

Sound Check



The Future of Ag¹⁸

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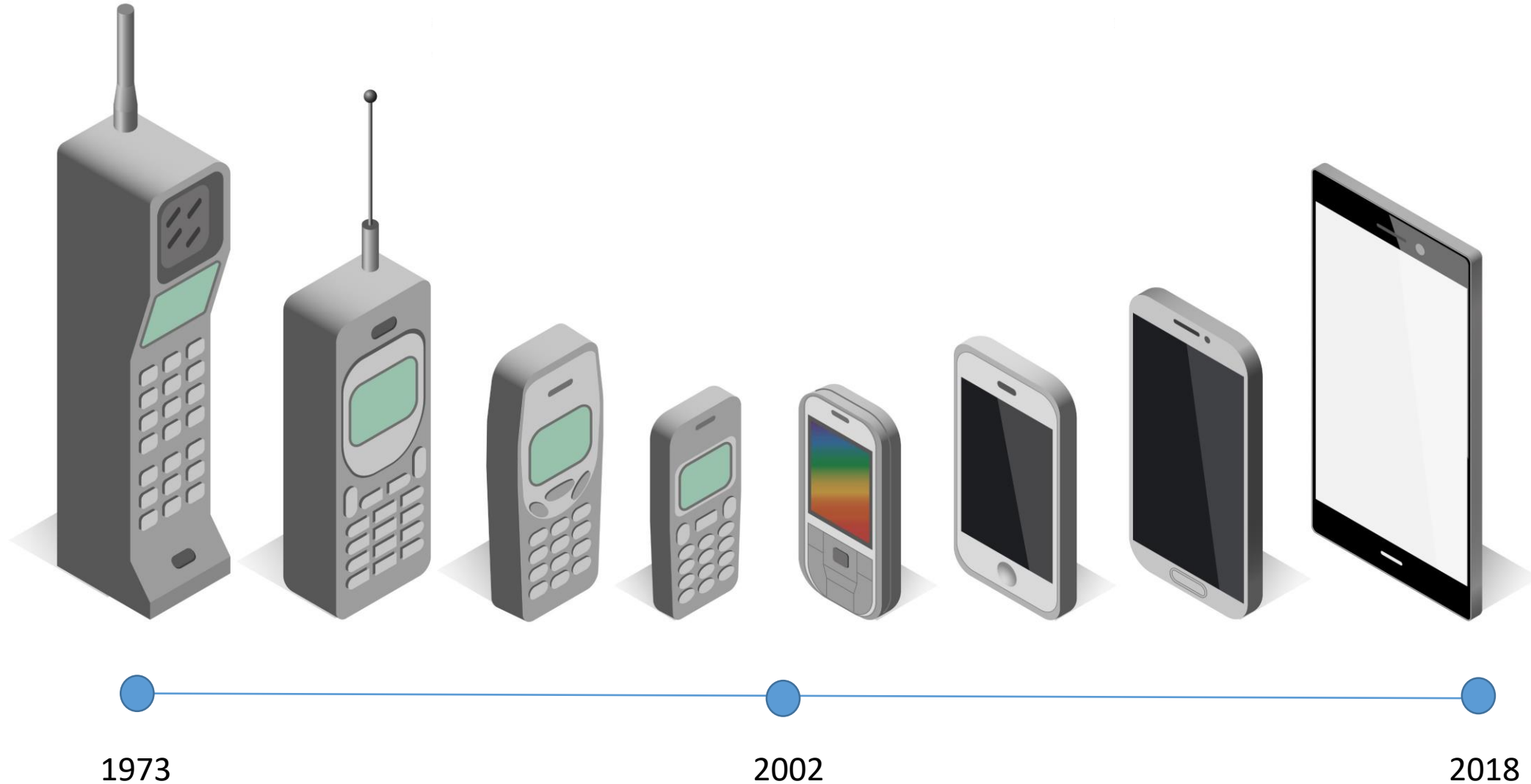








The exponential evolution of the cell phone



Thinking about the future

Having experience is no longer an advantage.
It only means you are an expert in the past.



