**ADTA 5770: HW 2: Prompts & Responses**

Thuan L Nguyen, Ph.D.

**IMPORTANT NOTES:**

*--) Prompts must be closely relevant to the student’s selected domain expertise field.*

*--) The LLM must be* ***Google Gemini 2.0 Flash Thinking Experimental.***

* *For the consistency and accuracy of the prompt response evaluation, the student can* ***only use one******LLM****, Google Gemini 2.0 Flash Thinking Experimental*

**IMPORTANT NOTES:**

*--) Sample of the screenshot of the final prompt:*

**A text on a white background

AI-generated content may be incorrect.**

**NOTES:**

**--)** *This is* ***not*** *an example of a well-designed prompt. It is only used as a sample of a screenshot.*

*--) The student’s account can be* ***different*** *from “Gemini Advanced” while using the free version of the LLM.*

**IMPORTANT NOTES: Response Evaluation**

**Likert Scale 1 – 5 Questionnaire Questions on LLM Response Quality Survey**

**Use the Likert scale of 1 to 5, where:**

**1 = Not at all**

**2 = Some**

**3 = Fair**

**4 = Good**

**5 = Excellent**

To evaluate the LLM’s response quality, the student must use the above Likert scale to answer the following questions in the survey questionnaire:

**--) 1: Question 1: Usefulness and Relevance**: "**To what extent did the LLM's response directly address your prompt and provide information or assistance that was actually useful to you in your intended context?**"

**--) 2: Accuracy and Trustworthiness**: "**How accurate and factually correct do you believe the information presented in the LLM's response to be, and how much does this affect your trust in the response as a whole?**"

**--) 3: Clarity, Coherence, and Understanding**: "**How clear, well-written, and easy to understand was the LLM's response? Did you find the response logically structured and coherent in its presentation of information?**"

**--) 4: Completeness and Depth**: "**Did the LLM's response provide a sufficiently complete answer to your prompt? Did it offer enough depth or detail, or did it feel superficial or lacking in important aspects?**"

**--) 5: Overall Satisfaction and Further Assistance Needed**: "**Overall, how satisfied were you with the quality of the LLM's response to your prompt? And, based on the response, do you feel you need to issue further prompts or seek additional information from other sources to achieve your goal?**"

Student Name: Sonali Sabnam…

Domain Expertise Field: Supply Chain Management

LLM: Google Gemini 2.0 Flash Thinking Experimental

# Prompt 1: Zero-Shot Prompting

## Prompt: Initial Version

As an expert of the warehouse, provide the Stock Optimization strategy

## Prompt Design: Step by Step

### Step 1: …

Used imperative verb “strategy”.

### Step 2: …

Assign a persona “expert of the warehouse”

### Step 3: …

Define the scope “Stock Optimization strategy”

### Step 4: …

Suggested the output to be bullet points

### Step 5: …

Suggested the output to be condensed

### Step 6: …

Introduced the context and the output requirement clearly.

### Step 7: …

Prompt has three parts, context, persona and output requirements.

## PROMPT: Final Version

As an expert of the warehouse, provide Demand Forecasting. Condense the output to bullet points.

A screenshot of a computer

AI-generated content may be incorrect.

## Response: Final Version

* Data: Historical sales, external factors (market trends, economy, promotions, seasonality, weather, social media), segmented data.
* Methods: Quantitative (time series, regression), qualitative (market research, expert opinion, Delphi), combined approach.
* Tools: Forecasting software, demand planning systems, data analytics platforms.
* Evaluation: Accuracy metrics (MAD, MAPE, RMSE), regular reviews, feedback loops.
* Collaboration: S&OP, supplier/customer collaboration.
* Planning: Scenario planning, contingency planning.
* Considerations: Forecast horizon, product lifecycle, data quality.

Screenshot of the response:

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**

# Prompt 2: Zero-Shot Prompting

## Prompt: Initial Version

As an expert of the warehouse, provide the Order Fulfillment Efficiency. Consolidate the output to bullet points.

