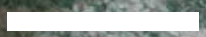




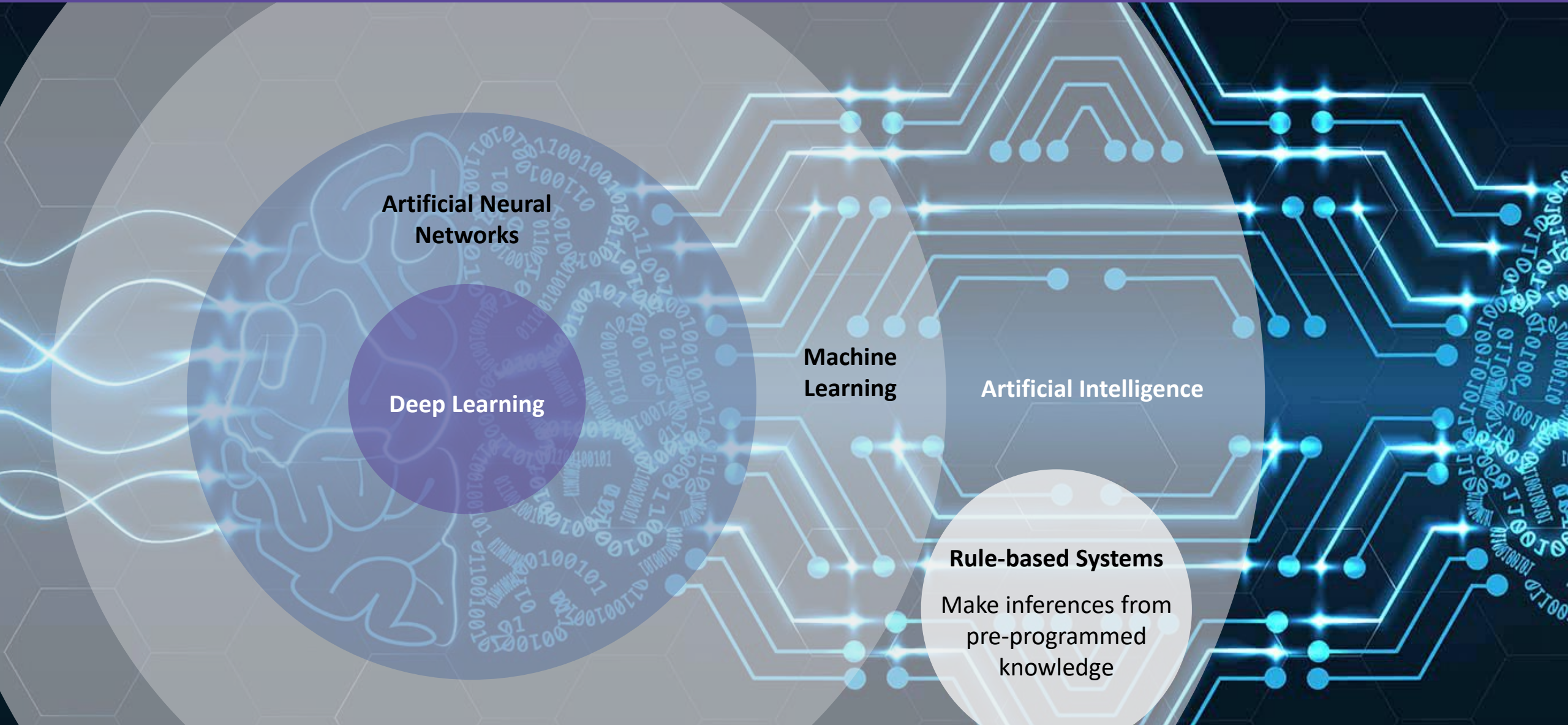
AI in Reinsurance

ELEMENT AI



The narrowing definition of AI

As simple as possible, but not simpler
- Albert Einstein



Building AI readiness

1. Digital transformation
2. Operational systems modernization
3. Connectivity
4. Computational resources
5. Talent



D1 – Goal: Engagement, Automation, Insights

Engagement Chatbots, recommender systems, ...	24	15.8%
Automation Auto doc processing, Cognitive RPA, ...	71	46.7%
Insights Satellite imagery, speech analytics, ...	57	37.5%
Total	152	100.0%

