Digital Manufacturers use AI to optimize operations and improve efficiency. Here are some ways AI is utilized:

1. **Predictive Maintenance**
   - AI predicts when equipment needs maintenance, reducing downtime and costs.
   - Preventive maintenance saves time and money by identifying issues before they become problems.

2. **Cost Reduction**
   - AI optimizes resource allocation and reduces waste, leading to cost savings.

3. **Predictive Quality**
   - AI identifies quality issues early, allowing for adjustments before production.

4. **Virtualization**
   - AI creates virtual prototypes, allowing for real-time simulations and testing.

5. **Disaster Avoidance**
   - AI monitors the shop floor for changes, flagging potential dangers to prevent accidents.

6. **Time to Market**
   - AI enables faster product development by predicting outcomes based on historical data.

7. **Reduce New Product Time to Market**
   - AI speeds up the product development process by automating tasks and providing insights.

8. **E-commerce**
   - AI personalizes user experiences and optimizes inventory management.

9. **IoT + AI**
   - IoT devices collect data, which AI processes to improve operations and safety.

10. **Virtual Optimizers**
    - AI tools assist in the optimization of processes and resources.

11. **ELIMINATION**
    - AI reduces waste and improves efficiency in manufacturing processes.

12. **Health and Safety**
    - AI uses sensors to monitor worker safety, reducing the risk of accidents on the shop floor.

13. **SAFETY GEAR**
    - AI provides insights that help in the analysis of personal protective equipment (PPE) needs.

14. **Blueprints**
    - AI helps in creating digital representations of workflows, processes, and equipment.

15. **AI in Action**
    - AI is used in planning systems, enterprise resource planning, and virtual optimizers to improve efficiency and reduce costs.