Human vs AI

Introduction

Could you image that walk into a store grab what you want and just walk out? I mean legally. Okay, my name is Zhang Haoyu and my major is Computer Science and he's my partner Ryu Suhyun. He majors in Business. Today we'd like to talk about the AI and its application in business mainly in the retail industry. Because it's not only most associated industry between our different majors, but also hot topic since the unmanned supermarket appearance in the world.

Main body

[the next week plan]

Conclusion

In general, today we told about the differences and similarities between traditional industry and the industry with AI technology. There are a lot of potential future applications that will alter the traditional industry. Not only is it to increase profits, but more importantly to improve the customer experience.

References that may be used

- [Machine Learning in Retail – Near-Term Applications and Implications](#)
- [10 uses of computer vision in marketing & customer experience](#)
- [How AI Boosts Industry Profits and Innovation](#)

Some charts about this topic

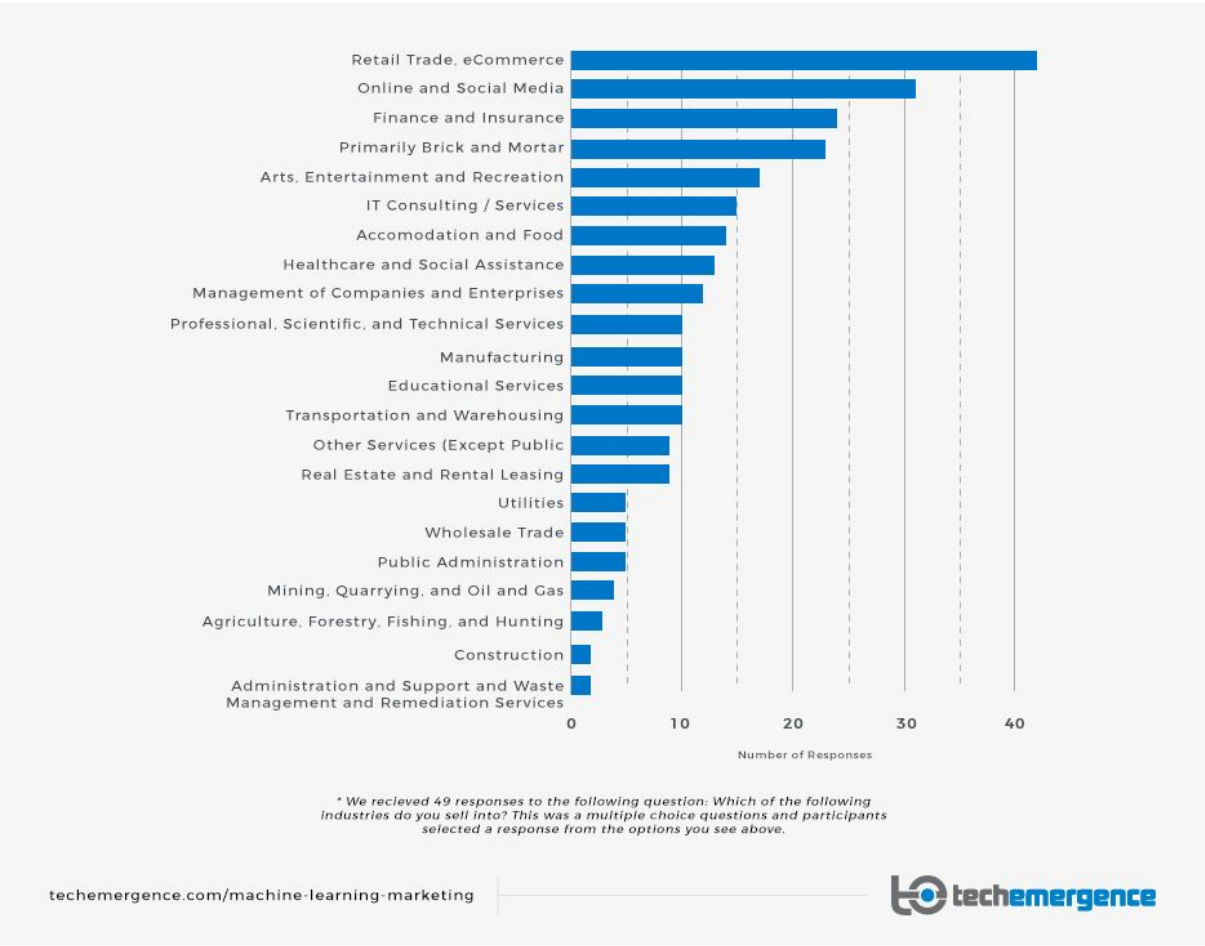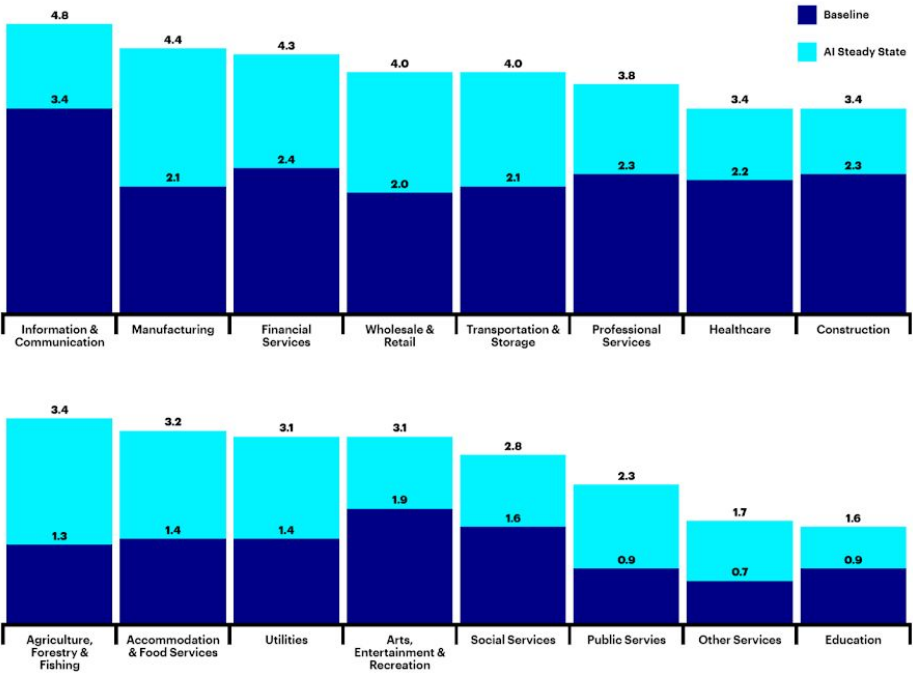Chart 1: Which industries that AI technology company sell their product into?