Tom Davenport and Rajeev Ronanki,
[Artificial Intelligence for the Real World](#)
Harvard Business Review, Jan/Feb 2018

*“However, our study [...] reveals that **highly ambitious moon shots are less likely to be successful than “low-hanging fruit” projects** that enhance business processes.”*

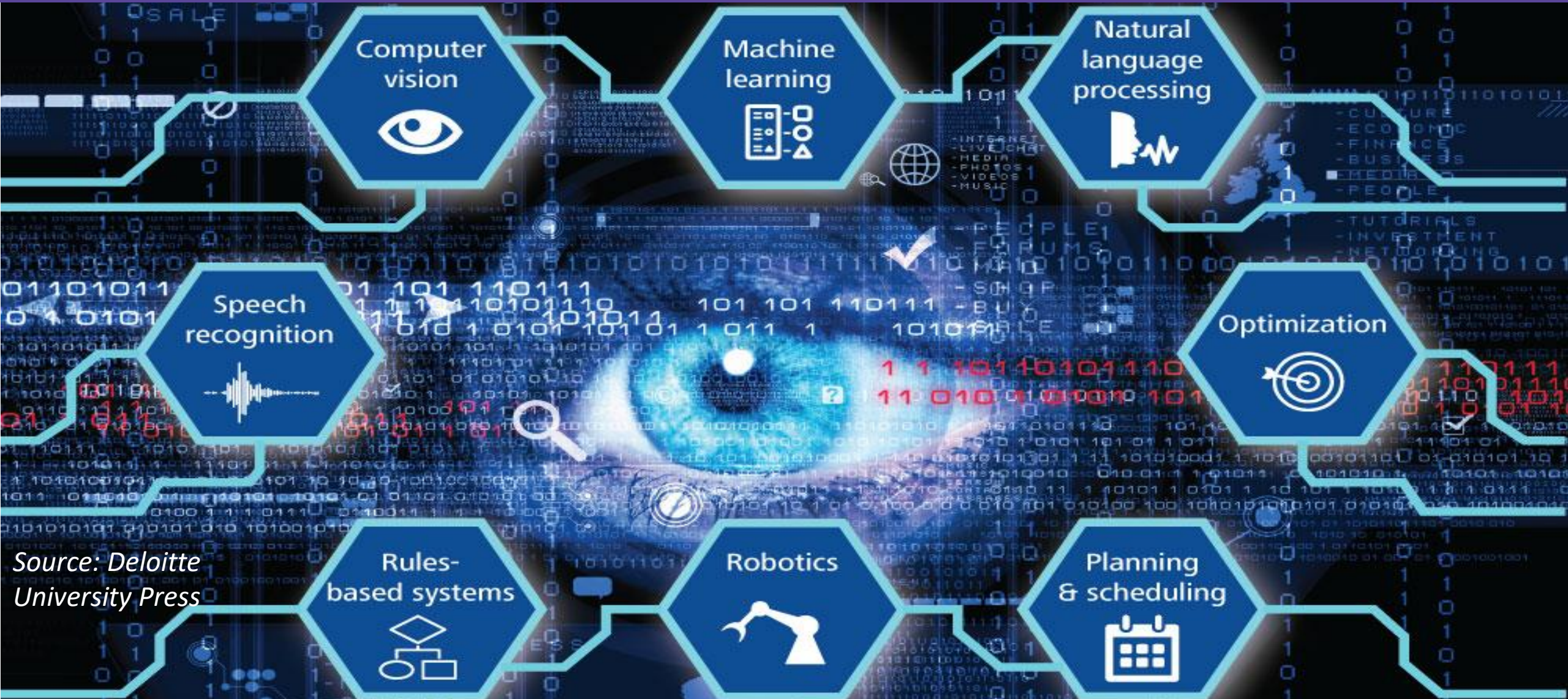
D2 – Customer journeys and internal functions

Life cycle	Engagement	Automation	Insights
Acquisition			★
Underwriting		★	
Pricing			★
Servicing	★		
Claims		★	★
Risk and finance		★	