If the future is different than the past, **how safe is your business?**



S=ELFZONE™

SI=ELFZONE™



FARM MANAGEMENT SOFTWARE



NEXT GEN FARMS



PRECISION AGRICULTURE AND PREDICTIVE ANALYTICS



MARKETPLACES



ANIMAL DATA



ROBOTICS AND DRONES



SMART IRRIGATION



PLANT DATA/ANALYSIS



SENSORS



In ag-food, we need to think bigger

Google = \$13 billion

MONSANTO  +  = \$1 billion



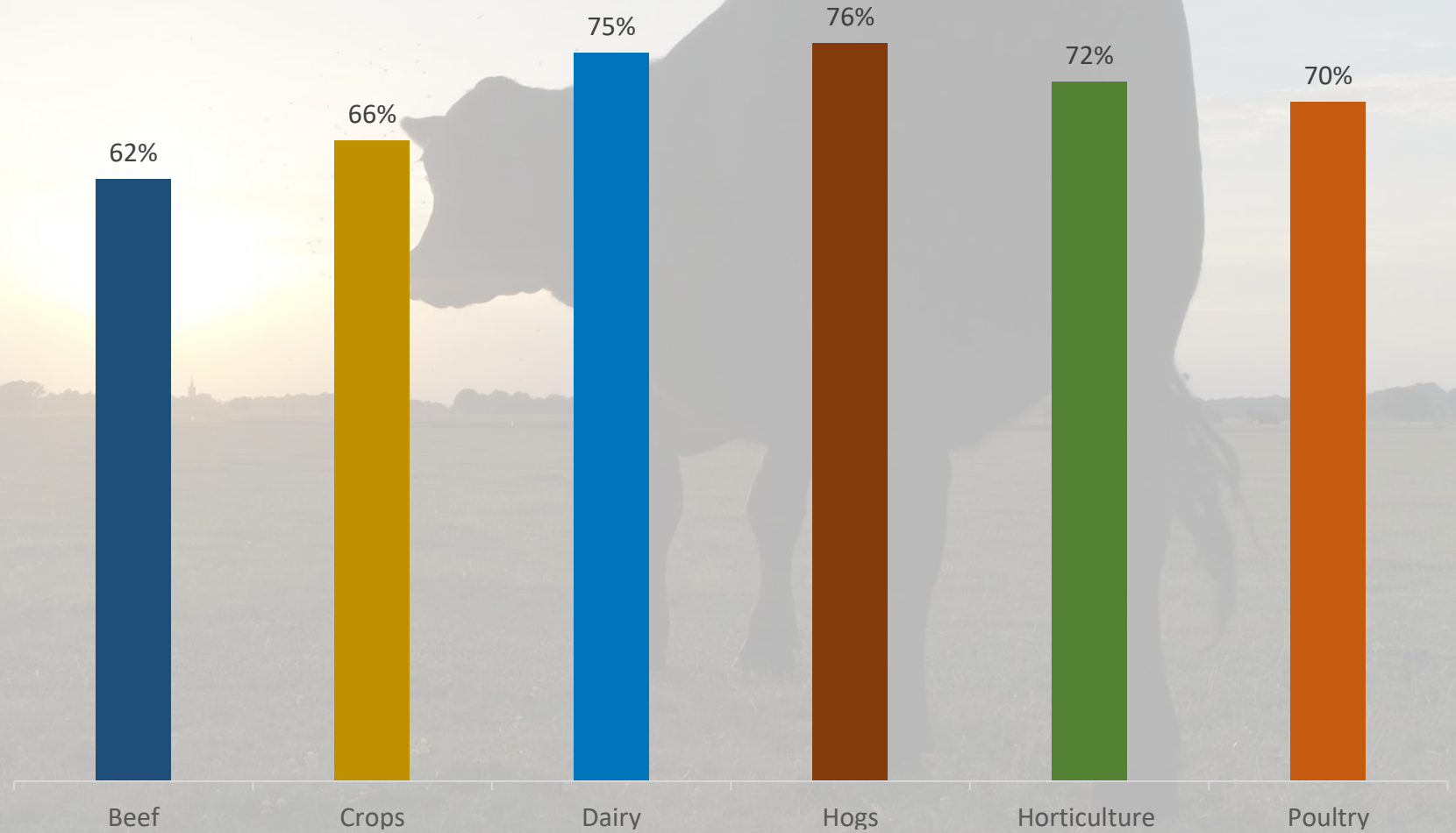
In the next **three years**
I will be making
technological
upgrades/changes

46% - To become **more efficient**
in core productions

31% - To manage business
data/information

24% - I will not be making **any**
technology changes in the next
three years

Tech **changes** over the past year **by sector**



Why are you **not adopting** a new technology?

51% - High cost of advanced technologies

33% - Payback period on the technology is too long

27% - Investment not necessary for continuing operations

14% - I am unsure of how to compute the economic benefit



You don't have to have the latest technology,
but you will **compete** against those **who do**.

