Assignment week 1

1) Ai Enabled opportunities in SMEs:

i. Cybersecurity:

- ➤ <u>Phishing Detection</u>: Ai can analyse email content, links and sender information to identify phishing attempts with greater accuracy than traditional methods.
- ➤ Natural language processing(NPL) can detect subtle linguistic cues that indicate fraudulent emails.
- ➤ <u>Risk Assessment</u>: Use of the machine learning to evaluate and manage cybersecurity risks.
- ➤ <u>User Behaviour Analytics</u>: Ai can establish a baseline of normal user behaviour within the organization. If any user exhibits behaviour that deviates from this norm such as accessing sensitive data they typically don't use then ai can flag if for the further investigation.

ii. Product Development:

- ➤ <u>Market analysis</u>: Leverage Ai to identify trends and customer preferences for new product development.
- ➤ <u>Prototype and Testing</u>: Use Ai driven simulation to speed up the design and testing phase.

iii. E- commerce:

Recommendation systems: Enhance user experience by suggesting products based on browsing history and preferences.

➤ <u>Dynamic pricing</u>: Use ai to adjust prices in real time based on demand and competitor pricing.

iv. Human Resources:

- Recruitment Tools: Use ai to screen resumes and identify the best candidate.
- Employee Engagement analysis: analyse employee feedback and performance data to enhance retention.

2) Benefits of Artificial Intelligence in SMEs:

I. Improves decision making:

- ➤ <u>Data-Driven insights</u>: Ai can analyse vast amounts of data quickly, providing valuable insights and trends that aid in informed decisionmaking.
- ➤ <u>Predictive Analytics</u>: SMEs can forecast market trends and customer behaviours ,allowing them to make proactive business decisions.

II. Cost Savings:

- ➤ <u>Operational cost reduction</u>: By automating tasks and improving processes, ai can help SMEs reduce operational costs.
- ➤ <u>Better resource allocation</u>: Ai can identify inefficiencies and suggest reallocating resources to maximize productive.

III. Scalability:

➤ <u>Support for growth</u>: Ai systems can easily scale with the business, accommodating increased

- data and customer demands without significant additional investment.
- Flexibility: Ai solutions can be adapted to various business needs, making them suitable for SMEs in diverse industries.

IV. Enhanced efficiency:

- ➤ <u>Automation of repetitive tasks</u>: Ai can automate routine tasks such as data entry, invoicing and customer queries, freeing up employee time for more strategic activities.
- ➤ <u>Streamlined operations</u>: Ai tools can optimize process, reducing time and costs associated with manual workflows.