D1 x D2 – Portfolio of projects (roadmap)

Life cycle	Engagement	Automation	Insights
Acquisition			Real-time bidding for ad placement
Underwriting		Automated document processing	
Pricing			Genetic predictive tools
Servicing	Recommender systems, Chatbots		
Claims		Touchless claims	Speech analytics of call center recordings
Risk and finance		Cognitive RPA	

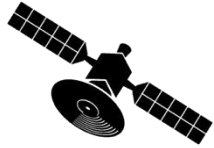
D3 – AI capabilities



Source: Deloitte
University Press

D4 – Other technologies involved

Satellites



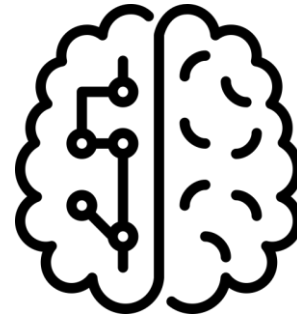
Blockchain



Payments



Drones



AR/VR



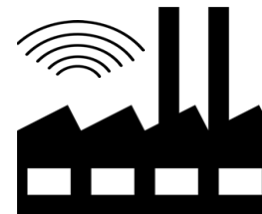
Connected and autonomous vehicles



Connected homes



IIoT



Wearables



Prevention: insurers and customers as partners

Solving distracted driving



Connected homes and leak sensors



Wearables and health insurance

[Gen Re names TrackActive as Collaboration Partner](#)

BusinessWire, October 11, 2017

Life insurance underwriting with a selfie

Janus – from Lapetus Solutions:

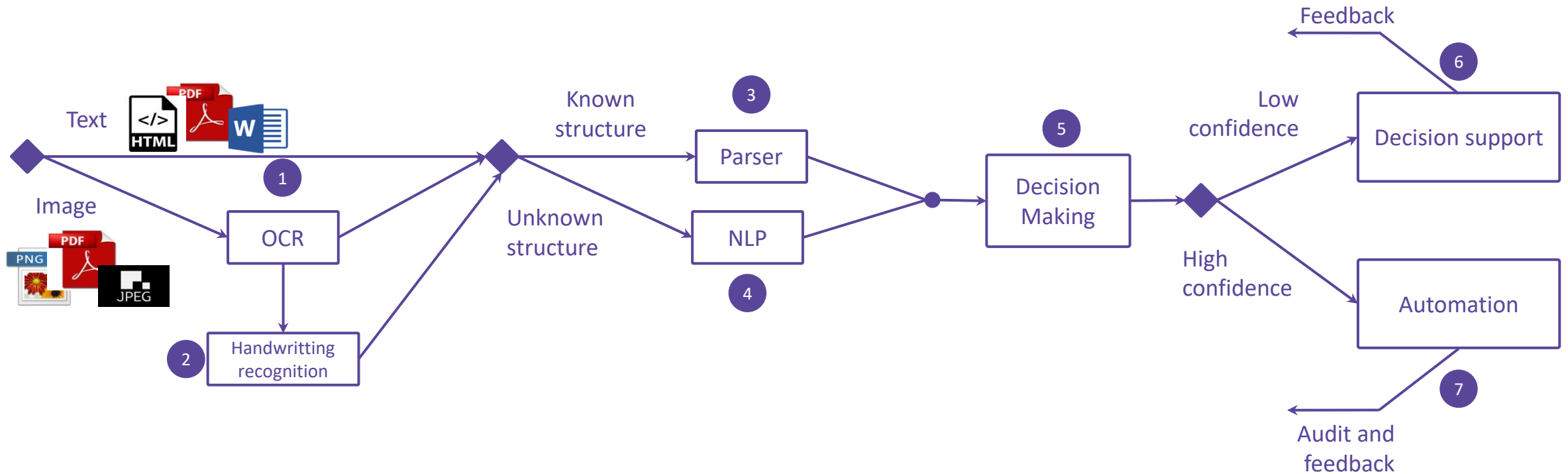
- Captures 200 data points
- Infers Age, Gender, and BMI
- In development: Alcohol use, Smoking, Chronic diseases



D5 – Decision making or support (or hybrid)



Automation: Automated document processing



Use cases:

- Triage broker submissions
- Surety compliance certificate emission
- Claims adjudication
- Subrogation opportunities

Audience voting question

Have you already implemented a solution for automated document processing?