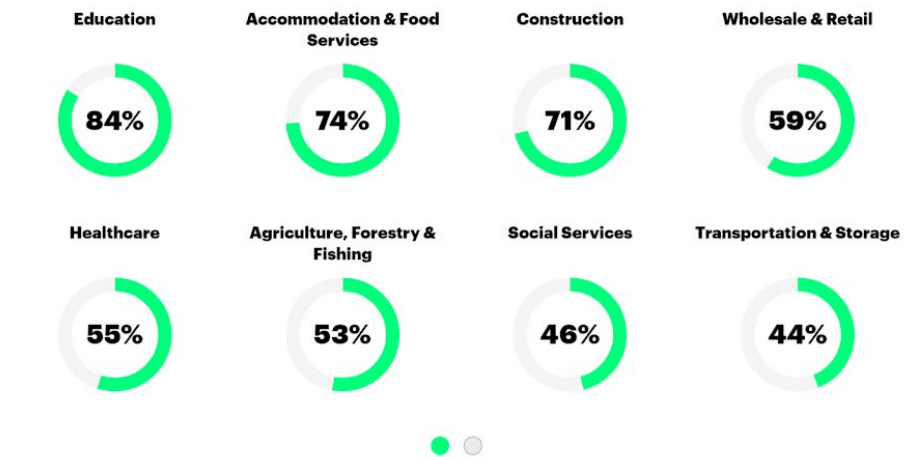Chart 2: The gross value added of AI technology apply in every industries.

FUELING INDUSTRY GROWTH

AI has the potential to markedly **increase industry growth**. Information and Communication, Manufacturing and Financial Services are the three sectors that will benefit most from the application of AI.

