

School of Computing Science and Engineering

Course Code : CSIO3050

Course Name: IOT Platform & Design

The logo of Galgotias University is a stylized 'G' composed of several curved, overlapping bands in shades of yellow, blue, and red. The text 'UNIT I' is overlaid on this logo.

UNIT I

IoT Architecture- State of Art

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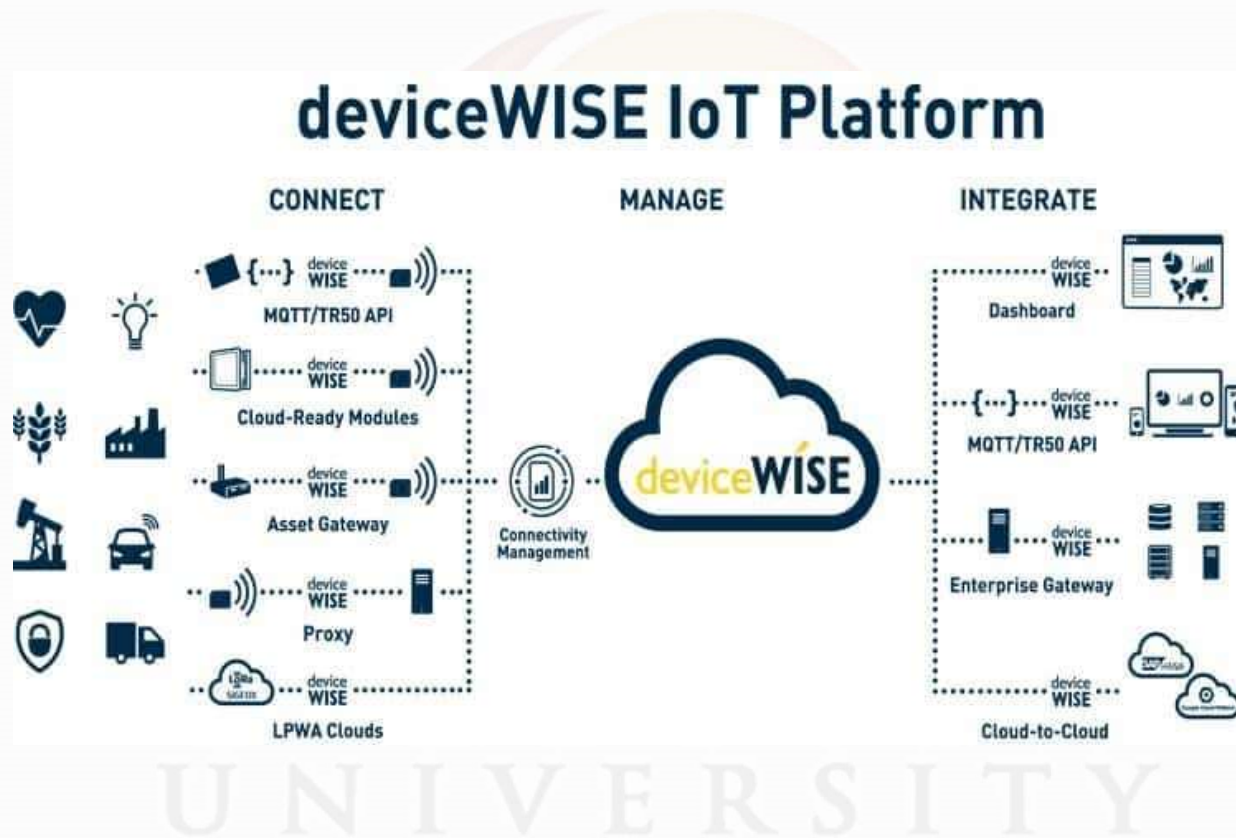
Name of the Faculty: Dr. M.Kumaresan

Program Name: B.Tech Spl

What is an IoT platform?

An IoT platform is a multi-layer technology that enables straightforward provisioning, management, and automation of connected devices within the Internet of Things universe. It basically connects your hardware, however diverse, to the cloud by using flexible connectivity options, enterprise-grade security mechanisms, and broad data processing powers. For developers, an IoT platform provides a set of ready-to-use features that greatly speed up development of applications for connected devices as well as take care of scalability and cross-device compatibility.

What is an IoT platform?



IoT platform as the middleware

Thus, an IoT platform can be wearing different hats depending on how you look at it. It is commonly referred to as middleware when we talk about how it connects remote devices to user applications (or other devices) and manages all the interactions between the hardware and the application layers.