## Prompt Design: Step by Step

### Step 1: …

Used imperative verb “Fulfillment Efficiency”.

### Step 2: …

Assign a persona “expert of the warehouse”.

### Step 3: …

Define the scope “Order Fulfillment Efficiency”

### Step 4: …

Suggested the output to be bullet points

### Step 5: …

Suggested the output to be condensed

### Step 6: …

Introduced the context and the output requirement clearly.

### Step 7: …

Prompt has three parts, context, persona and output requirements.

## PROMPT: Final Version

As an expert of the warehouse, provide the Order Fulfillment Efficiency. Consolidate the output to bullet points.

A screenshot of a chat

AI-generated content may be incorrect.

## Response: Final Version

* **Receiving:** Pre-receiving notifications (ASNs), efficient docks, rapid unloading/inspection.
* **Storage:** ABC analysis & slotting, optimized layout, accurate inventory.
* **Picking:** Efficient strategies (zone, wave, batch), technology (scanners, pick-to-light), optimized routes.
* **Packing:** Ergonomic workstations, appropriate packaging.
* **Shipping:** Order consolidation, shipping software, carrier management, real-time tracking.
* **Technology:** WMS, automation (AS/RS, robotics), data analytics.
* **Improvement:** KPIs, audits, training, feedback.
* **Customer:** Order accuracy, fast shipping, communication.

## Screenshot of response:

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**

# Prompt 3: Zero-Shot Prompting

## Prompt: Initial Version

As an expert of the warehouse, provide Demand Forecasting

## Prompt Design: Step by Step

### Step 1: …

Used imperative verb “Forecasting”.

### Step 2: …

Assign a persona “expert of the warehouse”

### Step 3: …

Define the scope “Demand Forecasting”

### Step 4: …

Suggested the output to be bullet points

### Step 5: …

Suggested the output to be condensed

### Step 6: …

Introduced the context and the output requirement clearly.

### Step 7: …

Prompt has three parts, context, persona and output requirements.

## PROMPT: Final Version

As an expert of the warehouse, provide details on Demand Forecasting. Condense the output to bullet points.

A screenshot of a computer

AI-generated content may be incorrect.

## Response: Final Version

* **Data:** Historical sales (volume, variations, seasonality, trends), external factors (market trends, economic conditions, promotions, seasonality, weather, social media), clean & organized data, segmented by product/customer/region.
* **Methods:** Quantitative (time series: moving average, exponential smoothing, ARIMA; regression analysis), qualitative (market research, expert opinion, Delphi technique), combined approach for accuracy.
* **Tools:** Specialized forecasting software, demand planning systems integrated with ERP/SCM, data analytics platforms.
* **Process:** Data collection & preparation, model selection & application, forecast generation, evaluation (MAD, MAPE, RMSE), regular review & updates, feedback loops, collaborative forecasting (S&OP, supplier/customer).
* **Considerations:** Forecast horizon (short/long-term), product lifecycle (new/mature), data quality (accuracy, completeness, consistency), scenario planning ("what-if" analysis), contingency planning.

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**

# Prompt 4: Zero-Shot Prompting

## Prompt: Initial Version

As an expert of the warehouse, provide a plan for Warehouse Layout Optimization

## Prompt Design: Step by Step

### Step 1: …

Used imperative verb “plan”.

### Step 2: …

Assign a persona “expert of the warehouse”

### Step 3: …

Define the scope “Warehouse Layout Optimization”

### Step 4: …

Suggested the output to be bullet points

### Step 5: …

Suggested the output to be condensed

### Step 6: …

Introduced the context and the output requirement clearly.

### Step 7: …

Prompt has three parts, context, persona and output requirements.

## PROMPT: Final Version

As an expert of the warehouse, provide a plan for Warehouse Layout Optimization. Consolidate the output to bullet points.

A screenshot of a computer

AI-generated content may be incorrect.