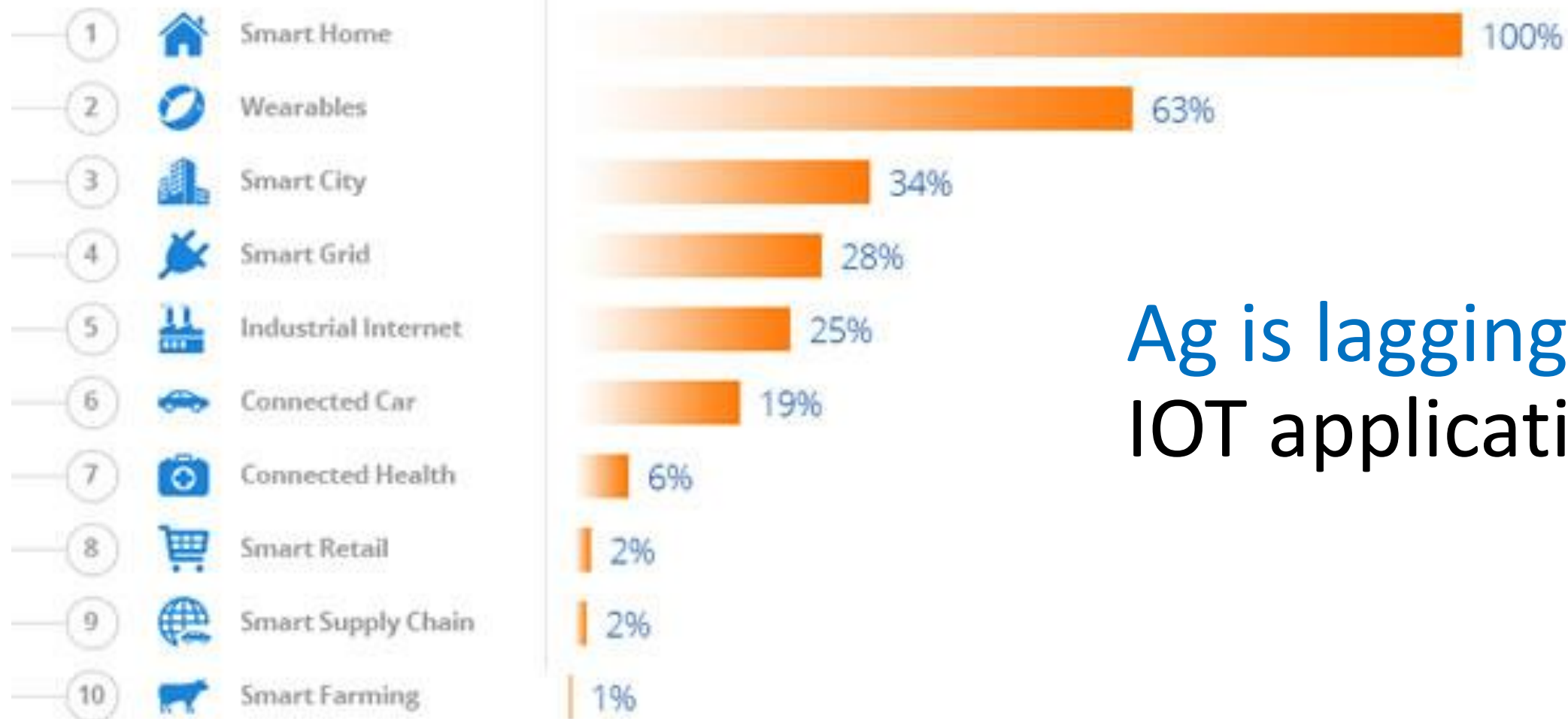


Artificial Intelligence and the Internet of Things



The 10 most popular Internet of Things applications

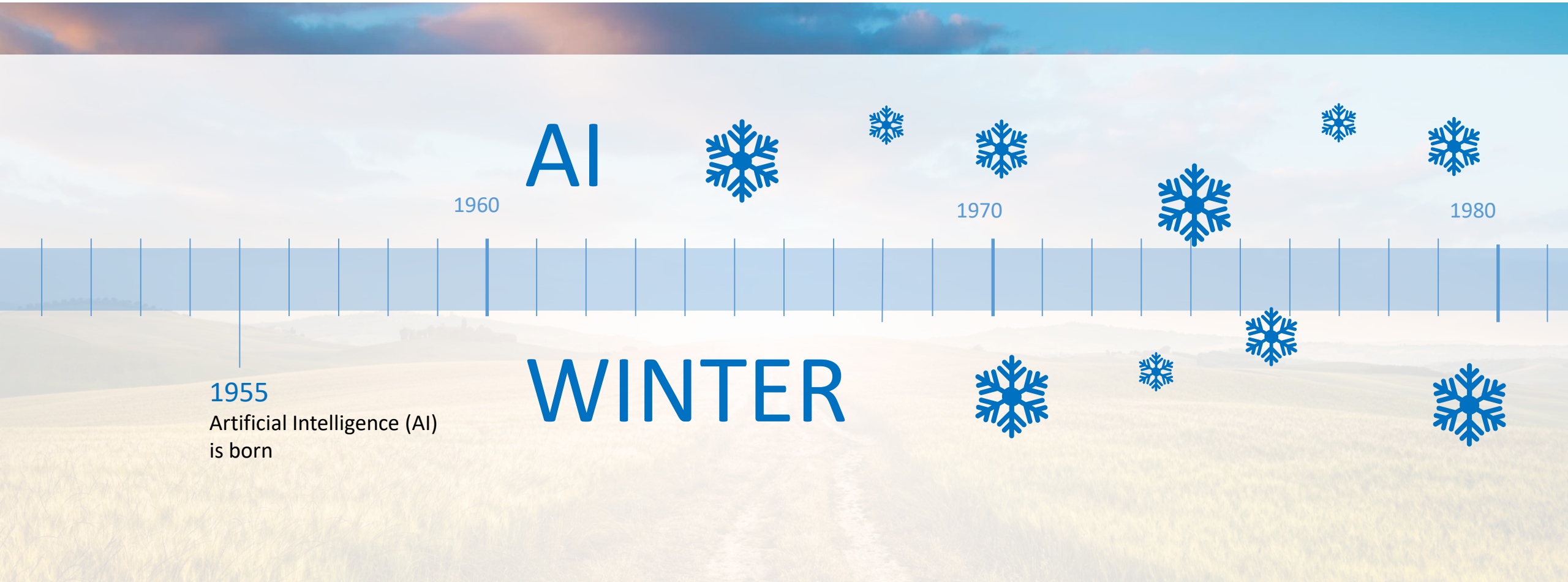
A ranking based on web analytics



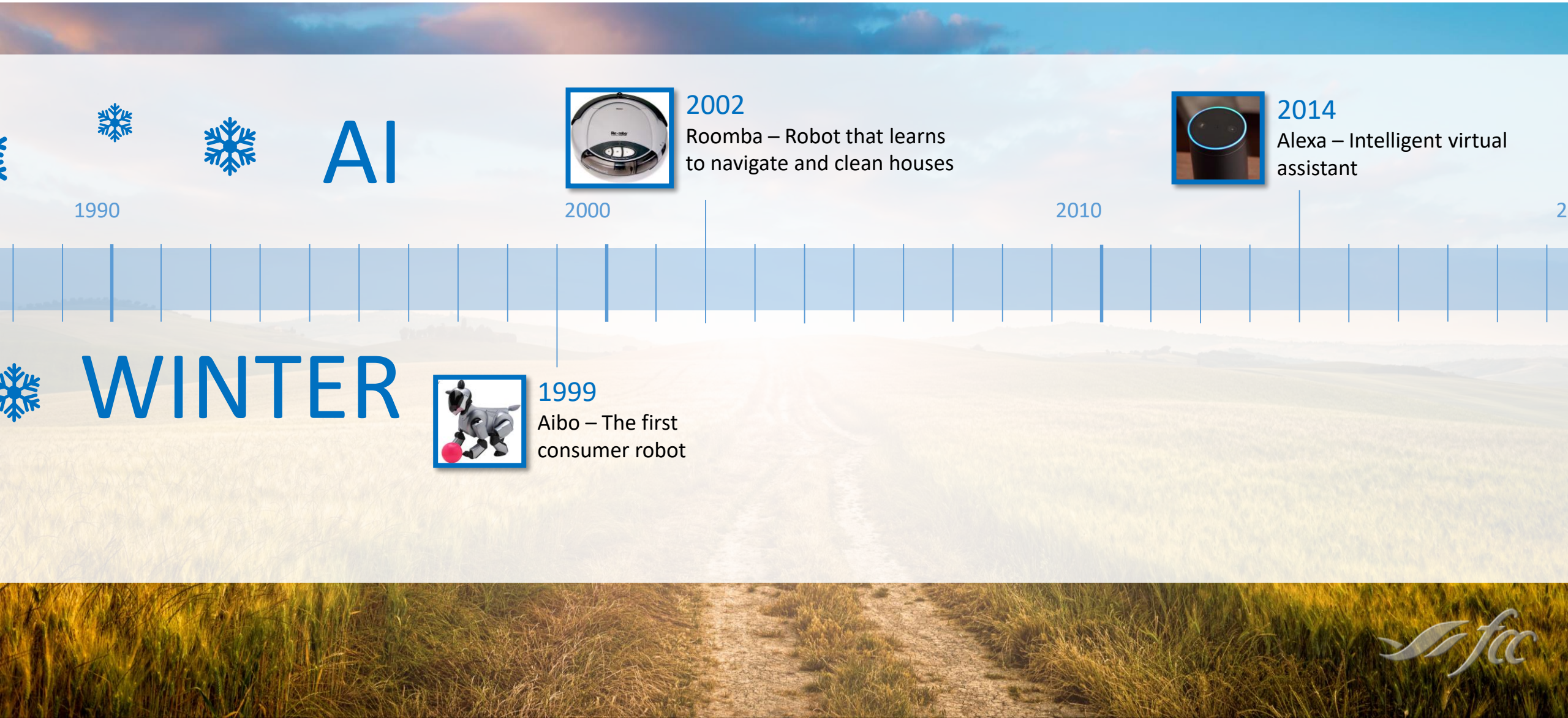
Ag is lagging in
IIOT applications



Key moments in AI's timeline



Key moments in AI's timeline