- a. Yes, we are already using OCR and natural language processing (NLP)**
- b. No, but we are in the process of implementing such a solution.**
- c. No and we do not have any plan to implement such a solution.**
- d. Not applicable**

The importance of context



Merchant

Mirza Transportation

Date

Jan 18, 2018

Currency

CAD

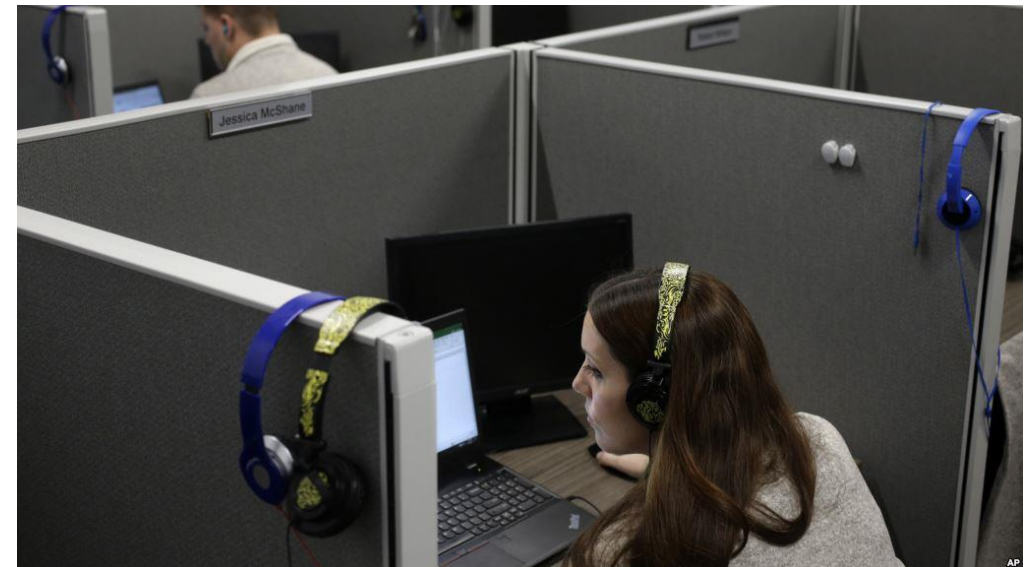
Total

C\$11.25

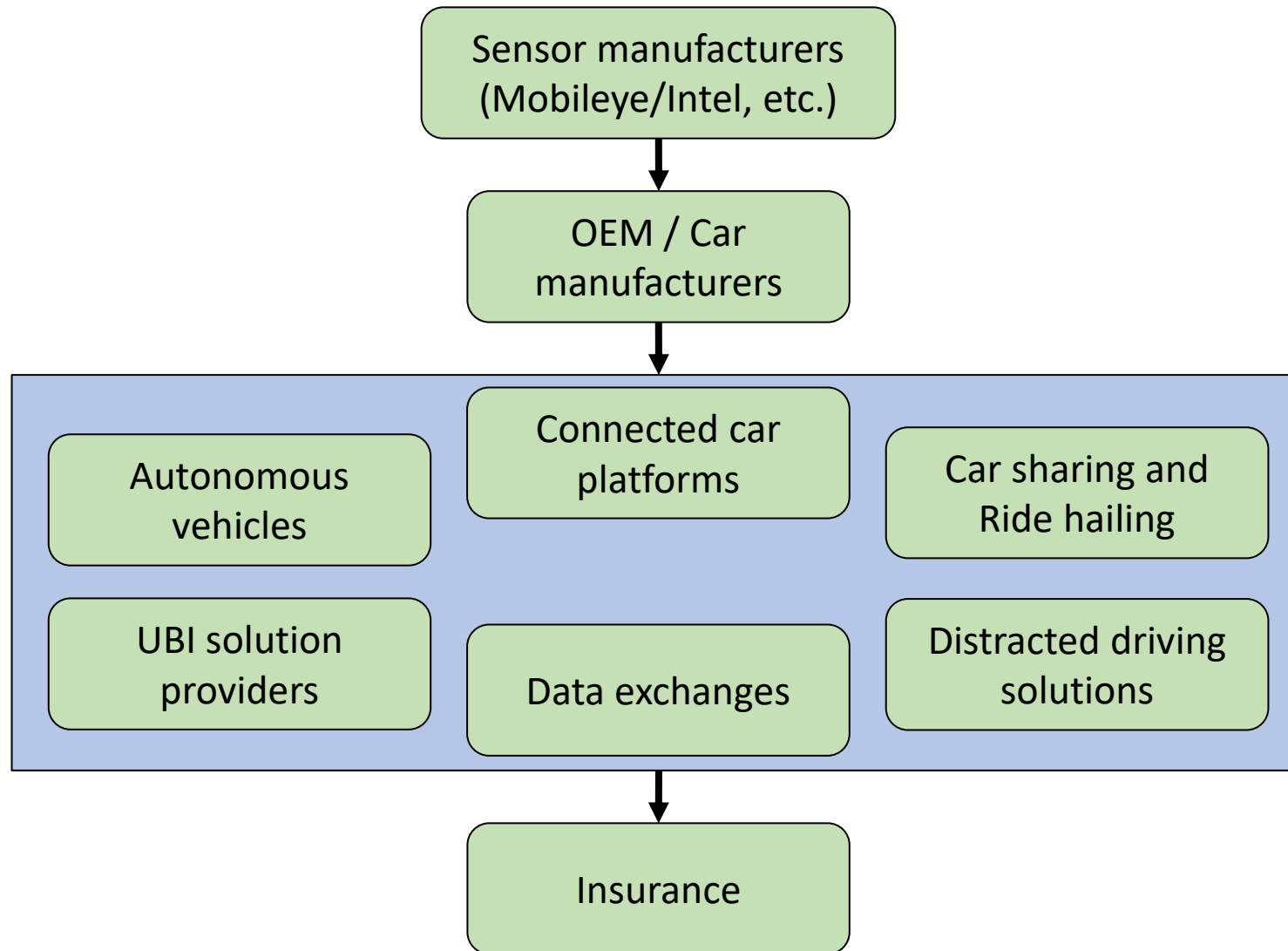
AI has a dirty little secret: it's powered by people