## Response: Final Version

* Assessment: Analyze current layout (flow, space utilization, bottlenecks), data (inventory, orders, movement), future needs (growth, new products).
* Slotting Optimization: ABC analysis (fast/slow-moving items), popularity, size, weight, handling requirements, frequency of access, proximity to packing/shipping.
* Flow Optimization: Minimize travel distances (picking, putaway, replenishment), straight-line flow, eliminate cross-traffic, dedicated areas for specific functions.
* Space Utilization: Maximize vertical space (racking, mezzanines), efficient aisle widths, minimize dead space, consider cube utilization.
* Equipment & Technology: Evaluate material handling equipment (forklifts, conveyors, AS/RS), integrate technology (WMS, barcode scanners, pick-to-light), automation opportunities.
* Safety & Ergonomics: Safe aisle widths, clear signage, ergonomic workstations, proper lighting, temperature control.
* Flexibility & Scalability: Design for future growth, adaptable to changing product lines, modular design for easy reconfiguration.
* Implementation: Phased approach, minimize disruption, clear communication, staff training.
* Continuous Improvement: Performance metrics (travel time, picking accuracy, space utilization), regular reviews, feedback mechanisms.

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**

# Prompt 5: Zero-Shot Prompting

## Prompt: Initial Version

As an expert of the warehouse, provide a plan for Technology Integration

## Prompt Design: Step by Step

### Step 1: …

Used imperative verb “plan”.

### Step 2: …

Assign a persona “expert of the warehouse”

### Step 3: …

Define the scope “Technology Integration”

### Step 4: …

Suggested the output to be bullet points

### Step 5: …

Introduced the context and the output requirement clearly.

### Step 6: …

Prompt has three parts, context, persona and output requirements.

### Step 7: …

Suggested the output to be condensed

## PROMPT: Final Version

As an expert of the warehouse, provide a plan for Technology Integration. Consolidate the output to bullet points.

A screenshot of a computer

AI-generated content may be incorrect.

## Response: Final Version

* **Assessment:** Analyze current systems (WMS, ERP, etc.), identify pain points (inefficiency, errors, lack of visibility), define goals (automation, improved accuracy, real-time data).
* **WMS Optimization:** Evaluate existing WMS or select a new one, ensure integration with other systems (ERP, TMS), configure for specific needs (inventory management, order fulfillment, reporting).
* **Automation:** Explore automation options (AS/RS, robotics, conveyors, automated guided vehicles (AGVs)), prioritize based on ROI and feasibility, integrate with WMS.
* **Hardware:** Implement necessary hardware (barcode scanners, mobile computers, RFID readers, pick-to-light systems), ensure compatibility with software, provide adequate training.
* **Software Integration:** Integrate different software systems (WMS, ERP, TMS, CRM) for seamless data flow, eliminate manual data entry, improve data accuracy.
* **Data Analytics:** Implement data analytics tools to track KPIs, identify trends, optimize processes, improve decision-making.
* **Cloud Solutions:** Consider cloud-based solutions for scalability, accessibility, and reduced IT infrastructure costs.
* **Training & Support:** Provide comprehensive training for staff on new technologies, establish ongoing support and maintenance.
* **Security:** Implement robust security measures to protect data and systems from cyber threats.
* **Continuous Improvement:** Regularly evaluate technology performance, identify areas for improvement, stay updated on new technologies.

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**

# Prompt 6: Few-Shot Prompting

## Prompt: Initial Version

As a warehouse expert, provide a detailed plan for Warehouse Layout Optimization. Consider factors such as space utilization, workflow efficiency, safety, and technology integration.

## Prompt Design: Step by Step

### Step 1: …

Provided context

### Step 2: …

Added Background Information

### Step 3: …

Gave example

### Step 4: …

mentioned desired output

### Step 5: …

provided output format

### Step 6: …

decided the style

### Step 7: …

decided the tone

## PROMPT: Final Version

As a warehouse expert, provide a detailed plan for Warehouse Layout Optimization, consolidating the output into bullet points. Consider factors such as space utilization, workflow efficiency, safety, and technology integration.

