Identify how an Organization improved workplace efficiency and employability using modern technology



amazon fresh



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Technology

- Computer Vision
- Sensor Fusion



Module code: BMSW4003

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Background of the Organisation

amazon fresh



Alin - Eugen Bariz: 2110939

- Who is? and What is?
- The Founder
- History of the Amazon
- Meet the Team
- Top Facts About Amazon



Who is? and What is?

WHO

- AmazonFresh is a subsidiary of Amazon.Com
- Also known as AmazonGo in USA
- First convenience store using Just Walk Out Shopping Technology

WHAT

- Is a platform for online grocery
- A cashier-less convenience store



The Founder



- Amazon was founded in 1994 by Jeff Bezos
- Cadabra Inc. was the company first name
- The word “Amazon” comes from the largest river in the world

  Stone, B. (2013)
- He wanted Amazon to be “An everything store."

  Stone, B. (2013)

History of the Amazon

5 July 1994

Amazon is founded

15 May 1997

Amazon goes public

June 2003

Amazon launches



2007

Amazon launches



2020

Opened first AmazonFresh store

Meet the Team







Andy Jassy
CEO

Werner Vogels
VP & CTO

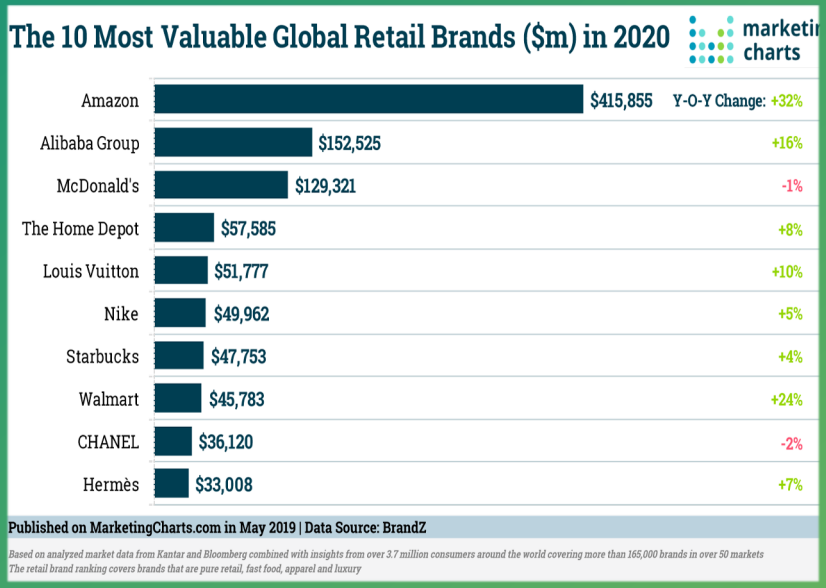
Dilip Kumar
VP PR

Michael Huffaker
VP Fresh

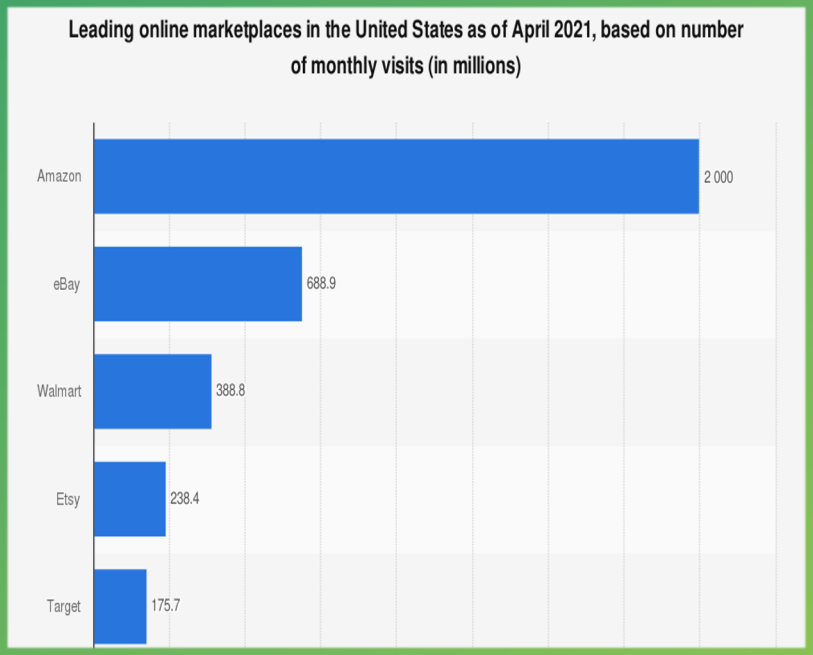
Gianna Puerini
VP GO

Top Facts About Amazon

