

Internet of Behavior (IoB)

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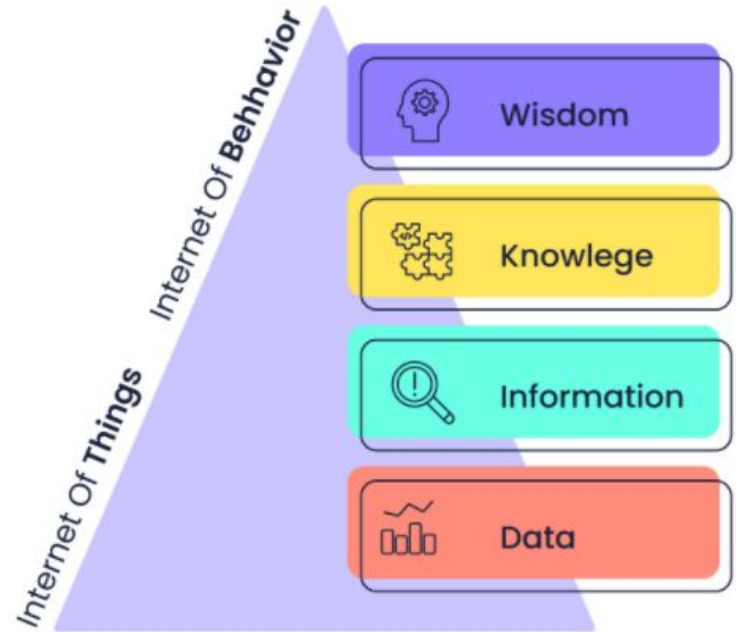


The Concept of (Internet of Behavior)










- Gote Nyman, retired Psychology Professor at the University of Helsinki in 2012, developed the concept that behavior can be data mined.
- Data mining systems are already answering the question “what is happening to the world”.
- Nyman believes that being able to see intentions of the human background to know what is about to happen in the connected world is doable.

Internet of Things vs Internet of Behavior

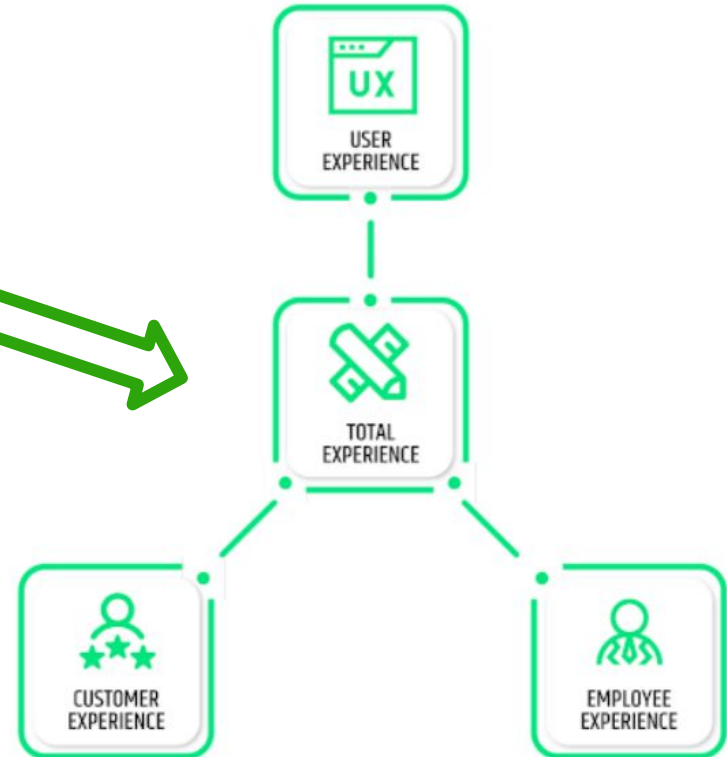
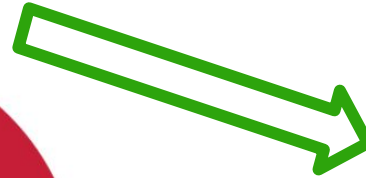
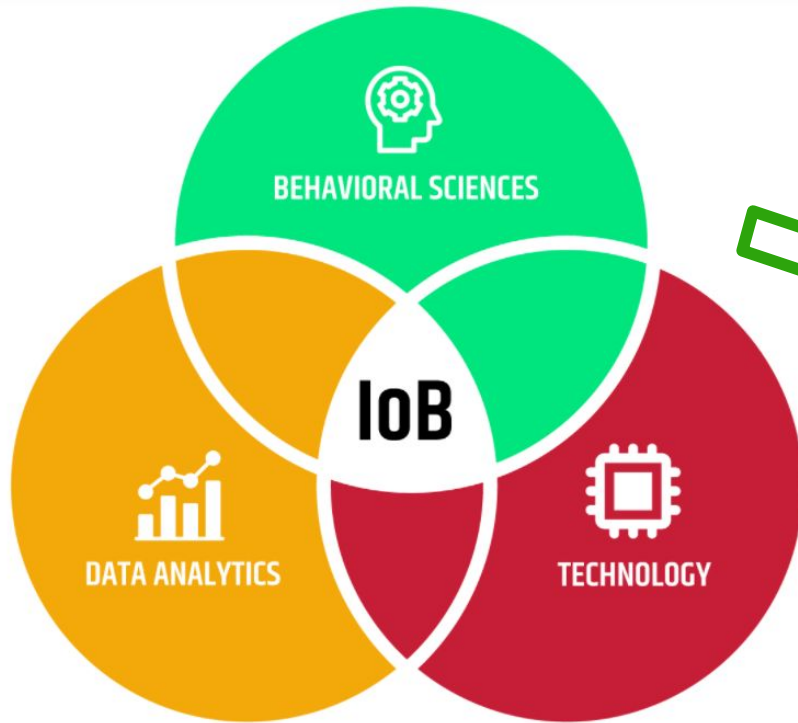
- The Internet of Behaviors (IoB) is an expansion of the concept of the (IoT).
- The IoT focuses mainly on collecting information and automating the communication of web-connected devices, whereas the IoB searches data for patterns and uses them to influence human behavior in the physical world.