Artificial intelligence will make our lives easier

Predicted market size of VR/AR software for different use cases in 2025*



*base case scenario

2017 Goldman Sachs Global Investment

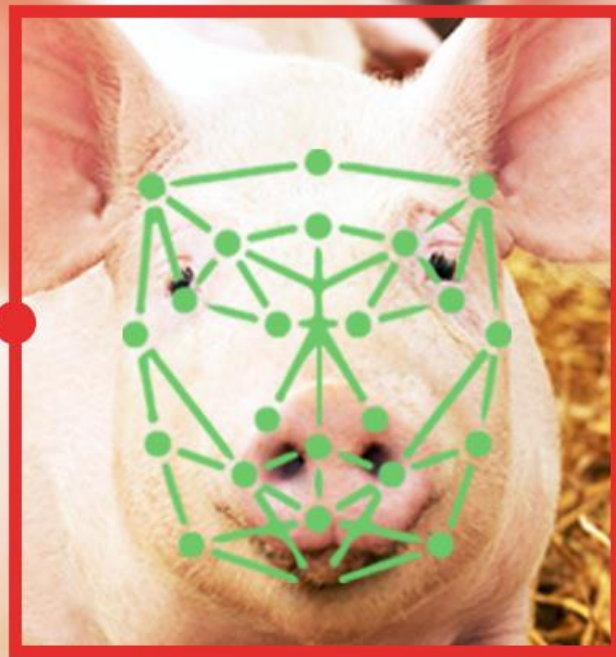




Open/
Trigger

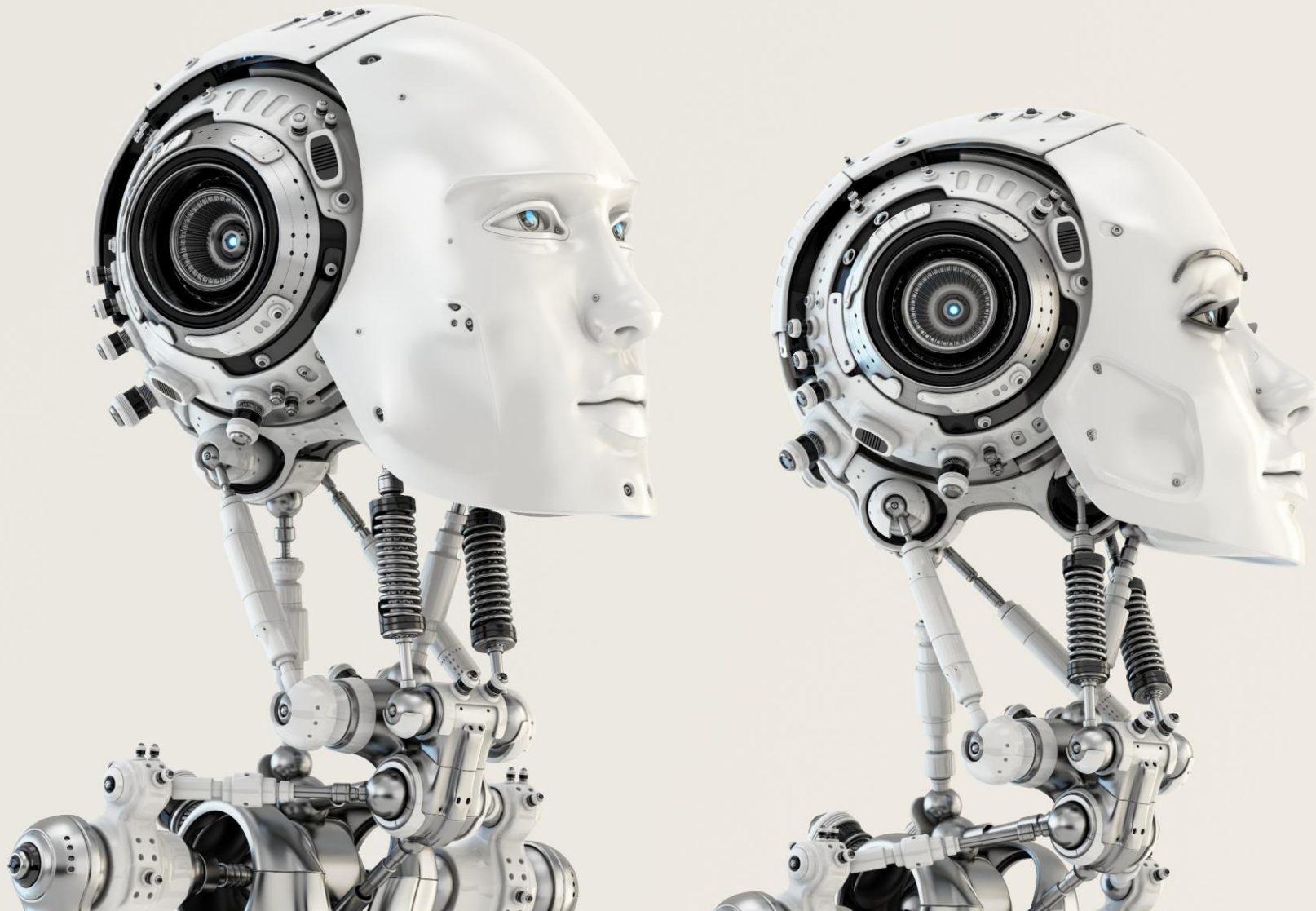
Look

Move using left joystick
Look using right joystick
or... just turn your head
Push "**B**" to start