Voice of America

March 5, 2018



Manufacturers, data exchanges, and AI



Dematerialization, cyber insurance, and AI

Percentage of S&P500 companies' market value tied to **intangible assets**

1975	2015
17%	84%

Source: [Intangible asset market value study](#),
Ocean Tomo LLC, 2017

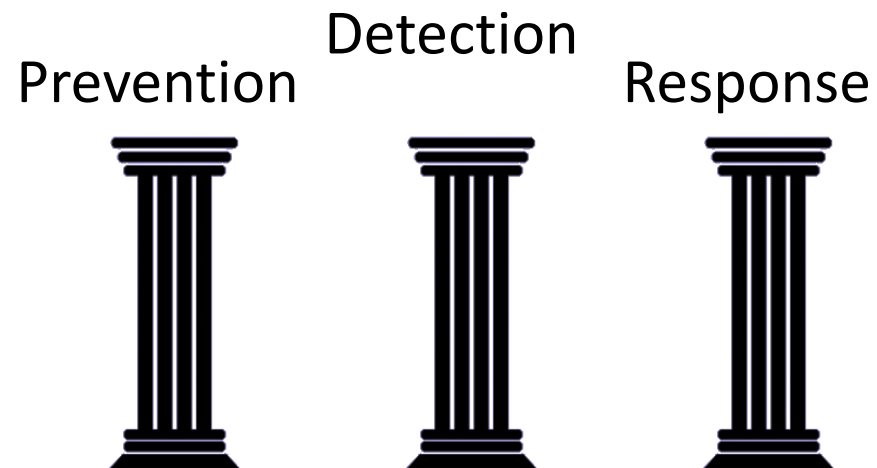
2016 US figures

Cyber insurance GWP	1.3B
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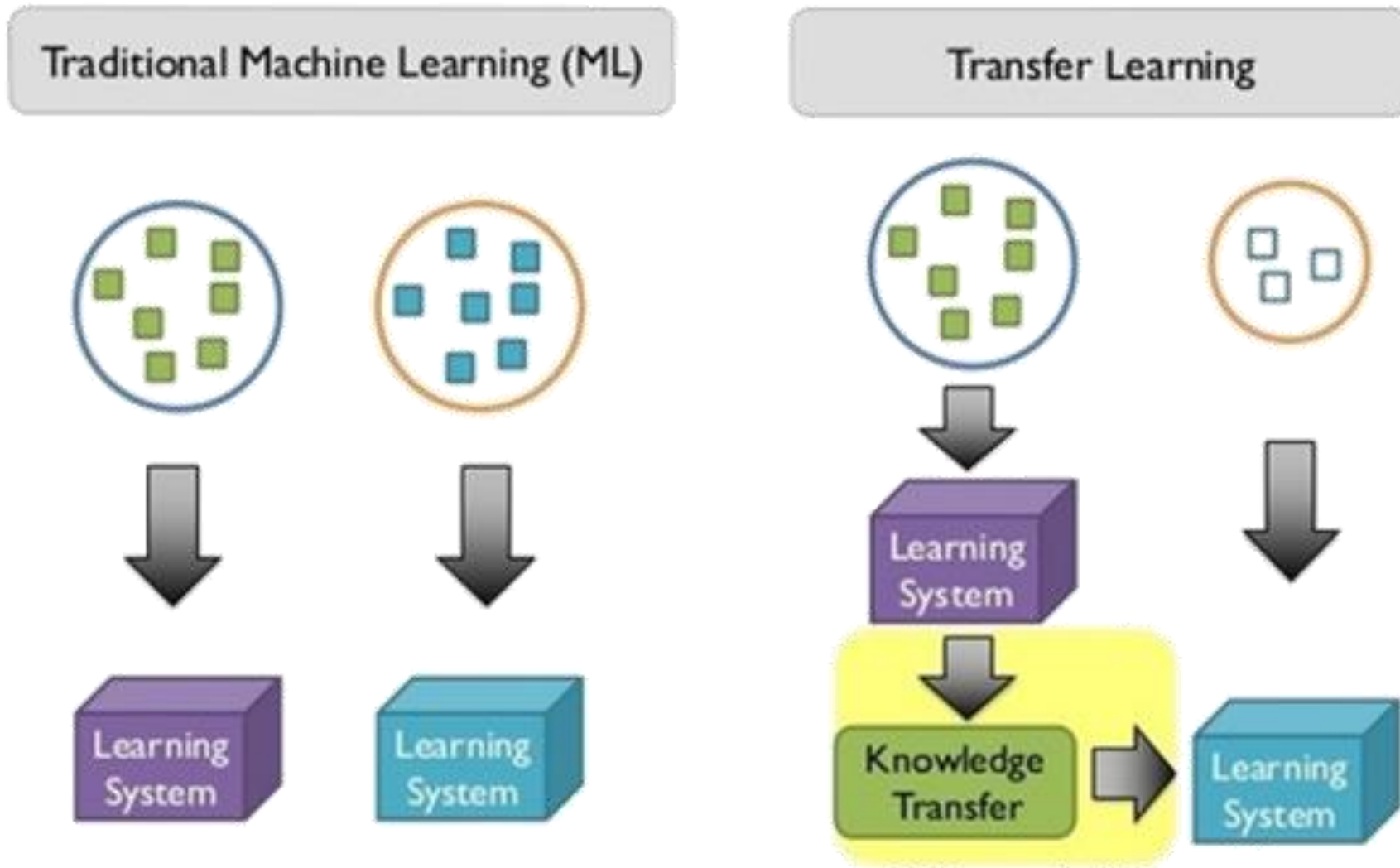
Source: [Fitch ratings](#)

Cost of Malicious Cyber Activity	57B to 109B
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Source: [The Council of Economic Advisors](#)