A screenshot of a computer

AI-generated content may be incorrect.

## Response: Final Version

* **I. Assessment & Planning:**
* Analyze current layout (flow, space utilization, bottlenecks, congestion points).
* Gather data: Inventory (SKU velocity, dimensions, weight), orders (volume, frequency, product mix), movement (picking/packing/shipping patterns), equipment (capacity, dimensions).
* Define future needs: Growth projections, new product lines, seasonal variations, operational changes.
* Establish clear objectives: Improve space utilization, enhance workflow efficiency, increase throughput, reduce costs, improve safety.
* **II. Slotting Optimization:**
* ABC analysis: Categorize inventory by value and movement (A = fast-moving, B = medium, C = slow-moving).
* Slotting strategy:
  + Fast-moving items: Easily accessible locations (near packing/shipping, eye level, smaller pick distances).
  + Slow-moving items: Less accessible locations (higher shelves, further from packing/shipping).
  + Consider item size, weight, and handling requirements.
  + Optimize for picking frequency and order commonality.
* Slotting software: Utilize tools to analyze data and suggest optimal slotting strategies.
* **III. Workflow Optimization:**
* Flow analysis: Map current workflows (receiving, putaway, picking, packing, shipping) to identify bottlenecks and inefficiencies.
* Straight-line flow: Design layout to minimize travel distances and eliminate backtracking.
* Cross-docking: For suitable products, bypass storage and ship directly upon receipt.
* Dedicated areas: Designate specific zones for receiving, storage, picking, packing, shipping, value-added services.
* Minimize congestion: Optimize traffic flow, separate inbound and outbound operations, utilize appropriate material handling equipment.
* **IV. Space Utilization:**
* Maximize vertical space: Utilize racking systems (adjustable, high-density), mezzanines, vertical lift modules (VLMs).
* Efficient aisle widths: Balance accessibility with storage capacity.
* Cube utilization: Optimize packaging sizes and storage container dimensions.
* Minimize dead space: Eliminate unused areas, consolidate storage where possible.
* Storage density: Consider different storage methods (e.g., pallet racks, shelving, drawers) to maximize storage density.
* **V. Safety & Ergonomics:**
* Safe aisle widths: Ensure adequate space for material handling equipment and personnel.
* Clear signage: Use clear and visible signage for navigation and safety.
* Ergonomic workstations: Design packing stations and picking areas to minimize strain and fatigue.
* Proper lighting: Adequate lighting for visibility and safety.
* Temperature control: Maintain appropriate temperature and humidity levels for products and personnel.
* Safety equipment: Provide necessary safety equipment (e.g., fire extinguishers, first aid kits).
* **VI. Technology Integration:**
* Warehouse Management System (WMS): Implement or optimize a WMS to manage inventory, track orders, and optimize warehouse operations.
* Barcoding & RFID: Utilize barcoding or RFID for accurate inventory tracking and efficient picking/packing.
* Pick-to-light systems: Improve picking accuracy and speed with pick-to-light technology.
* Automation: Explore automation options (AS/RS, AGVs, robotic picking) to improve efficiency and reduce labor costs.
* Data analytics: Leverage data analytics to identify trends, optimize processes, and improve decision-making.
* **VII. Implementation & Evaluation:**
* Phased approach: Implement changes in phases to minimize disruption.
* Clear communication: Communicate changes to staff and provide necessary training.
* Performance metrics: Track key performance indicators (KPIs) (e.g., space utilization, picking accuracy, order fulfillment time).
* Regular reviews: Conduct regular reviews of the layout and make adjustments as needed.
* Continuous improvement: Continuously evaluate and improve the warehouse layout based on performance data and feedback.