PIG

Let's talk about robots



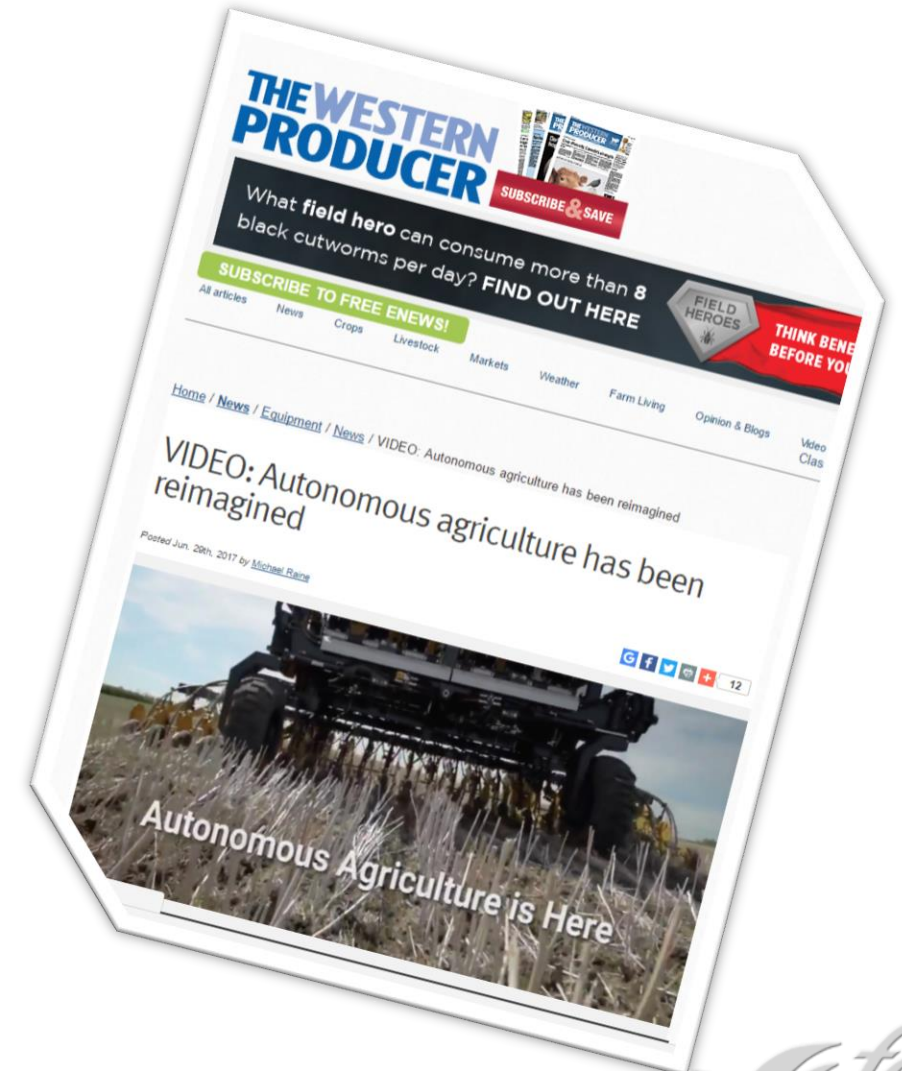
Robots have shown
remarkable
advancements





Robots have shown
remarkable
advancements

Driverless is here





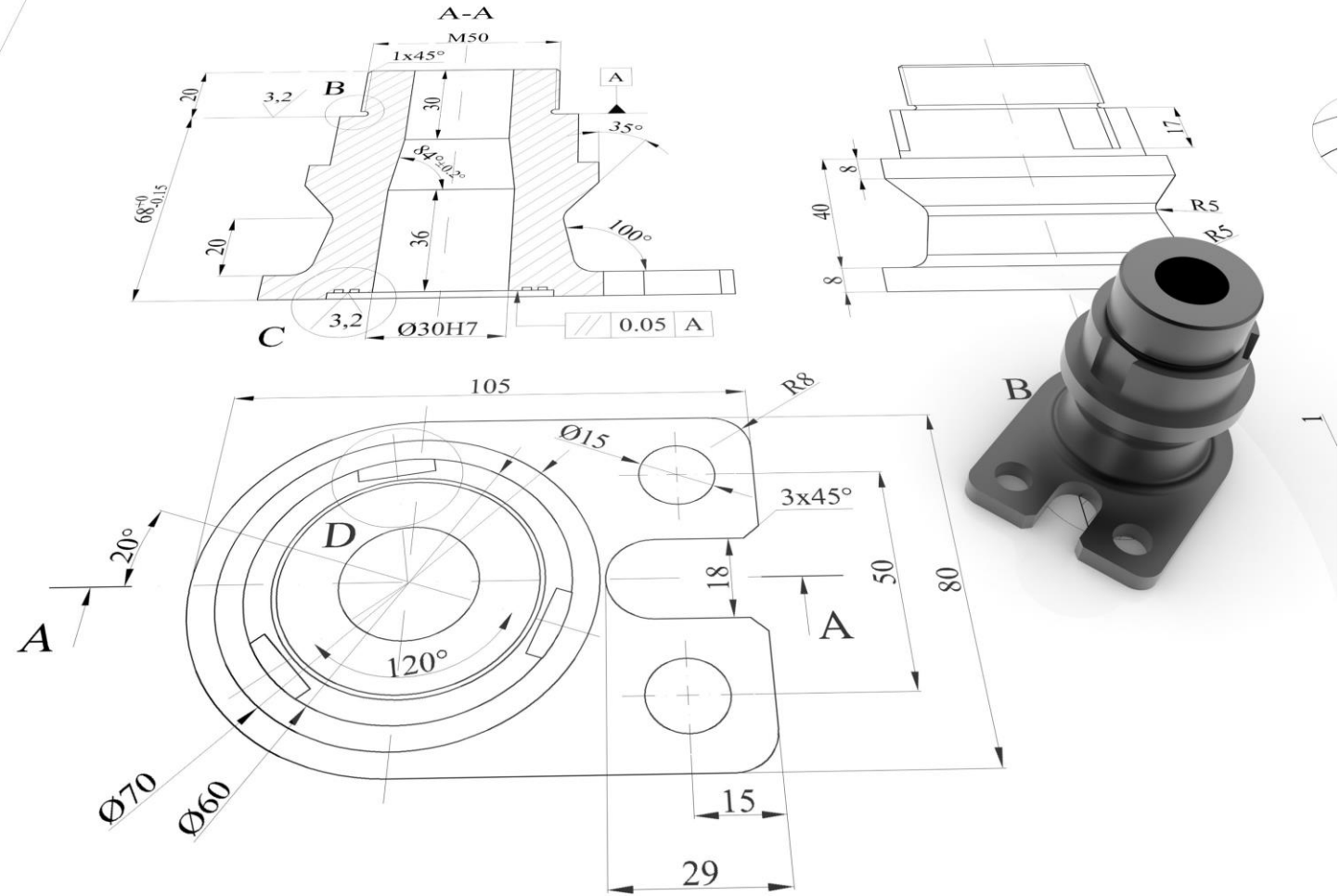
Use infrared technology to **manage disease**