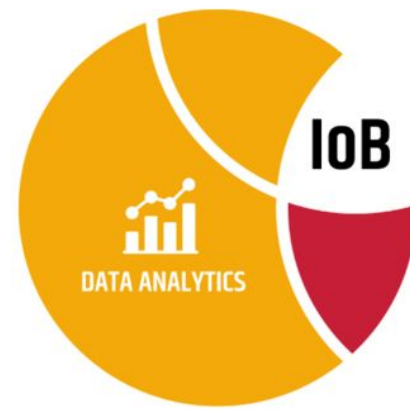
Gartner Top Strategic Tech Trends for 2021

 <p>Internet of Behaviors</p>	 <p>Distributed cloud</p>	 <p>Intelligent composable business</p>
 <p>Total experience strategy</p>	 <p>Anywhere operations</p>	 <p>AI engineering</p>
 <p>Privacy-enhancing computing</p>	 <p>Cybersecurity mesh</p>	 <p>Hyperautomation</p>

Three IoB Ingredients



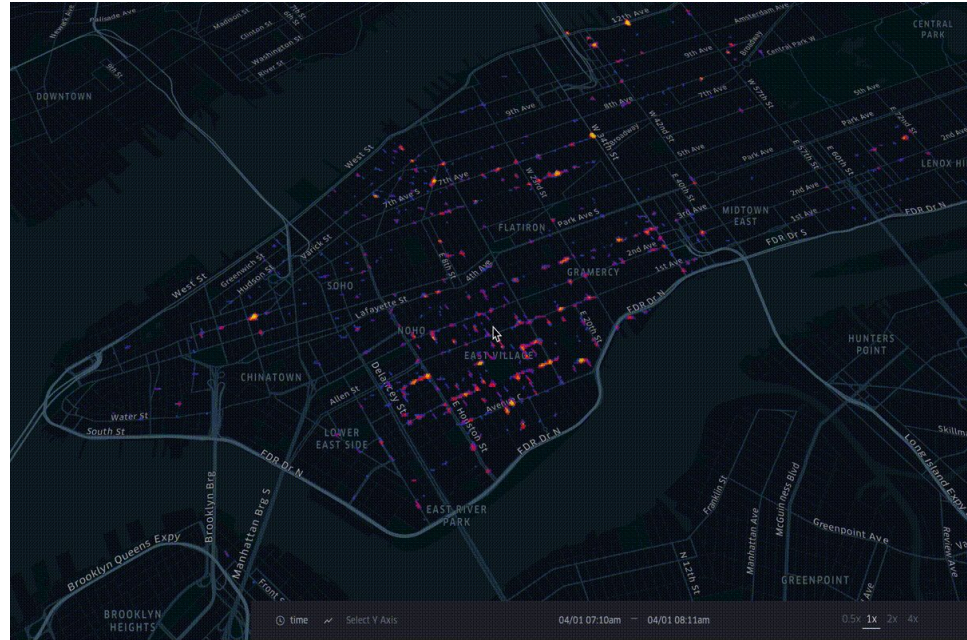
Data Analytics



- the IoB uses information derived from various sources, including:
 - ✓ Commercial (e.g. e-commerce)
 - ✓ Public (e.g. city monitoring)
 - ✓ Private (e.g. IoT devices)
- An increasing number of our everyday activities leave a trace on the Internet ("**digital dust**"), which may be used by private organizations to shape our experiences (positive or negative) and, consequently, to change specific behaviors.