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**

# Prompt 7: Few-Shot Prompting

## Prompt: Initial Version

Develop an optimal inventory replenishment strategy for a warehouse. Provide responses in bullet points, incorporating forecasting and automation.

## Prompt Design: Step by Step

### Step 1: …

Provided context

### Step 2: …

Added Background Information

### Step 3: …

Gave example

### Step 4: …

mentioned desired output

### Step 5: …

provided output format

### Step 6: …

decided the style

### Step 7: …

decided the tone

## PROMPT: Final Version

Develop an optimal inventory replenishment strategy for a warehouse with fluctuating demand. Provide responses in bullet points, incorporating forecasting, stock levels, and automation.

A screenshot of a computer

AI-generated content may be incorrect.

## Response: Final Version

* **Demand Forecasting:**
* **Historical Data Analysis:** Analyze past sales data, identifying trends, seasonality, and cyclical patterns. Use statistical methods like moving averages, exponential smoothing, or ARIMA models.
* **External Factors:** Consider market trends, economic conditions, promotions, and competitor activity that might influence demand.
* **Forecast Accuracy:** Regularly evaluate forecast accuracy using metrics like Mean Absolute Deviation (MAD) or Mean Absolute Percentage Error (MAPE) and adjust models as needed.
* **Collaborative Forecasting:** Engage with sales and marketing teams to incorporate their insights and upcoming promotions into forecasts.
* **Stock Level Management:**
* **Safety Stock:** Calculate safety stock based on demand variability and lead time. Use statistical methods to determine the appropriate level to minimize stockouts while avoiding excess inventory. Dynamically adjust safety stock based on forecast accuracy and lead time fluctuations.
* **Reorder Point (ROP):** Establish ROPs for each item, considering lead time and safety stock. ROP = (Lead Time Demand) + Safety Stock.
* **Order Quantity:** Determine optimal order quantities using techniques like Economic Order Quantity (EOQ) or considering volume discounts and storage capacity constraints. Balance ordering costs with holding costs.
* **ABC Analysis:** Categorize inventory by value and consumption (A, B, C). Apply tighter control and more frequent reviews to A items, while simplifying management for C items.
* **Replenishment Process:**
* **Automated Replenishment:** Implement a system that automatically triggers replenishment orders when inventory levels fall below the ROP. Integrate with forecasting and inventory management systems.
* **Lead Time Management:** Closely monitor lead times and work with suppliers to reduce variability. Shorter, more predictable lead times allow for lower safety stock levels.
* **Supplier Relationships:** Build strong relationships with reliable suppliers to ensure timely deliveries and potentially negotiate flexible order quantities.
* **Regular Reviews:** Conduct regular reviews of inventory levels, forecasts, and replenishment parameters to identify areas for improvement and adjust strategies as needed.
* **Technology & Automation:**
* **Warehouse Management System (WMS):** Implement a WMS to track inventory in real-time, automate replenishment processes, and provide valuable insights into inventory performance.
* **Automated Data Capture:** Use barcode scanners or RFID to improve data accuracy and efficiency in receiving, putaway, and picking processes.
* **Demand Planning Software:** Consider specialized demand planning software to enhance forecasting capabilities and integrate with other systems.
* **Integration:** Integrate the WMS with ERP and supplier systems for seamless data exchange and automated ordering.
* **Continuous Improvement:**
* **Performance Metrics:** Track key metrics like inventory turnover, stockout rate, carrying costs, and order fulfillment time.
* **Regular Audits:** Conduct regular inventory audits to ensure accuracy and identify discrepancies.
* **Process Optimization:** Continuously analyze and optimize replenishment processes to reduce costs, improve efficiency, and enhance customer service.
* **Feedback Loops:** Establish feedback mechanisms to gather input from warehouse staff, sales teams, and customers to identify areas for improvement.

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**

# Prompt 8: Few-Shot Prompting

## Prompt: Initial Version

Provide strategies to improve order-picking efficiency in a warehouse. Format responses as bullet points and consider picking workflow design.