Autonomous will
impact **trucking**
and **warehousing**

3D printing offers
just-in-time
delivery



Data

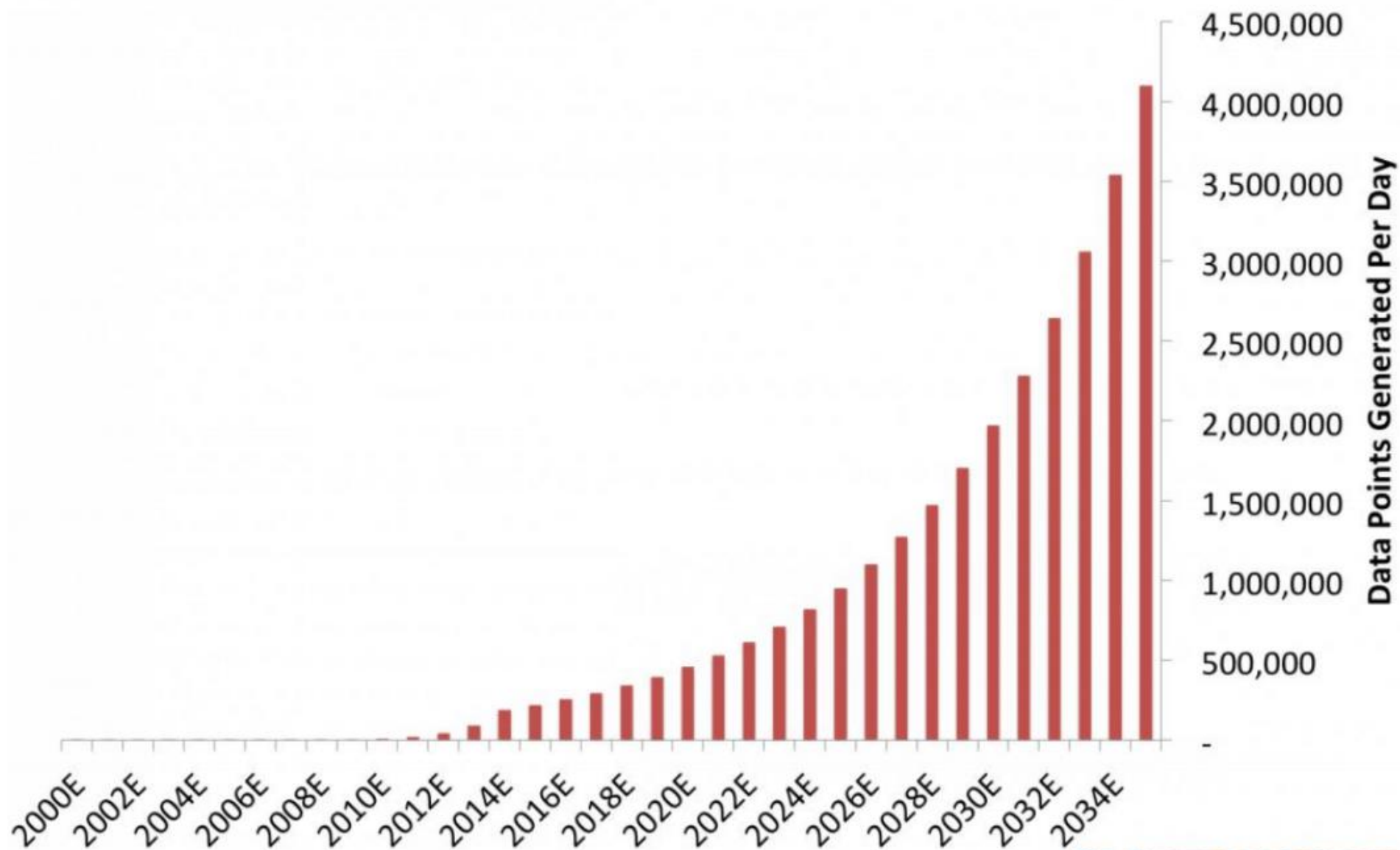


Data is the new oil.

Data isn't about collection, **it's about connection**



Estimated Amount Of Data Generated By The Average Farm Per Day



Source: OnFarm. BI Intelliaence Estimates. 2015

BI INTELLIGENCE

“

I have a deep seated **mistrust** of the
digitalization of my farm information and so I
avoid it as much as possible.

- Crop producer, Ontario

”

Data interpretation **will be essential**



We don't need **precision** ag...
we need **decision** ag

A person wearing a blue, white, and red plaid shirt is holding a tablet computer. They are standing in a lush green field with rolling hills in the background under a warm, golden sunset sky. The text 'Blockchain changes the game on traceability and food safety' is overlaid on the right side of the image.