Transfer learnings and data consortiums



AI trustworthiness

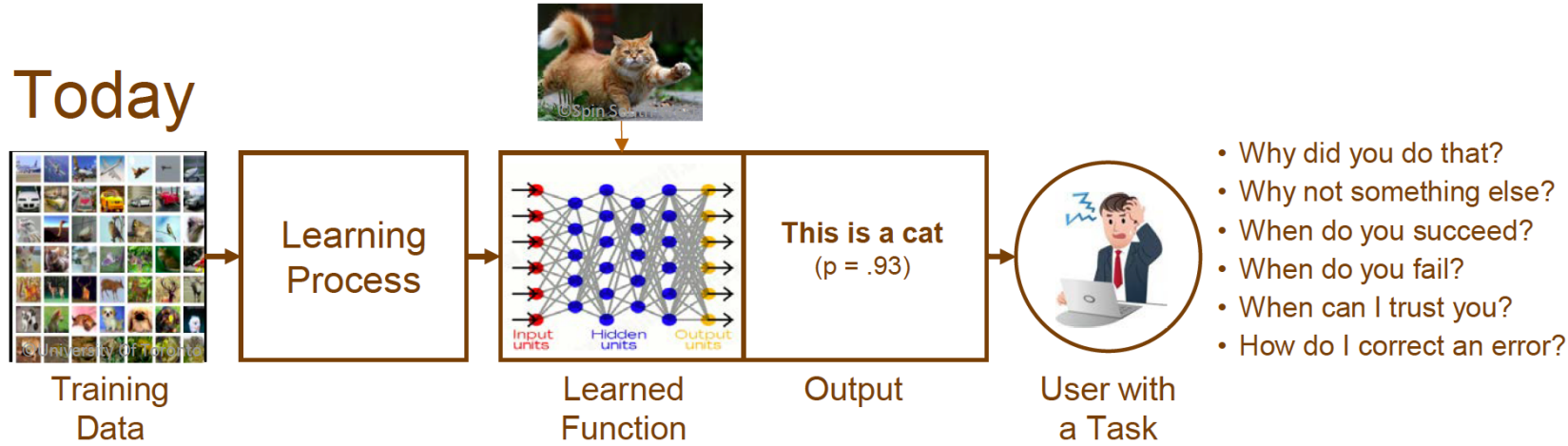
CXO - Benefits

CRO - Limitations



Building trust in AI

Today

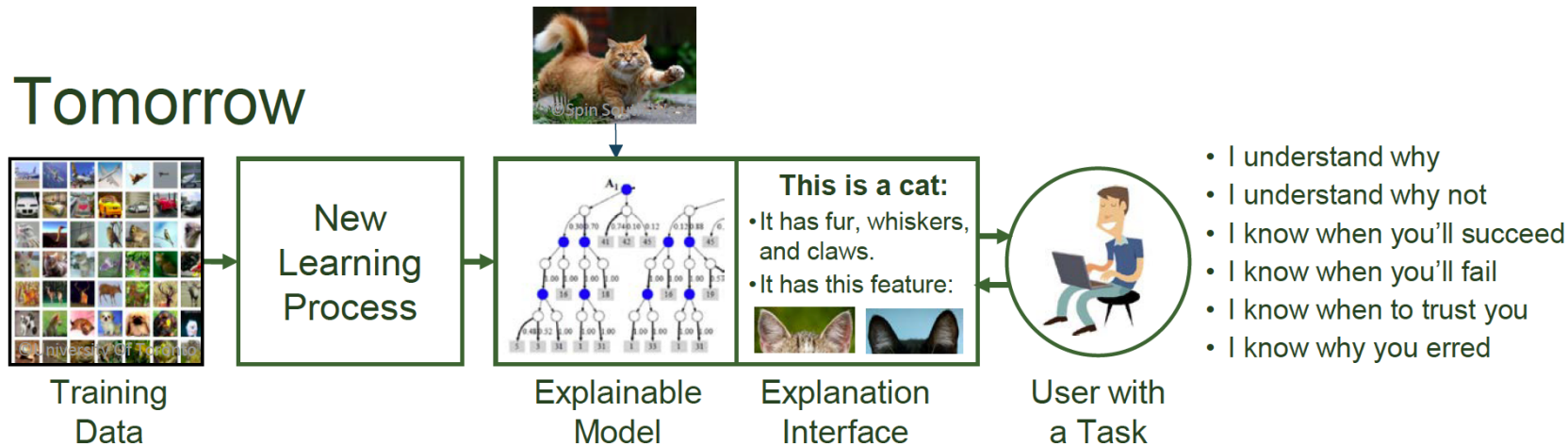


- Why did you do that?
- Why not something else?
- When do you succeed?
- When do you fail?
- When can I trust you?
- How do I correct an error?

