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Automated Supply Chain Management in IIOT 4.0 (Car Manufacturing)

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Abstract: *Fully Automated supply chain management in Industrial IOT increases the productivity of an industry manufacturing cars exponentially than the industries that operates and depends on the human labour and power. All the stages of supply chain management are automated starting from the materials required for manufacturing a car to selling of car to the consumer (i.e end to end). The automation in each stage is done with components such as RFID device (passive), beacon tags and various type of sensors depending on the requirement of the consumers. These devices are connected wirelessly and the data obtained from it is pushed into the cloud, where we can access the data and refresh it view the data frequently as per our requirement. By this we can know the availability of stocks, live tracking of materials arriving into the warehouse and to the distributors etc. The data which is pushed into the cloud is then viewed in application built for this purpose for easy access of users. The application also helps the user to know the current condition of their car and helps them maintain it in a very healthy condition.*

Keywords: Supply Chain Management

REFERENCES

[1]. https://www.skubana.com/blog/future-of-supply-chain
[2]. https://www.cips.org/knowledge/procurement-topics-and-skills/procurement-technology/disruptive-technologies/
[3]. https://stockarea.io/blogs/benefits-of-technology-in-supply-chain-management/
[4]. https://6river.com/8-key-benefits-of-effective-supply-chain-management/
[5]. https://www.upgrad.com/blog/advantages-of-supply-chain-management/
[6]. https://www.sciencedirect.com/science/article/pii/S2666351121000310#:~:text=The%20standa rd%20sensor%20types%20available,to%20increase%20efficiency%20through%20automation
[7]. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/process-and-operations/us-cons-smart-sensors.pdf
[8]. https://www.mbaskool.com/business-concepts/operations-logistics-supply-chain-terms/15631-raw-material.html
[9]. https://en.wikipedia.org/wiki/Materials_managementhttps://www.holtsauto.com/prestone/news/coolant-tempera ture-sensor/#:~:text=A%20coolant%20temperature%20sensor%20(CTS,the%20engine%20is%20givi ng%20off
[10]. https://www.blumeglobal.com/learning/internet-of-things/
[11]. https://mechathon.com/components-parts-of-automobile/
[12]. https://en.wikipedia.org/wiki/Assembly_line
[13]. https://en.wikipedia.org/wiki/Parking_sensor#:~:text=Parking%20sensors%20are%20proximi ty%20sensors,either%20electromagnetic%20or%20ultrasonic%20sensors.
[14]. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/process-and-operations/us-cons-smart-sensors.pdf
[15]. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/process-and-operations/us-cons-smart-sensors.pdf

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[16]. https://www.sciencedirect.com/science/article/pii/S2666351121000310#:~:text=The%20standard%20sensor%20types%20available,to%20increase%20efficiency%20through%20automation
https://www.electronicshub.org/different-types-sensors/

[17]. https://www.mckinsey.com/business-functions/operations/our-insights/supply-chain-40--the-next-generation-digital-supply-chain