Blockchain
changes the game
on traceability and
food safety



Advanced science



“Science will not
tell you what your
policy should be.”

John Butterworth, The Guardian



DNA testing will allow for **targeted crop protection**



Substitutes for milk and animal proteins are hot



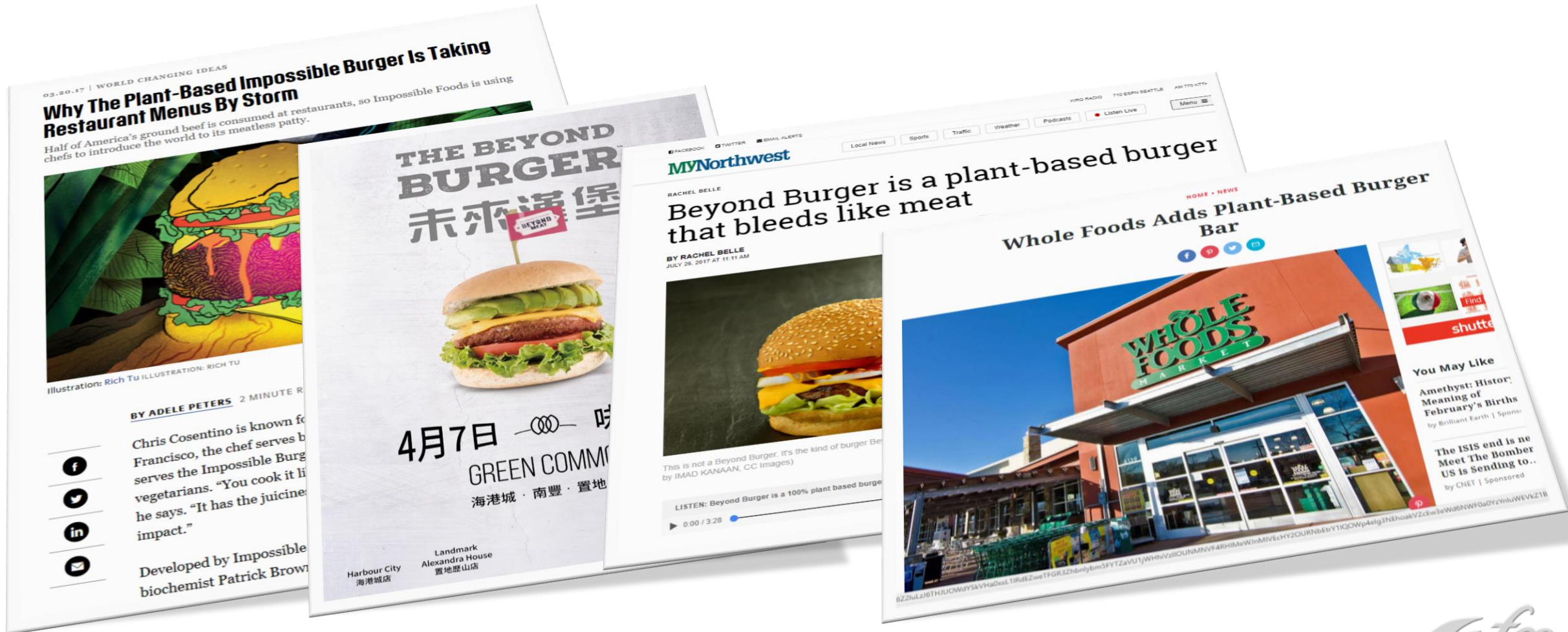
Welcome to the
Future of food





Snack Foods are the
next food **trend**

Plant-based hamburgers solve market demand



Cultured meat is the solution for many economies





Pay attention to **Culture**
and **social** norms

We are in an era of
transformational change



A man with glasses, wearing a dark green blazer over a light blue patterned shirt, stands in a large warehouse. He is smiling at the camera. The background shows tall orange metal shelving units filled with cardboard boxes. A red forklift is visible in the distance on the left side of the aisle.

“The answers are easy, it’s the questions that are difficult ”

Dr. Suess



Who will the winners be?

- 
- A hand is holding a gold-colored smartphone. The screen of the phone displays a bulleted list. The background of the slide is a light gray gradient.
- Artificial intelligence
 - Connectivity and data

We have a responsibility to do more

“The 20th century belonged to
Canada. The 21st century
belongs to agriculture.”