## Prompt Design: Step by Step

### Step 1: …

Provided context

### Step 2: …

Added Background Information

### Step 3: …

Gave example

### Step 4: …

mentioned desired output

### Step 5: …

provided output format

### Step 6: …

decided the style

### Step 7: …

decided the tone

## PROMPT: Final Version

Provide strategies to improve order-picking efficiency in a warehouse. Format responses as bullet points and consider picking methods, technology, and workflow design.

A screenshot of a computer

AI-generated content may be incorrect.

## Response: Final Version

* **Picking Methods:**
* **Zone Picking:** Divide the warehouse into zones and assign pickers to specific areas, reducing travel time.
* **Wave Picking:** Release orders in batches (waves) based on factors like shipping time or customer location, optimizing picker routes.
* **Batch Picking:** Combine multiple orders into a single picking trip, reducing overall travel time.
* **Cluster Picking:** Pick multiple items for different orders simultaneously, improving efficiency for orders with shared SKUs.
* **Piece Picking:** For individual items, optimize picking routes within storage locations.
* **Technology Integration:**
* **Warehouse Management System (WMS):** Implement a WMS to optimize picking routes, manage order releases, and track picker performance.
* **Barcode/RFID Scanners:** Use scanners for accurate and efficient item identification, reducing errors and improving speed.
* **Pick-to-Light Systems:** Install lights at picking locations to guide pickers to the correct items and quantities.
* **Voice Picking:** Utilize voice-directed picking systems to free up pickers' hands and improve accuracy.
* **Automated Storage and Retrieval Systems (AS/RS):** Implement AS/RS for high-density storage and automated retrieval of items, minimizing picker travel.
* **Automated Guided Vehicles (AGVs):** Utilize AGVs to transport picked items to packing stations, freeing up pickers for other tasks.
* **Real-time Location Systems (RTLS):** Track the location of pickers and inventory in real-time to optimize routes and improve efficiency.
* **Workflow Design:**
* **Optimized Slotting:** Strategically locate fast-moving items in easily accessible locations to minimize travel time. Use ABC analysis to categorize items.
* **Minimize Travel Distance:** Design picking routes to minimize travel time and backtracking. Consider using a "shortest path" algorithm.
* **Ergonomic Workstations:** Design picking areas to be ergonomic and reduce picker fatigue.
* **Clear Signage and Labeling:** Use clear signage and labeling to help pickers quickly locate items.
* **Standardized Procedures:** Develop and implement standardized picking procedures to ensure consistency and efficiency.
* **Regular Training:** Provide regular training to pickers on best practices and the use of technology.
* **Performance Monitoring:** Track picker performance metrics (e.g., pick rate, accuracy) to identify areas for improvement.
* **Continuous Improvement:** Regularly review and optimize picking processes based on performance data and feedback.
* **Cross-docking:** For suitable products, bypass storage and ship directly upon receipt, reducing picking requirements.
* **Order Consolidation:** Combine multiple orders into single shipments where possible to reduce handling and shipping costs.

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**

# Prompt 9: In-Context Learning Prompting

## Prompt: Initial Version

As a warehouse manager, create a safety and compliance to ensure regulatory adherence. Provide bullet points with actionable items.

## Prompt Design: Step by Step

### Step 1: …

Provided context

### Step 2: …

Added Background Information

### Step 3: …

Gave example

### Step 4: …

mentioned desired output

### Step 5: …

provided output format

### Step 6: …

decided the style

### Step 7: …

decided the tone

## PROMPT: Final Version

As a warehouse manager, create a safety and compliance checklist to minimize risks and ensure regulatory adherence. Provide bullet points with actionable items.

A screenshot of a computer

AI-generated content may be incorrect.

