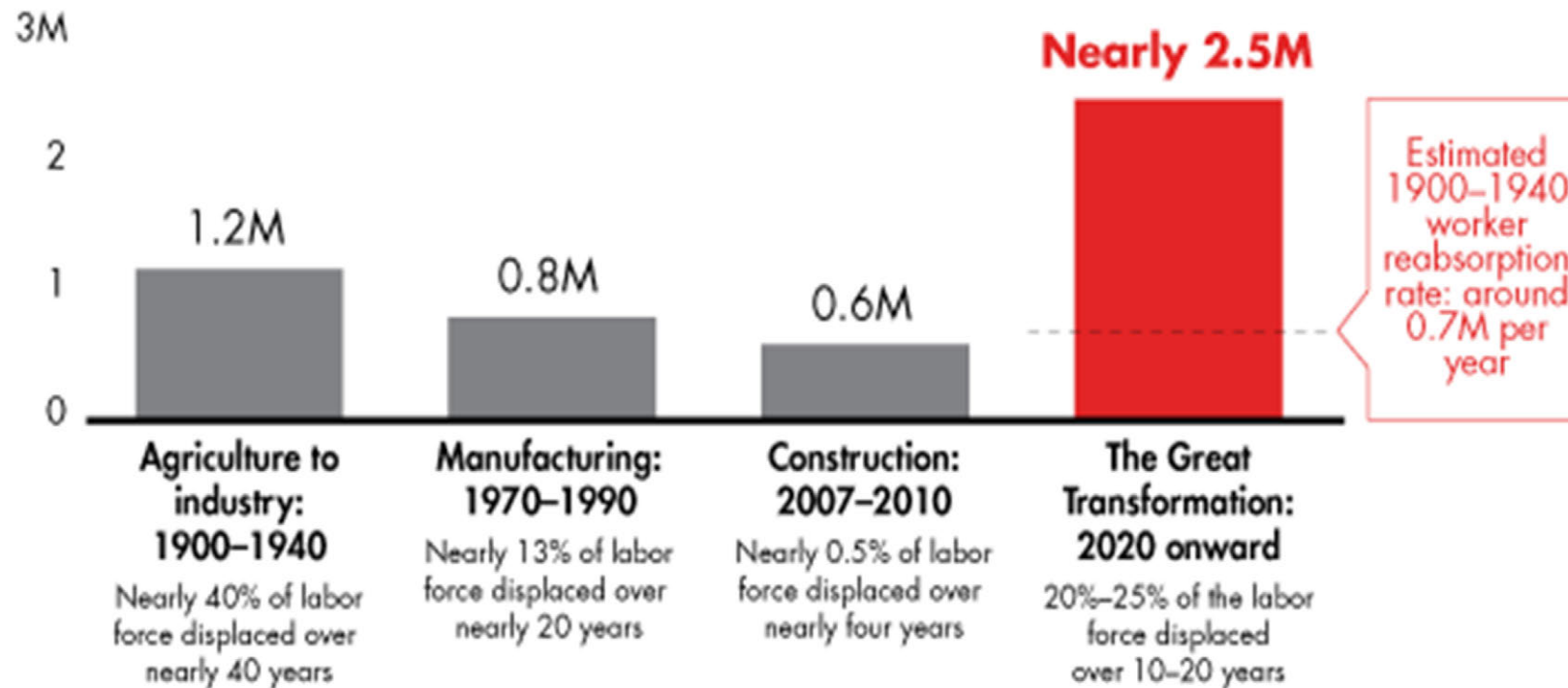Automation-driven labor productivty growth, 2015 vs. 2030

Notes: Labor productivity measured in dollars of gross output per employee; projections do not include baseline forecasts of labor productivity growth
Sources: US Bureau of Economic Analysis; US Bureau of Labor Statistics; Bain Macro Trends Group analysis, 2017

Scale and Speed of Adoption matters as displaced workers re-skill for new employment

Figure 27

▌ US service sector automation could displace labor two to three times more rapidly than previous transformations

Average annual workers displaced, scaled to the size of the 2016 total labor force

Nearly 2.5M

1.2M	0.8M	0.6M	

Agriculture to industry: 1900–1940
Nearly 40% of labor force displaced over nearly 40 years