The Honourable Lawrence MacAulay,
Minister of Agriculture and Agri-Food



Canada **is ready.**



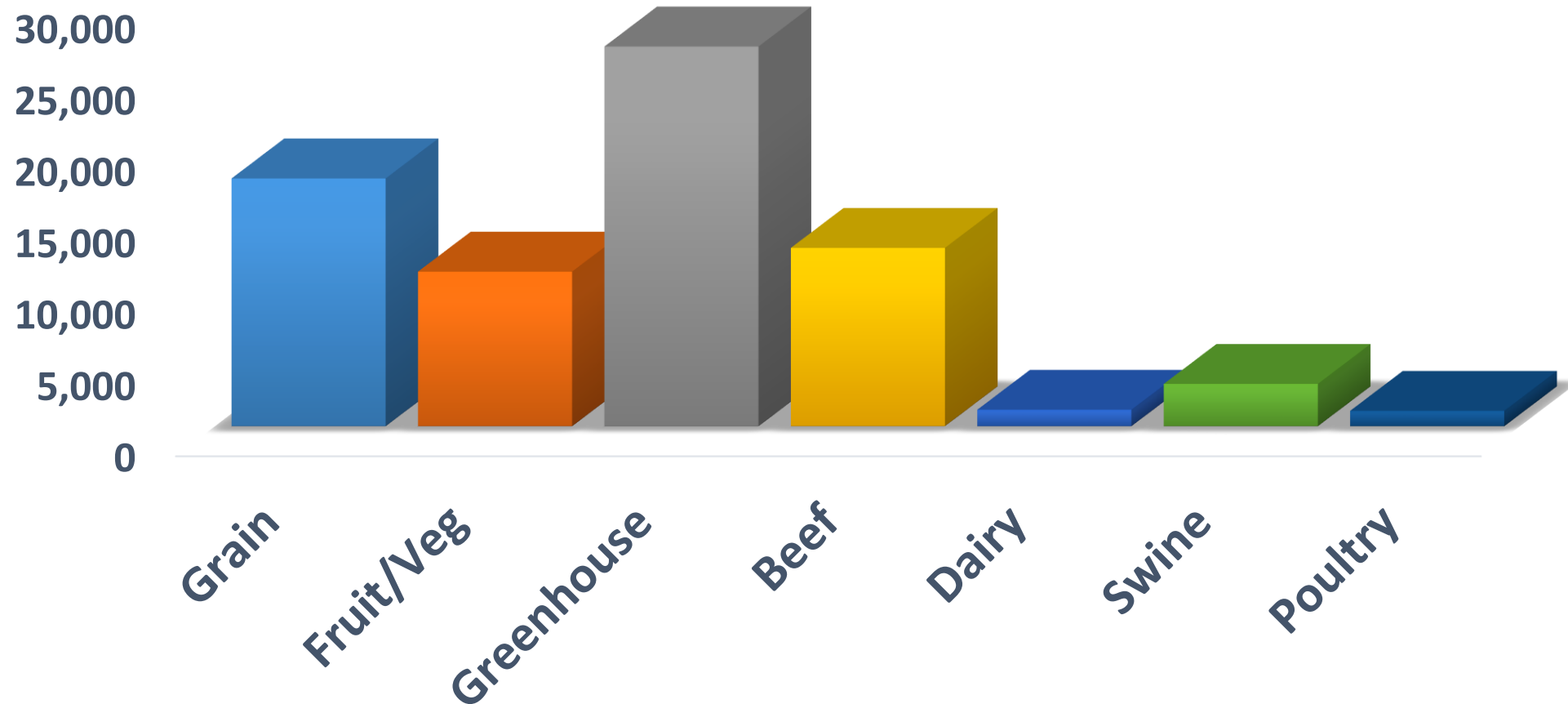
Are you ready?



There will always be a
place for human
labour



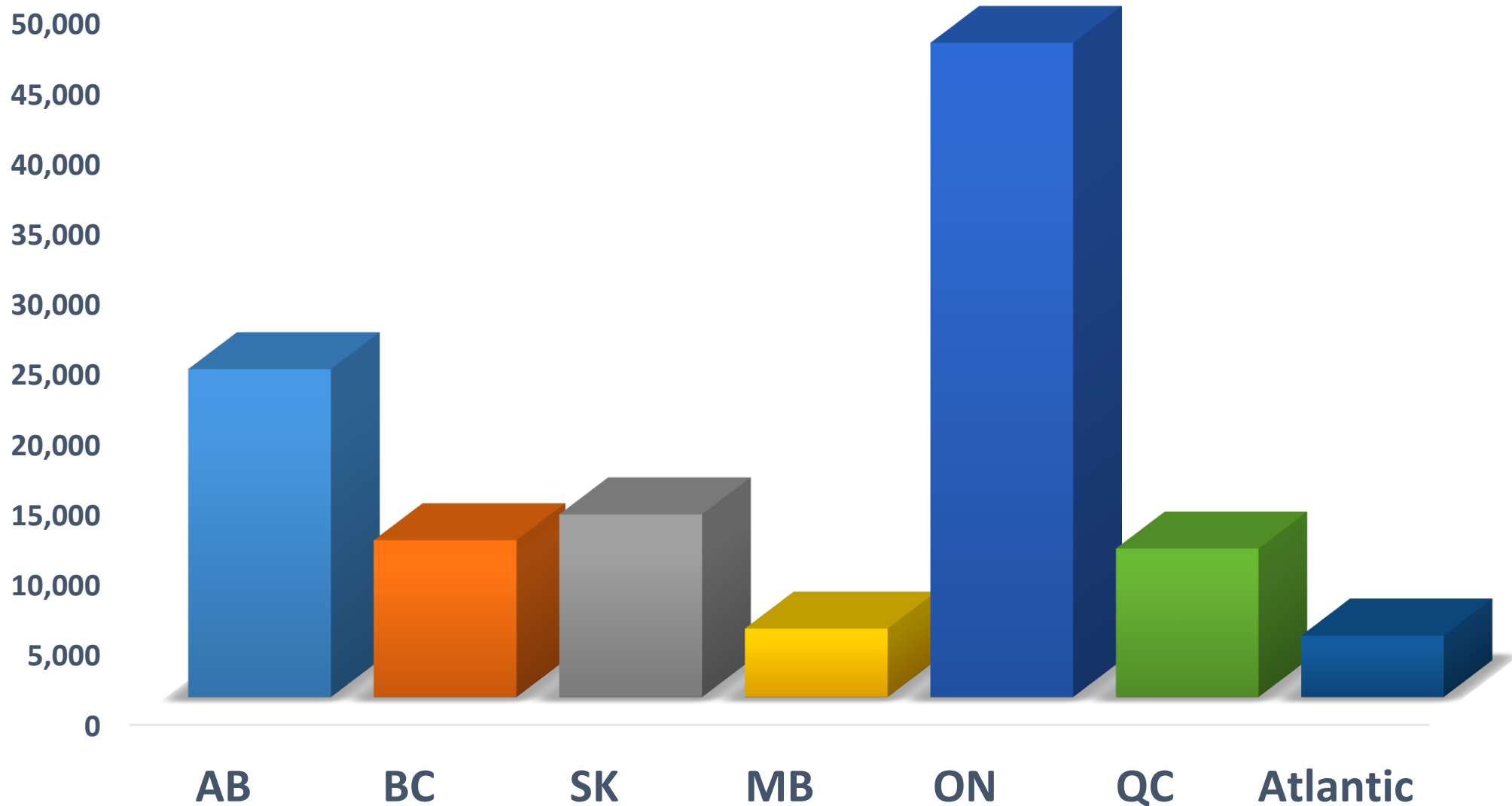
Canadian labour gap by sector



Source: CAHRC 2017



Canadian labour gap by region



Source: CAHRC 2017