## Response: Final Version

**Warehouse Safety and Compliance Checklist:**

* **General Safety:**
* **Housekeeping:**
  + Regularly clean floors, aisles, and storage areas.
  + Remove debris, spills, and clutter promptly.
  + Empty trash containers frequently.
  + Maintain clear walkways and fire exits.
* **Personal Protective Equipment (PPE):**
  + Provide appropriate PPE (safety glasses, gloves, safety shoes, hearing protection, etc.) to all employees.
  + Enforce the use of PPE in designated areas.
  + Regularly inspect and replace damaged PPE.
* **Fire Safety:**
  + Ensure fire extinguishers are readily accessible and inspected regularly.
  + Conduct fire drills and training regularly.
  + Maintain clear fire exits and emergency routes.
  + Implement a fire prevention plan.
  + Test fire alarms and sprinkler systems regularly.
* **First Aid:**
  + Maintain a well-stocked first aid kit.
  + Train employees in basic first aid and CPR.
  + Designate a first aid responder on each shift.
  + Ensure easy access to emergency contact information.
* **Hazard Communication:**
  + Provide training on handling hazardous materials.
  + Maintain Safety Data Sheets (SDS) for all hazardous chemicals.
  + Label containers of hazardous materials clearly.
  + Implement spill control procedures.
* **Machine Guarding:**
  + Ensure all machinery has proper guarding to prevent contact with moving parts.
  + Regularly inspect machine guards for damage or malfunction.
  + Train employees on the safe operation of machinery.
* **Lockout/Tagout:**
  + Implement a lockout/tagout procedure for servicing or repairing equipment.
  + Train employees on the lockout/tagout procedure.
  + Ensure lockout/tagout devices are readily available.
* **Electrical Safety:**
  + Inspect electrical cords and equipment for damage.
  + Ensure proper grounding of electrical equipment.
  + Avoid overloading electrical circuits.
  + Keep electrical panels clear and accessible.
* **Walking/Working Surfaces:**
  + Maintain floors in good condition, free from cracks or uneven surfaces.
  + Ensure stairways have handrails and are well-lit.
  + Use appropriate fall protection for elevated work areas.
* **Ergonomics:**
  + Provide training on proper lifting techniques.
  + Use mechanical aids for heavy lifting when possible.
  + Design workstations to minimize strain and fatigue.
  + Encourage regular breaks and stretching.
* **Material Handling:**
* **Forklift Safety:**
  + Train and certify all forklift operators.
  + Inspect forklifts daily before use.
  + Establish safe forklift operating procedures.
  + Maintain designated forklift traffic lanes.
  + Ensure proper ventilation in areas where forklifts operate.
* **Pallet Racking:**
  + Inspect racking regularly for damage.
  + Ensure proper loading of racks.
  + Use appropriate load capacity labels.
  + Do not overload racks.
* **Manual Handling:**
  + Train employees on proper lifting and carrying techniques.
  + Provide mechanical aids for heavy lifting.
  + Minimize the need for manual handling whenever possible.
* **Compliance:**
* **OSHA Compliance:**
  + Adhere to all applicable OSHA regulations.
  + Conduct regular OSHA training.
  + Maintain required OSHA records.
* **Fire Code Compliance:**
  + Comply with local fire codes.
  + Obtain necessary fire permits.
* **Environmental Regulations:**
  + Comply with environmental regulations regarding hazardous waste disposal.
* **Building Codes:**
  + Ensure the warehouse complies with all building codes.
* **Record Keeping:**
  + Maintain accurate records of safety training, inspections, and incidents.
* **Emergency Preparedness:**
* **Emergency Plan:**
  + Develop and implement an emergency plan.
  + Conduct regular drills and training.
* **Evacuation Procedures:**
  + Establish clear evacuation procedures.
  + Post emergency contact information.
* **Incident Reporting:**
  + Implement an incident reporting system.
  + Investigate all incidents to identify root causes.
* **Training and Communication:**
* **Safety Training:**
  + Provide regular safety training to all employees.
  + Tailor training to specific job tasks.
* **Safety Meetings:**
  + Conduct regular safety meetings to discuss safety issues and best practices.
* **Communication:**
  + Encourage open communication about safety concerns.
  + Provide a system for employees to report hazards.
* **Regular Inspections and Audits:**
* **Regular Inspections:**
  + Conduct regular safety inspections of the warehouse.
  + Use a checklist to ensure all areas are covered.
* **Safety Audits:**
  + Conduct periodic safety audits by qualified personnel.
* **Corrective Actions:**
  + Take prompt corrective action to address any safety hazards.
  + Track corrective actions to ensure they are completed.
* This checklist should be reviewed and updated regularly to reflect changes in regulations, best practices, and warehouse operations. It's crucial to foster a strong safety culture where all employees are empowered to identify and report hazards.

