# Lesson Plan

**Module: Integrated smart workplace**

**Learning Unit: How Internet of Things (IoT) can make your work easier**

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| **Desired Core professional goal**<br><br>Learners will be able to<br><br>– understand the concept and benefits of IoT,<br>– apply IoT solutions to their business problems and opportunities. | **Benchmark**<br><br>Internet of Things<br><br>big data<br><br>Cloud computing |
| **Level**<br><br>Standard | **Framework**<br><br>Empower |

**Professional micro-learning outcomes**

Learners will

- define IoT and explain its main features and components.
- identify the benefits and challenges of IoT for SMEs and micro-owners.
- analyse their own business needs and goals, and select appropriate IoT devices and platforms to meet them.
- implement and monitor IoT solutions using simple tools and techniques.
- evaluate the impact and effectiveness of IoT solutions on their business performance and customer satisfaction.

**Micro-learning activities**

Learners will

1. watch the Standard level: Module 4: Empower: How Internet of Things (IoT) can make your work easier https://youtu.be/Lt7dGsDpFXI (3:04)
2. watch the podcasts: How Internet of Things (IoT) can make your work easier
   a. Podcast: Internet of Things IoT Concept, main features and components https://youtu.be/V-Xpt1A7pdo (1:46)
   b. Podcast: How IoT works in different domains and contexts https://youtu.be/eOlyxwOMBRE (2:23)

c. Podcast: Benefits of IoT for Micro and SMEs with practical examples https://youtu.be/OiksJMRKdjs (3:45)

d. Podcast: Challenges of IoT for Micro and SMEs https://youtu.be/UyzsoilRiSU (2:13)

e. Podcast: Examples of IoT solutions that can be integrated into micro and SME businesses https://youtu.be/ob4-MZ6eddY (1:32)

3. have an option to do the following activities:

a. **Integrating IoT technology into your business**

To integrate IoT technology into your specific business models, go through your own business needs and goals analysis exercise to determine if IoT is suitable for your business. Check out the Business needs and goals analysis for selecting appropriate IoT solutions, which will facilitate your need analysis process. After assessing your needs and goals, you move on to the implementation and monitoring phase. These Guidelines for implementing and monitoring IoT solutions using simple tools and techniques will provide step-by-step assistance during the whole process. Finally, use the Checklist for evaluating impact and effectiveness of IoT solutions on your business Evaluate the impact and effectiveness of IoT solutions on your business performance and customer satisfaction.
The case study of Jane, a SME or micro-owner that wants to adopt IoT solutions for her business will inspire you along this process providing feedback and insight

**b. Measuring your confidence and competence in using IoT for your business**

Complete this self-assessment questionnaire that measures their confidence and competence in using IoT for your business. You may do this activity either individually or collaboratively with your team or other learners exchanging feedback for collaborative and mutual improvement in low scores using our course forum our chatroom. You may introduce yourself to the course forum and make a team with other learners sharing the same interests and professional sector. We highly recommend working collaboratively throughout the course.

4. have an option to see more resources:
   a. 100 Internet of Things (IoT) Courses You Can Take for Free: This is a comprehensive list of free IoT courses available online. The courses cover a wide range of topics from smart homes to connected cities.
   b. Learn Internet of Things (IoT) with Online Courses | edX: edX offers a variety of IoT courses that delve into sensors, networks, and protocols. They also offer courses geared toward data analysis professionals covering data management, machine learning, and cloud computing applications.

c. IoT Webinars - IoT Now**:** IoT Now offers a range of webinars that provide insights about future trends and major challenges in the field of IoT. Topics include boosting IoT product performance and quality with device reliability engineering, the art of IoT device design, and how to easily add digital intelligence and visibility to supply chains.
d. "Digital for SMEs" (D4SME) webinar on SME Digitalisation & Sustainability**:** The D4SME webinar on SME Digitalisation & Sustainability: The Twin Transition was held virtually on 11 May 2021. It gathered over 128 participants from 34 countries to discuss the connection between SME digitalisation, sustainability, and resilience to "build back better" our economies and societies.
e. IoT Full Course - Learn IoT In 4 Hours | Internet Of Things | IoT Tutorial For Beginners | Edureka: This video by Edureka is a comprehensive tutorial that covers the basics of IoT and Raspberry Pi from scratch. It's a great resource for beginners who want to learn about IoT.
f. IoT Tutorial for Beginners | Internet of Things (IoT) | IoT Training | IoT Technology | Edureka: This video by Edureka is another great resource for beginners who want to learn about IoT. It covers the basic concepts of IoT and explains how it is trying to revolutionize the world.
g. IoT for Beginners | Microsoft Learn: This video by Microsoft Learn is part of a 12-week, 24-lesson curriculum designed to get university and high school students ready for the fast-growing world of IoT. It's a great resource for beginners who want to learn about IoT.
h. Introduction to the Internet of Things (IoT) | Alison: This free online course on the Internet of Things(IoT) will teach you about the extension of Internet connectivity to physical and electronic devices, and how it can be used to complete both complicated and menial tasks.
i. Internet of Things and the Cloud | Alison: This free online course on the internet of things and the cloud quickly teach you the most important details of the integration of cloud computing and the IoT.