*“The real safety question, if you want to call it that, is that **if we give these systems biased data, they will be biased**”*

- John Giannandrea
Chief of AI, Google

Tomorrow

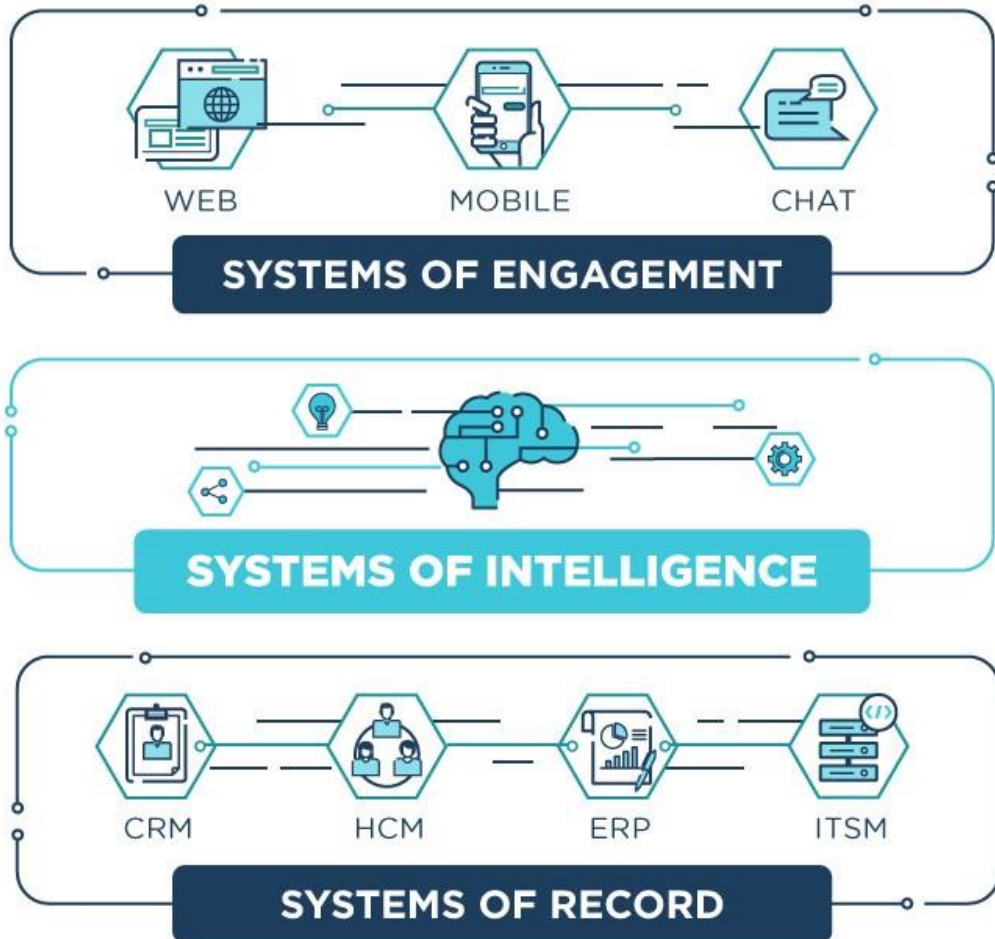


- I understand why
- I understand why not
- I know when you'll succeed
- I know when you'll fail
- I know when to trust you
- I know why you erred

Forget Killer Robots—Bias Is the Real AI Danger

MIT Technology Review
October 3, 2017

Systems of intelligence



Keys to successful systems of intelligence

- Domain knowledge
- Abstraction of complexity
- Human – AI interaction
- Latest AI
- Data (Internal and External)
- Network effects

ELEMENT^{AI}
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