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**

# Prompt 10: In-Context Learning Prompting

## Prompt: Initial Version

Discuss the impact of technology on warehouse management, focusing on automation, AI, and real-time tracking. Provide responses in bullet points

## Prompt Design: Step by Step

### Step 1: …

Provided context

### Step 2: …

Added Background Information

### Step 3: …

Gave example

### Step 4: …

mentioned desired output

### Step 5: …

provided output format

### Step 6: …

decided the style

### Step 7: …

decided the tone

## PROMPT: Final Version

Discuss the impact of technology on warehouse management, focusing on automation, AI, and real-time tracking. Provide a consolidated responses in bullet points

A screenshot of a computer

AI-generated content may be incorrect.

## Response: Final Version

* **Automation:**
* **Increased Efficiency:** Automated systems (AS/RS, AGVs, robotic picking) significantly increase throughput and reduce labor costs.
* **Improved Accuracy:** Automation minimizes human error in picking, packing, and inventory management, leading to greater accuracy.
* **Enhanced Safety:** Automated systems can handle hazardous tasks, reducing risks to human workers.
* **24/7 Operations:** Automated warehouses can operate continuously, maximizing productivity and meeting customer demand.
* **Reduced Space Requirements:** Automated storage systems often require less space than traditional racking, optimizing warehouse layout.
* **Artificial Intelligence (AI):**
* **Demand Forecasting:** AI algorithms can analyze historical data and external factors to predict future demand more accurately.
* **Inventory Optimization:** AI can optimize inventory levels by dynamically adjusting safety stock and reorder points based on real-time data and demand forecasts.
* **Route Optimization:** AI-powered systems can optimize picking routes and delivery schedules, minimizing travel time and fuel costs.
* **Predictive Maintenance:** AI can predict equipment failures, allowing for proactive maintenance and minimizing downtime.
* **Process Improvement:** AI can analyze warehouse data to identify bottlenecks and inefficiencies, suggesting process improvements.
* **Real-Time Tracking:**
* **Inventory Visibility:** Real-time tracking of inventory provides complete visibility into stock levels, location, and movement.
* **Improved Order Fulfillment:** Real-time tracking enables faster and more accurate order fulfillment, improving customer satisfaction.
* **Reduced Stockouts:** Real-time inventory data helps prevent stockouts by alerting managers to low stock levels.
* **Enhanced Supply Chain Management:** Real-time tracking across the supply chain provides better visibility and control over the flow of goods.
* **Improved Decision-Making:** Real-time data provides managers with the information they need to make informed decisions quickly.
* **Combined Impact:**
* **Seamless Integration:** Integrating automation, AI, and real-time tracking creates a highly efficient and responsive warehouse ecosystem.
* **Data-Driven Decisions:** The combination of these technologies enables data-driven decision-making, leading to continuous improvement.
* **Increased Agility:** Warehouses equipped with these technologies are more agile and adaptable to changing market demands.
* **Competitive Advantage:** Companies that effectively implement these technologies gain a significant competitive advantage.
* **Reduced Costs:** By optimizing processes and reducing errors, these technologies contribute to significant cost savings.

## Response Analysis and Evaluation

**… SHOULD BE BLANK FOR HW 2… WILL BE COMPLETED IN HW 3 …**