OPEN ACCESS Freely available online

Journal of Research and Development

Perspective

Digital Technological Revolution in Automobile Industry

Salvo Junior*

Department of Automobile Engineering, University of Sao Paulo, Sao Paulo, Brazil

DESCRIPTION

A technological revolution is a quick span of time within which one or more technologies are quickly superseded by brand-new ones. It is a phase of fast technological advancement, marked by breakthrough innovations whose quick adoption and spread generally result in a radical shift in society. Productivity and efficiency progressively increase during a technology revolution. It might entail architectural or ideological adjustments brought about by the introduction of a tool or system. Its potential impacts can be seen in a variety of areas outside of technology, including as business management, education, social relations, finance, and research technique. The technology revolution can change culture and change the existing realities of human existence. It may act as a catalyst for a series of different and unforeseen transformations.

They are specifically referred to the industrial revolutions, over the period of several centuries, there have been three industrial revolutions, each of which significantly altered the ways in which the work and output of labour that we produce.

They can broadly categorize the revolutions in terms of a few crucial ideas and technologies:

- The First Industrial Revolution: Steam Power and Mechanization (1760–1840).
- Electricity and mass production during the Second Industrial Revolution (1870–1914).
- Automation and computerization during the Third Industrial Revolution (1950–2000).

The fourth industrial revolution, also referred to as "Industry 4.0," is currently taking place all around us and encompasses cutting-edge technology such as additive manufacturing, artificial intelligence, augmented and virtual reality, and more.

Though there are several definitions of Industry 4.0, they all concentrate around 5 important new inventions:

- Cloud computing.
- Augmented reality.
- Internet of things.
- Artificial intelligence.
- Additive manufacturing (3D printing).

Today's creative brains are being inspired by these technologies. Enhancing human existence in a variety of ways. The automotive industry has made both the impossible and the possible a reality. It ranges from simple pleasures like heated seats, bluetooth connectivity, and cruise control to autonomous vehicles with GPRS technology, electrification, and predictive maintenance in production lines. Technological innovation is rarely smooth. It moves forward towards pulses through revolutions. For eg: From telegraph to telephone, copper wires to fibre optics, analogue to digital, wireless to satellite, telecommunications have advanced. Daguerreotypes, glass plates, film, and eventually digital cameras marked the transition from black-and-white to colour photography.

Almost every field exhibits this pattern, and each pulse ushers in fresh discoveries that transform entire markets and, occasionally, entire societies.

Techniques used in automobile

New battery technologies are helping us create vehicles like the new unveiled Chevrolet Bolt EV, a pure electric vehicle that acquires more than 200 miles per charge. Many innovations in auto safety have their roots in electrification. Today's cars offer a variety of intelligent technologies like blind-spot detection, collision warning systems, adaptive cruise control, and crash-imminent braking, which can stop your car automatically even when you don't. These technologies are made possible by integrating cameras, radars, and sophisticated sensors.

In addition, they invented 4G wireless connectivity. This enables automobiles to function as Wi-Fi hotspots that can link up to seven devices simultaneously.which initiates variety of technology, electronics on wheels. In Europe, Asia, and North America, we have now placed more than 2 million 4G-equipped automobiles on the road. More than 75% of our global volume is anticipated to be actively connected by 2020.

CONCLUSION

When automobiles are connected to other vehicles and even the highways they travel on, connectivity becomes more intriguing. Vehicle-to-vehicle (V2V) communication enables vehicles to transfer data on speed, direction of travel, traffic flow, and road and weather conditions with one another across a specific Wi-Fi band.

Correspondence to: Salvo Junior, Department of Automobile Engineering, University of Sao Paulo, Sao Paulo, Brazil, E-mail: salvo.junior25@alumni.usp.br

Received: 25-Feb-2022, Manuscript No. JRD-22-18103; **Editor assigned:** 02-Mar-2022, Pre QC No. JRD-22-18103(PQ); **Reviewed:** 16-Mar-2022, QC No. JRD-22-18103; **Revised:** 23-Mar-2022, Manuscript No. JRD-22-18103(R); **Published:** 30-Mar-2022, DOI: 10.35248/2311-3278.22.10.185.

Citation: Junior S (2022) Digital Technological Revolution in Automobile Industry. J Res Development. 10:185.