Fire and Fury in the realm of Internet of Things (IoT): Winners and Losers

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AGENDA FOR TODAY

What is the Internet of Things(IoT)?

Components of IoT

Fire & Fury: Current Status and Future Prospect of IoT

Key Application areas

The Potential of IoT

Technological Challenges of IoT: Winners & Losers

Concluding Remarks

• The *Internet of Things (IoT)* refers to the combination of hardware and software technology that produces trillions of data through connecting multiple devices and sensors with the cloud and making sense of data with intelligent tools.

In simple words, Internet of Things (IoT) is an ecosystem of connected physical objects that are accessible through the internet.

It is also referred to as Machine-to-Machine(M2M),
Skynet or Internet of Everything.



COMPONENTS OF IOT

Smart Systems and Internet of Things are driven by a combination of :

- 1) Sensors
- 2) Connectivity
- 3) People & Processes



Current Status & Future Prospect of IoT



"Change is the only thing permanent in this world"



"The Ultimate Goal of IOT is to Automate Human Life."

KEY APPLICATIONS OF INTERNET OF THINGS

Building and Home Applications

Manufacturing

Medical and Healthcare Systems

Media

Environmental Monitoring

*Agriculture

Infrastructure Management

Energy Management

Transportation

Better quality of life for elderly

Fashion Industry which is exciting

"THE SKY'S NOT THE LIMIT.IT'S ONLY BEGINNING WITH IOT"



IOT IN FASHION: A FUTURE WARDROBE?

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- •The technology that can be worn on human body is a wearable technology.
- •Most common examples of wearable devices are smart watches and google glasses.
- •However, smart devices are now available in the form of smart fabrics.
- •These smart dresses have attracted the fashion industry towards this emerging trend.





LOOKING AHEAD!

Merging of fashion and Technology is a hot talk nowadays

The google glasses have helped to increase self confidence in a face to face interaction where people can talk more when they have data in front of their eyes. The people have argued that the wearable technology has brought revolution and they expect the technology to make fabrics with the motive- " If tech fits, wear it"





This dress was designed by the TECHHAUS branch of Haus of Gaga. The dress blows bubbles on its own! It feels magical to wear!

○ 4,489 8:05 AM - Sep 3, 2013

 \bigcirc 6,119 people are talking about this

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CELEBRITIES TALK ABOUT FASHION AND TECHNOLOGY



Featuring a metallic embellished neckline and cinched in waist, the floor-sweeping gown was not only revolutionary but fashion forward too. Created by leading interactive fashion design agency **Cute Circuit** – whose clientele includes U2 and Katy Perry – even Nicole could not contain her excitement about the dress.

She tweeted "I've been asked to wear the UK's first ever Twitter dress tonight for the @EE Launch Party @BatterseaPowerStation #tweetthedress So EXCITED!"





3D printing dress that releases smoke based on the Wearer's breathing and proximity to others by Dutch Designer Anouk Wipprect



The same Dutch designer created the "Spider Dress," a garment that features claw-like plastic arms which react when someone comes close to the wearer. On her website, the designer describes the dress as a combination of robotics and design.

Her invention is both beautiful and terrifying



KEY QUESTIONS

- Can we imagine smart dresses to be a part of our wardrobe?
- 2. Do you think drift from health towards fashion can be detrimental for health?
- 3. Would you like your skin to be data fed?
- 4. How can customs & religions define the acceptance criteria of smart dresses?

Smart Bra & T-Shirt

Smart-Bra was made to detect the breast cancer and Smart Tshirts to detect the biometric data like pulse rate and calories burnt in a day

http://omsignal.com/





The smartly clothed body produces data as well as wears the data. The extended skin is equipped with artificial sensory systems, extending our natural body and sensory systems into the augmented space; the extended skin is datafied and the body is datafied

The Potential of IoT

Value of Industrial Internet is huge

Connected machines and data could eliminate up to \$150 billion in waste across industries



GE's estimates on potential of just ONE percent savings applied using IoT across global industry sectors.

TECHNOLOGICAL CHALLENGES OF IOT:WINNERS AND LOSERS

Criticisms and Controversies or Winners and Losers of IOT revolution in the areas such as

Privacy

- Security
- Technical Standardization
- Social Control
- Political Manipulation due to absence of Governance
- Design &Influencing Human Moral Decision Making including Ethics
- Environmental impact
- Difficult to protect the patient's personal data due to leakages, destruction collusion attacks and insider attacks.

Unlock the Massive potential of IoT





COCLUDING REMARKS

Fire & Fury or Hype to Reality: Projection as many as 100 billion connected IoT devices resulting a global economic impact of more than \$11 trillion by 2025.

Journey of IoT adoption is not a seamless one, huge complexity to implement it

For some people this technology may also be restricted due to cultural or regional norms or their self beliefs of not datafying their bodies in some cases.

Identification of Challenges and its perfect solution will decide truly winners and losers

THANK YOU!

Any Questions?