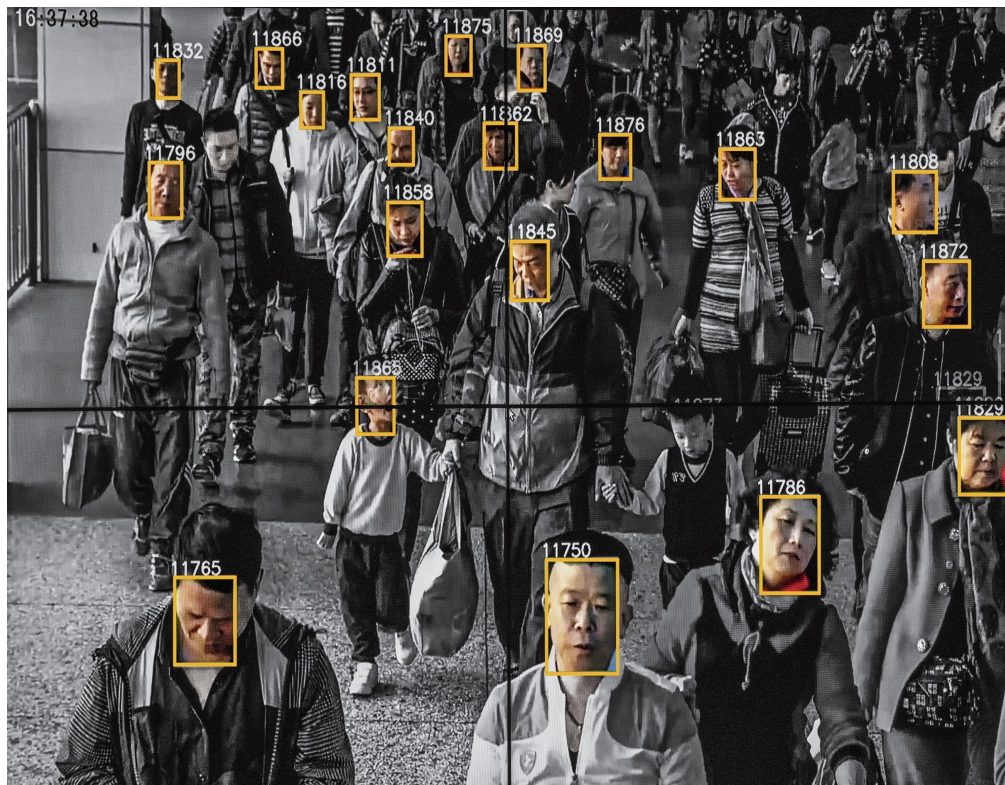
How Uber Uses IoT Data?

- Uber uses **IoT data** to analyze its clients' preferences and find new approaches to customers.
- Use **smartphones** to track a person's geographical position,
- Uber will know whether you have visited a supermarket or a beauty salon, and the length of your stay there.



China Government Uses IoB

- **Face recognition**, plays an important role in introducing a **social credit score system** in the China.
- The system assigns social credit scores to each individual based on their **behavior**, which are translated into a range of rewards and punishments.



IoB used in Health Insurance Companies

- Health insurance companies can monitor your fitness bands and your food intake, and the number of times you go to the gym, and those things to adjust your premiums.