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IoT platform as the middleware contd.,

It is also known as a cloud enablement platform or IoT enablement platform to pinpoint its major business value, that is empowering standard devices with cloud-based applications and services. Finally, under the name of the IoT application enablement platform, it shifts the focus to being a key tool for IoT developers.



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What is an IoT platform?

IoT platforms originated in the form of IoT middleware, which purpose was to function as a mediator between the hardware and application layers. Its primary tasks included data collection from the devices over different protocols and network topologies, remote device configuration and control, device management, and over-the-air firmware updates.

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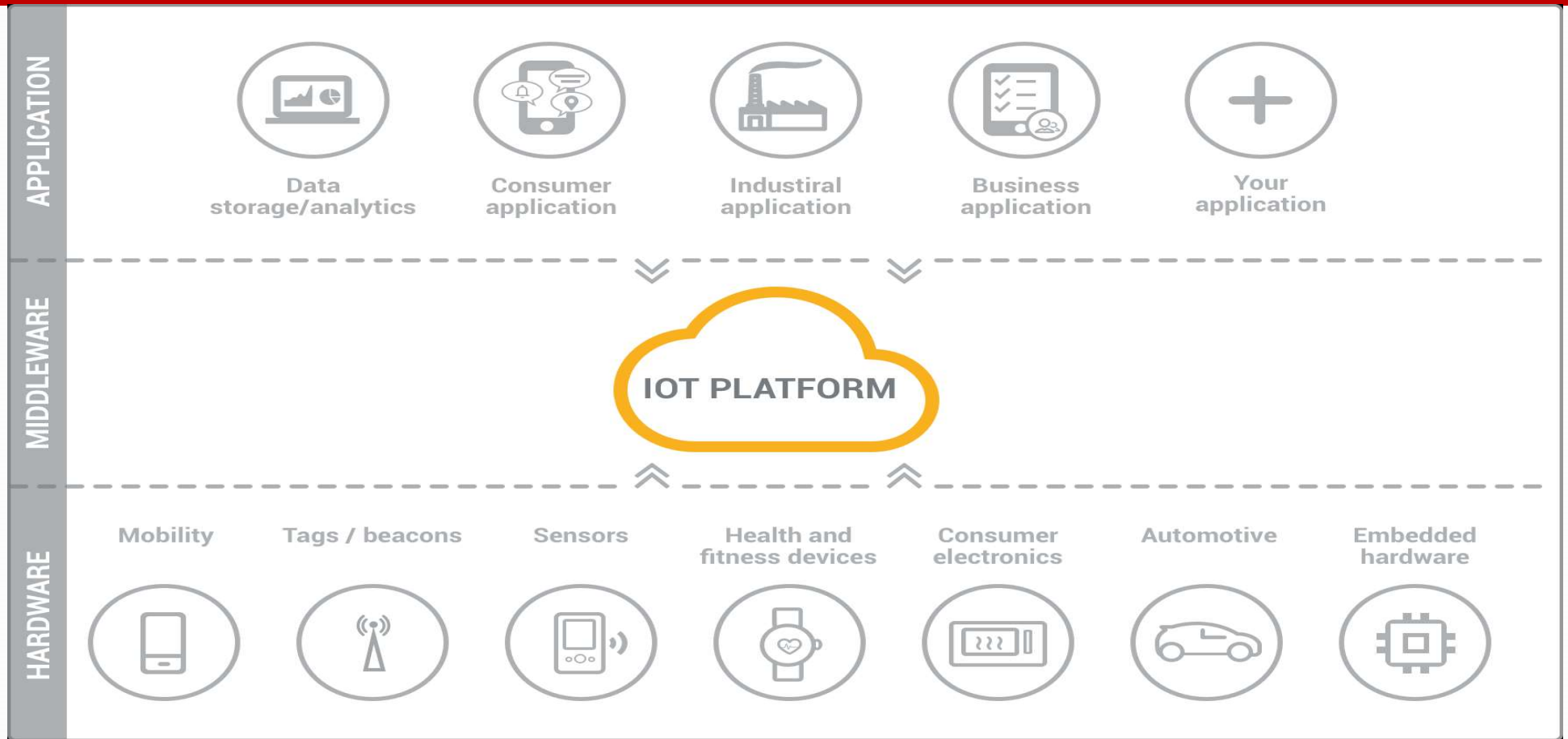
What is an IoT platform? Contd.,

To be used in real-life heterogeneous IoT ecosystems, IoT middleware is expected to support integration with almost any connected device and blend in with third-party applications used by the device.

This independence from underlying hardware and overhanging software allows a single IoT platform to manage any kind of connected device in the same straightforward way.

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What is an IoT platform? Contd.,



References

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Thank You