Manufacturing: 1970–1990
Nearly 13% of labor force displaced over nearly 20 years

Construction: 2007–2010
Nearly 0.5% of labor force displaced over nearly four years

The Great Transformation: 2020 onward
20%–25% of the labor force displaced over 10–20 years

Estimated 1900–1940 worker reabsorption rate: around 0.7M per year

Note: Reabsorption rate calculated based on estimated average annual reabsorption of displaced agricultural workers from 1900 to 1940
Sources: US Census Bureau; US Bureau of Labor Statistics; Bain Macro Trends Group analysis, 2017

8

How Will it Impact Government?

The Role of Government in the Great Transformation

Legislation and Regulation

Utilize Technology to Improve Services

Foster Successful Adoption

Sample Legislation Challenges

Legislation and Regulation

- What rights do consumers have to their data?

- When AI makes a decision, who is liable for the consequences?

- What are ethical uses of Artificial Intelligence?

Data Scandals

June 2018, 92 million records breached

January 2018, 1.1 billion records breached

June 2018, 340 million records breached

Sample Opportunities to Leverage Technology

Utilize Technology to Improve Services

- How can citizens interact with the Government and obtain information?

- How can Administrations learn from successes and failures?

- How can problems and solutions/ resources be optimally matched?

Customer Preference is Moving Towards Digital

44% of shoppers prefer to use chatbots rather than speak to a live agent

90% of consumers expect a consistent experience across channels

84% of customers try to find the answer to their question using a brand's self-service application.

By 2020, 85% of Customer Relationship interactions will be through an AI powered service

Source: Nuance Communications, Gartner

Exampled of Governments Supporting Change

Foster Successful Adoption

- What data infrastructure will regional ecosystems require?

- How can Governments initiate Public Private Collaborations?

- What tone can you set for talent in your area of responsibility?

What is the Digital County Effort?

What is the Digital County Effort?

12 Participating Counties with over 150 Individuals

14 Use Cases to be Reimagined

3 Events to Create Ideas for Tomorrow

Who Was "The Digital County"