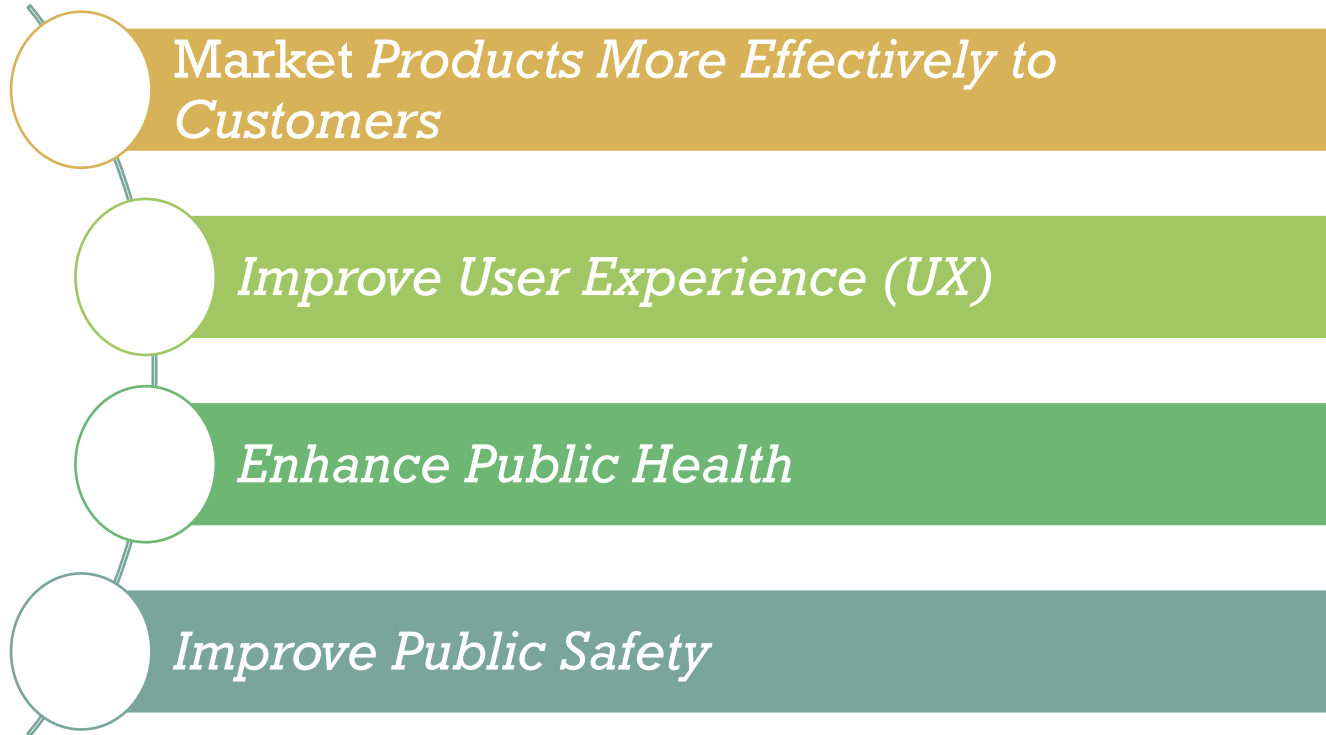


Barista Uses IoB

- In 2018, coffee chain Barista started using IoB for facial recognition to determine their consumers' gender, age, and mood. The technology helps them observe the results and suggest an appropriate drink for the customer.



How Can the IoB Benefit Businesses?



Cyber Security and IoB

- **The dark side of IoB**
 - this behavior data can allow cybercriminals access to sensitive data that reveals consumer behavior patterns.
 - However, more likely they can take '**Phishing**' to a new level by being able to better impersonate individuals for the sake of fraud.
- Solution □ Need for new cybersecurity protocols

Conclusion

- The IoB technology may still be in its early days, but by the end of 2025, more than 50% of the world's population are expected to be exposed to at least one IoB program, either from the government or a private company.
- It will be the ecosystem that defines human behavior in an increasingly digital world.
- Any company that chooses to adopt an IoB approach to its strategies must ensure that it has robust cyber security in place to protect all that sensitive data.

Thank You