- Has over 300 million active users
- It is the most visited retail site in the US
- In 2020 become the most valuable retail brand
- 43% of the US population has AmazonPrime account



(Marketing Charts, 2020)



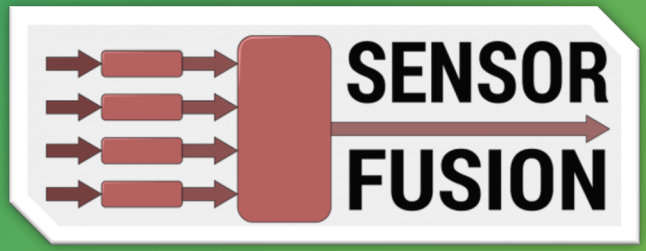
(Statista, 2021)

The challenges before the introduction of modern technology

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- How it’s starts ?
- What been through?
- What’s the progress?
- Where it comes?





From an online shopping platform to a modern store

People could only do their shopping online on Amazon platform if that includes:

- Employees spending time to upload items on the platform
- Creating a good description of the product
- Staff for packaging and maintaining the quality of it
- Staff for sorting out parcels for next step of delivery
- Delivery drivers



Shopping online comes to…

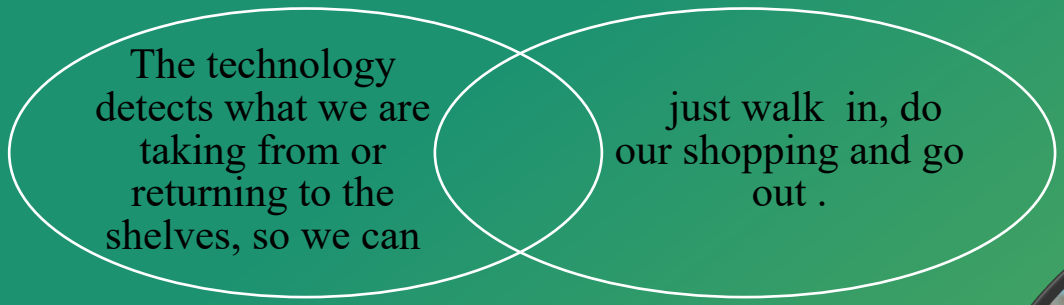
- Long time for delivery
- Damaged packages
- Not very safe as lots of the items been ‘ lost ‘ on the way







What's been implemented
Computer vision + sensor fusion





- The technology makes the life a lot simpler and safer
- NO need of cashier
- NO need of security staff
- NO tills , NO check outs

Amazon Fresh

The dream comes true

- Physical shopping
- Being able to see and touch the products before purchasing
- Fresh ready to eat meals
- Easier and faster
- No queues ,no checkouts