180 Participants, Counties and Experts

- County employees from the frontlines to leadership roles

- Technology Experts to share their knowledge and facilitate sessions

- WCA and other Sponsors enabling the event

Sponsor Recognition

EVENT PARTNER

PLATINUM SPONSORS

GOLD SPONSORS

Fond Du Lac County

La Crosse County

League Of Wisconsin Municipalities

Ozaukee County

SILVER SPONSORS

Door County

Iowa County

KEYNOTE SPONSOR

LUNCH SPONSOR

Jefferson County

The Scope of the Conversation

14 Use Cases to be Reimagined

- Road Maintenance and Winter Road Maintenance

- Drones in Public Service, 911 Center Operations

- Sheriff's Patrols, Tracking of Evidence, Jail Exit Guidance

- Application for Economic Support

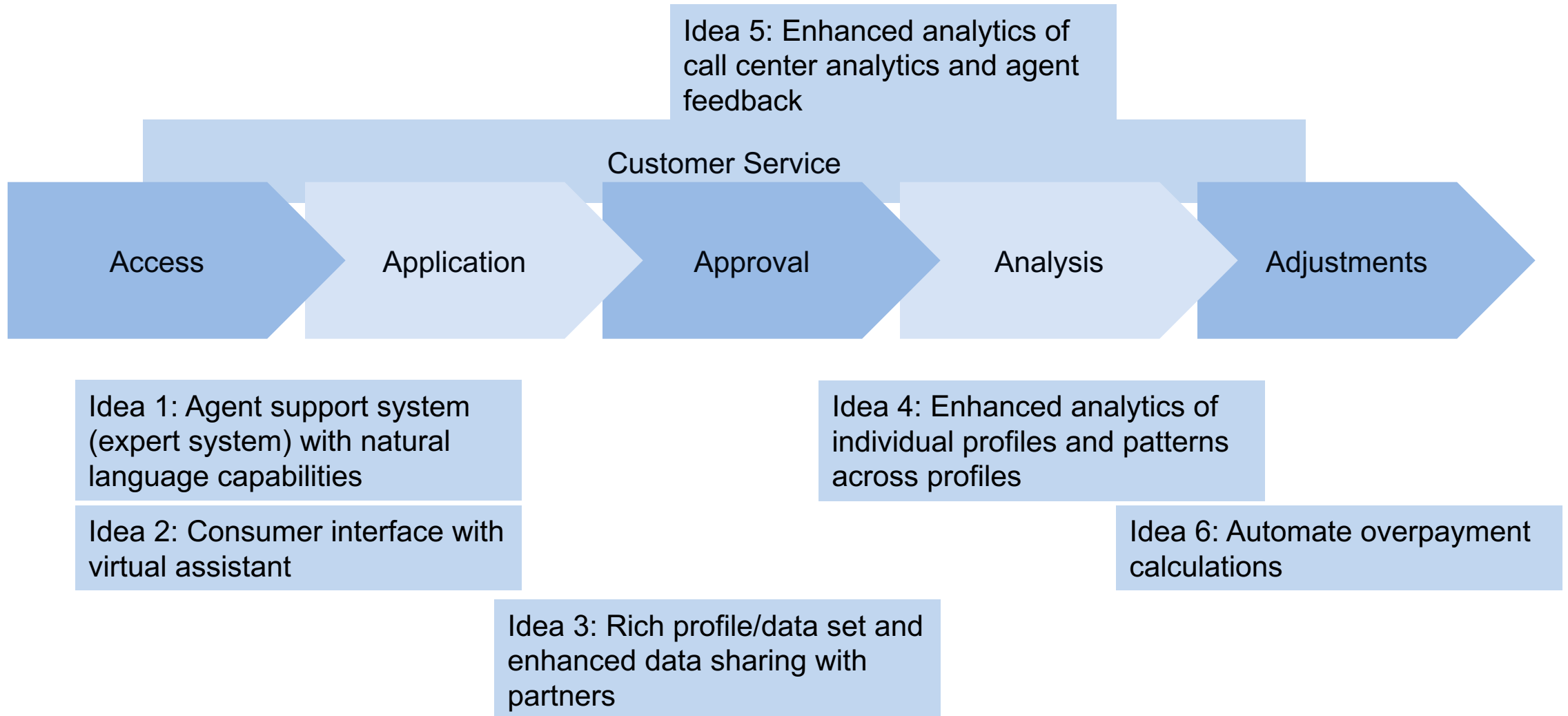# So, What Exactly Happened?

3 Events to Create Ideas for Tomorrow

- Eau Claire, Green Bay, Cedarburg

- AI, IoT, Blockchain

- Keynotes to educate

- Problem definition to understand

- Brainstorming to imagine solutions

What are Key Outcomes?

Economic Support – Reimagining Highlights

Idea 5: Enhanced analytics of call center analytics and agent feedback

Customer Service

Access → Application → Approval → Analysis → Adjustments

Idea 1: Agent support system (expert system) with natural language capabilities

Idea 2: Consumer interface with virtual assistant

Idea 3: Rich profile/data set and enhanced data sharing with partners

Idea 4: Enhanced analytics of individual profiles and patterns across profiles

Idea 6: Automate overpayment calculations

Starting point only, needs further work

23

Idea Profile: Agent Support System

What is the basic idea?

- Agents will have the opportunity to access a knowledge system in natural language to receive guidance, reduce ambiguity

How is technology being leveraged?

- Create a knowledge/expert system with Natural Language capabilities
- Virtual assistant interface for agents
- AI based mapping of areas of ambiguity

What benefits are derived?

- Enhanced ability of the agent to assist the customer, make accurate decisions/assessments
- Fewer cases go to committee, fewer workarounds
- Heatmap of policy change needs

What's next?

- Principal technology components exist, but have not been combined for this purpose
- Explore if pilots are underway (exact or analogous applications)
- Work with state agencies to test their receptiveness for technology upgrades (multiple agencies involved with varying technology status quo)
- Identify appropriate test scope (what, who, where)

Starting point only, needs further work

Where is the Journey Going?

What is Next for the Digital County?

Continued Advocacy by WCA

Brown County Visionary Leadership

Opening Doors and Building Coalitions