

# MODULE 3 - DATA-DRIVEN DECISION MAKING

## UNIT 3.1 - Making Smarter Decisions with AI

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| <p><b>LESSON INTRO</b></p>                 | <p><b>What are we doing today?</b><br/>Today we will learn how AI helps businesses make better decisions by using data. We'll explore how to collect and analyze data, and how AI turns that data into useful business insights.</p> <p><b>What soft skill am I going to acquire today?</b><br/>Analytical thinking; Strategic decision-making; Digital literacy; Evidence-based reasoning</p>       |
| <p><b>PREVIOUS ASSIGNMENT(s) CHECK</b></p> | <p>Invite learners to reflect on the operational area they identified in Module 2 that could benefit from AI. Did they research any tools?</p>   |
| <p><b>INTRODUCTION TO THE TOPIC</b></p>    | <p>Every business makes decisions every day. With AI and data analytics, those decisions can be smarter, faster, and more evidence-based. This module introduces how data is used in AI-powered tools to forecast outcomes, identify patterns, and reduce risk. Participants will learn how even basic data like customer lists, sales logs, or web traffic can be turned into strategic assets.</p> |
| <p><b>GENERAL THEORY</b></p>               | <p><b>GENERAL THEORY</b></p> <ul style="list-style-type: none"> <li>• <b>Business Intelligence (BI):</b> The process of gathering and analyzing data to support decision-making</li> <li>• <b>Predictive Analytics:</b> Using historical data to forecast future trends</li> </ul>   |

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|   | <ul style="list-style-type: none"> <li>• <b>Data Visualization:</b> Communicating data through visual formats (charts, dashboards)</li> <li>• <b>Decision Support Systems (DSS):</b> Software systems that support managerial choices through AI models</li> </ul> <p>Data can come from internal sources (sales data, CRM) or external (market trends, social media). AI tools can analyze these datasets to offer recommendations or simulate outcomes.</p>  |
| <p style="text-align: center;"><b>EXAMPLES</b></p>            | <ol style="list-style-type: none"> <li>1. A coffee shop uses Google Analytics to decide when to run promotions.</li> <li>2. A car repair service uses spreadsheet-based forecasts to manage seasonal demand.</li> <li>3. A freelance consultant uses a chatbot and form data to identify most-requested services.</li> <li>4. A language school visualizes enrollment trends to open new time slots.</li> </ol>  |
| <p style="text-align: center;"><b>HANDS ON EXPERIENCE</b></p> | <p><b>Data Quiz</b></p> <ol style="list-style-type: none"> <li>1. What is data-driven decision making?             <ol style="list-style-type: none"> <li>a. Using intuition only</li> <li>b. Basing decisions on data and insights</li> <li>c. Guessing trends</li> <li>d. Ignoring past performance</li> </ol> </li> <li>2. A dashboard is:             <ol style="list-style-type: none"> <li>a. A vehicle interface</li> <li>b. A summary of key business data</li> <li>c. A type of AI algorithm</li> <li>d. A legal compliance tool</li> </ol> </li> </ol> |

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|                            | <p>3. Predictive analytics help businesses to:</p> <ul style="list-style-type: none"> <li>a. Look backwards</li> <li>b. Forecast future trends</li> <li>c. Design websites</li> <li>d. Store passwords</li> </ul> <p>4. What is one benefit of using AI with data?</p> <ul style="list-style-type: none"> <li>a. Hides business results</li> <li>b. Adds confusion</li> <li>c. Reduces errors and supports decisions</li> <li>d. Limits control</li> </ul> <p><b>Answers:</b></p> <ul style="list-style-type: none"> <li>1. b</li> <li>2. b</li> <li>3. b</li> <li>4. c</li> </ul> |
| <b>DISCUSSION</b>          | <p>Have you used any dashboards, analytics, or even spreadsheets to support your decisions? What information would you like to better understand in your business?</p>   |
| <b>FEEDBACK AND OTHERS</b> | <p>Use a simple reflection form: “After this lesson, one data point I want to monitor in my business is...” Encourage participants to identify metrics they already have access to (e.g., sales, customers, service complaints).</p>   |