Legend:
- Baseline
- AI Steady State

Sector	Baseline	AI Steady State
Information & Communication	3.4	4.8
Manufacturing	2.1	4.4
Financial Services	2.4	4.3
Wholesale & Retail	2.0	4.0
Transportation & Storage	2.1	4.0
Professional Services	2.3	3.8
Healthcare	2.2	3.4
Construction	2.3	3.4

Sector	Baseline	AI Steady State
Agriculture, Forestry & Fishing	1.3	3.4
Accommodation & Food Services	1.4	3.2
Utilities	1.4	3.1
Arts, Entertainment & Recreation	1.9	3.1
Social Services	1.6	2.8
Public Servies	0.9	2.3
Other Services	0.7	1.7
Education	0.9	1.6

Annual growth rates in 2035 of gross value added (a close approximation of GDP), comparing baseline growth in 2035 to an artificial intelligence scenario where AI has been absorbed into the economy.
Source: Accenture and Frontier Economics

AI offers unprecedented **profitability opportunities**. For example, manufacturing has a forecast share-of-profit increase of 39 percent due to AI-powered systems whose ability to learn, adapt and evolve over time can eliminate faulty machines and idle equipment.

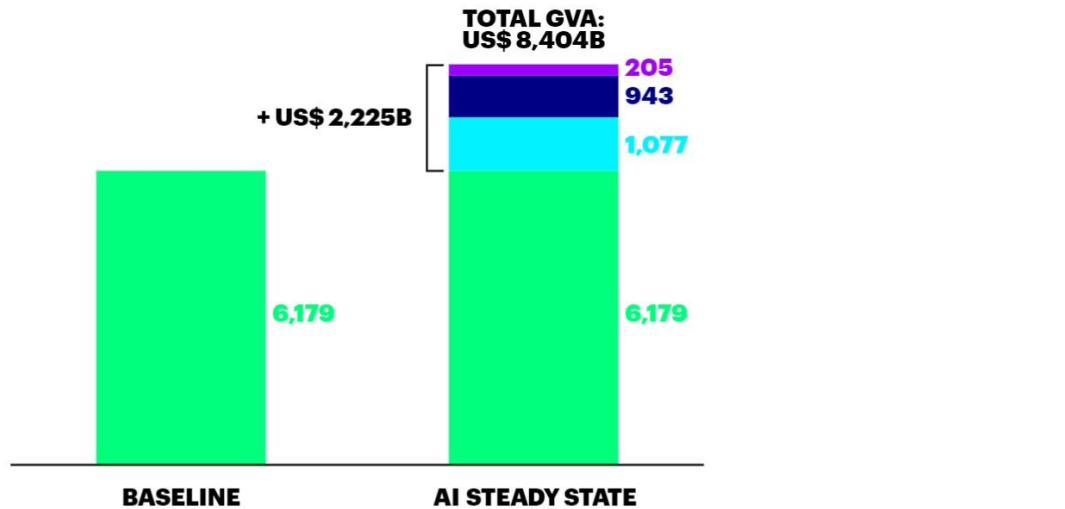| Industry	Profit Increase
Education	84%
Accommodation & Food Services	74%
Construction	71%
Wholesale & Retail	59%
Healthcare	55%
Agriculture, Forestry & Fishing	53%
Social Services	46%
Transportation & Storage	44%

Percentage increase in industry profits with AI, compared to expected baseline profit levels in 2035.
Source: Accenture and Frontier Economics

Chart 3: The gross value added of AI technology apply in wholesale & retail.

WHOLESALE AND RETAIL
GVA in 2035 (US$ billion)

Intelligent automation

Augmentation

Total factor productivity (TFP)

TOTAL GVA: US$ 8,404B

+ US$ 2,225B

205
943
1,077
6,179

6,179

BASELINE   AI STEADY STATE

the sources of chart 2 and chart 3 are both from HOW AI BOOSTS INDUSTRY PROFITS AND INNOVATION - Accenture

Some cases about AI technology apply in retail industry

Case 1: Amazon Go Unmanned Supermarket
- [What is Amazon Go, where is it, and how does it work?](#)

Case 2: X-Mart Chinese Unmanned Supermarket
- [JD'S UNMANNED STORE GOES INTERNATIONAL](#)

Case 3: Bio Pay Korean Unmanned Supermarket
- [First Bio Pay Shop Opens In South Korea](#)