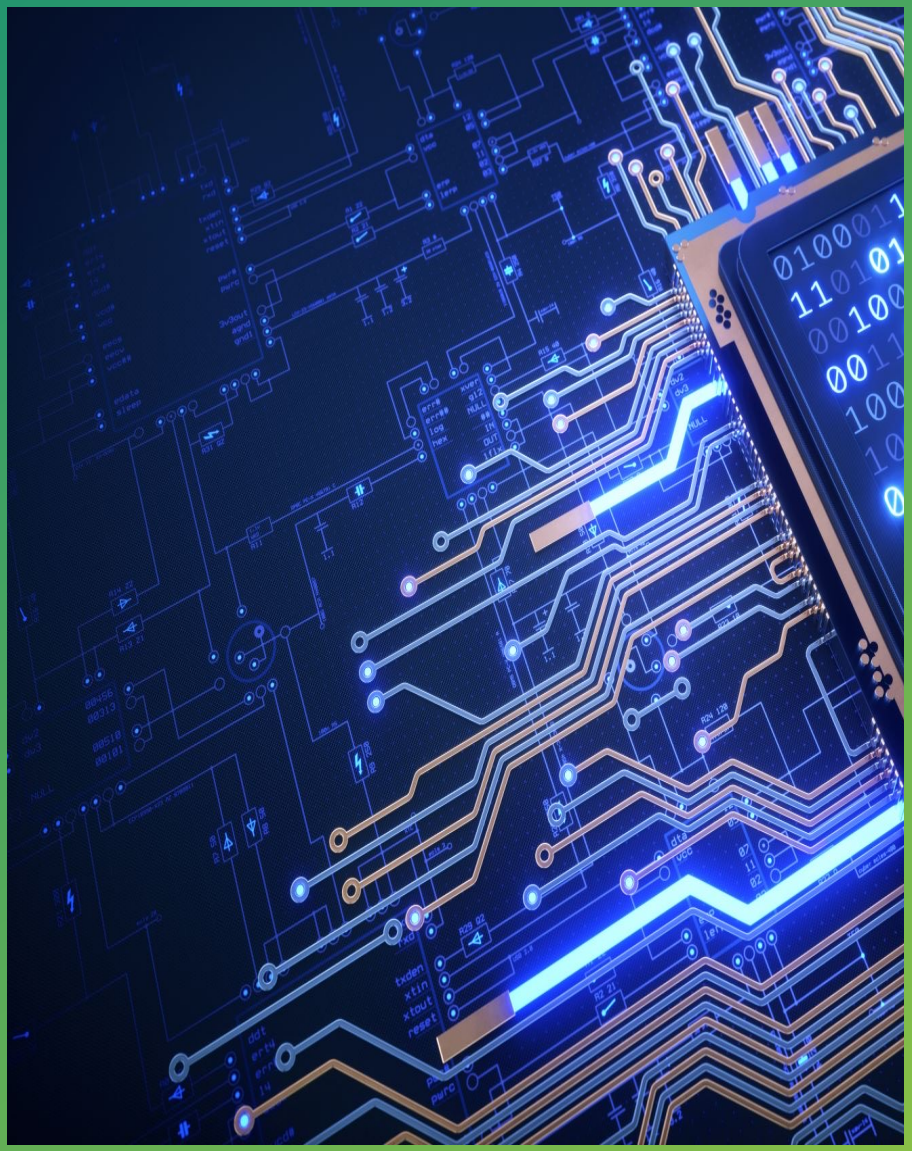
Insight to Modern technology

- Computer Vision
- Sensor fusion

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What is Computer Vision Technology :

- Clients scan their Amazon QR Code.
- Consumer can picking their items needed.
- The technology detect anything that has been picked up
- Billing automatic system
- Skip the till and go home



What is the Sensor Fusion technology is and how it works:

- Remove Amazon cashers.
- Client identification.
- Consolidate signals between sensors and cameras.
- Which Consumer took what and position in the store
- Entrance and leaving detection



Which other companies are using the same technology:

- Microsoft
- Apple
- Alibaba
- JD.com
- IBM
- Facebook



The impact of the technology introduced

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Positive aspects

- Faster shopping
- Shoplifters negatively affected
- Cashless
- High accuracy
- Avoid online scams
- Improved online merchandising

Negative aspects

Unemployment

Privacy

Why does Amazon Fresh have a low criminality rate?

- QR code sent to enter
- Customers face-Amazon account bonding
- Computer vision used at the shelves
- Security staff



Lessons that can be drawn from the case study

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Research

- Search -quantitative research
  -qualitative research
- Read -literature review

- Put all the information together in one format
- Present the information

Lessons gained from the case study

- The growth of the organisation
- Implementation of the future technology
- Advantages of the modern technology
- Development of new ways for future



Lessons learned from group work

- Communication
- Decision making
- Time management
- Share diverse perspectives
- Problem solving
- Delegate roles and responsibilities



Conclusion made

- Learning is gaining
- Handle of a topic
- Importance of team work
- Learn by doing practice
- The importance of the modern technology

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