# Walmart Example

We will use Walmart as an example to illustrate the various course concepts.  The examples provided in this document are to assist you in understanding the concepts and applying them to the class assignments, which consist of a case study and four staged projects.  The examples are provided for illustrative purposes only, and may not precisely conform to the specific directions given in the class assignments.  Student should follow the instructions provided in the assignments.

## Business Analysis (Stage 1) – Follow the directions in the Stage 1 Assignment

The following is a discussion of the Five Forces Analysis, Generic Strategy for Competitive Advantage and business process improvement to help you understand the topics.  Your assignment specifies the content and format to be used for your paper.

**Applying Porter's Five Forces Analysis**

The Five Forces are explained in the reading assignments for Week 1.  Below is an example showing the application of the Five Forces analysis to Walmart.
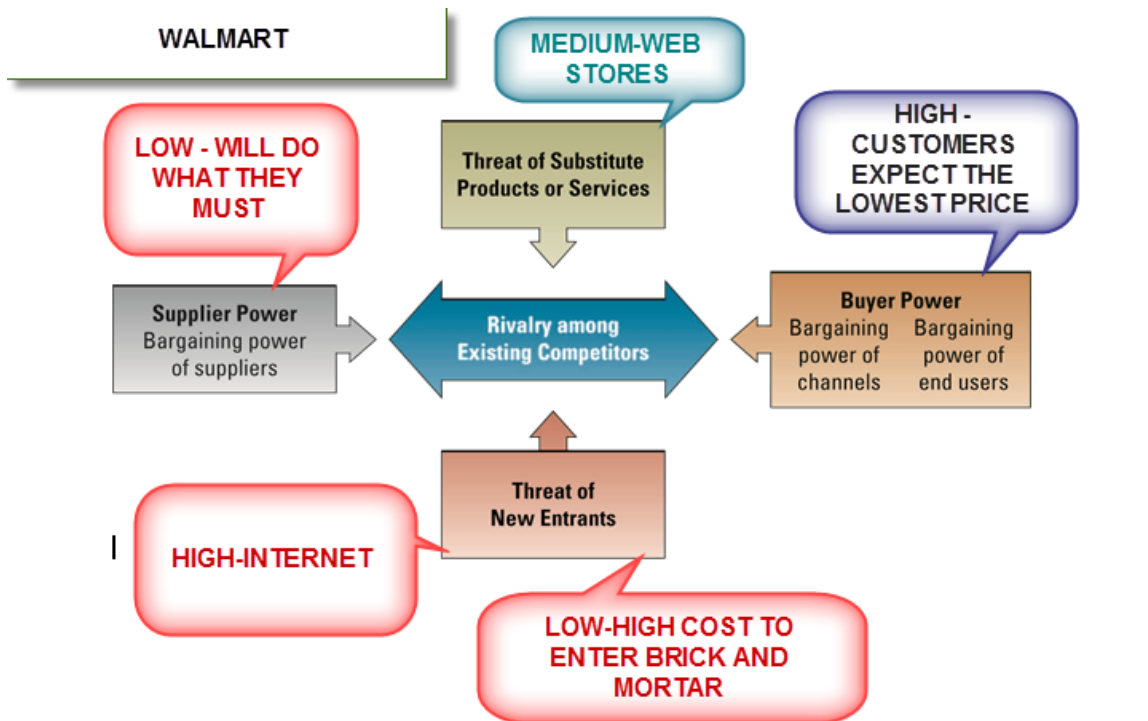


We know that Walmart's objective is everyday low prices, which is their competitive advantage.  When we look at the Five Forces model as applied to Walmart, we can determine that the Buyer Power of their customers is high because patrons have many other choices.  However, customers expect and demand the lowest prices

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from Walmart, and they are willing to overlook, but not ignore, other factors like customer service, store location, and atmosphere.

Walmart's Suppliers have little power because of the sheer size of Walmart, and because being a Walmart supplier can provide huge sales potential.  The suppliers must do what Walmart wants regarding business processes and technical requirements.  They will also be pressured for lower prices, which may cause the suppliers to move production to lower priced labor markets.

The threat of substitute products means that customers can go elsewhere for the same or substitute items.  There could be some threat here only because of web based stores as they may be able to have lower prices because of low overhead.

Threat of new entrants in the Brick and Mortar Store area is low, because of the costs involved in building stores and the infrastructure to support the business processes.  The threat of new entrants in the Internet market would be high, because of the low costs involved and the potential to specialize in different areas with especially low prices.

Rivalry between competitors at a store level would be high and could be affected by the breadth of products and quality of customer service or even the cleanliness and appearance of the store.  On a company level, Walmart's Sales are $418 billion and Target, their closest competitor, has annual sales of $67 billion, so while it may seem there is a large rivalry, the size of Walmart limits the threat.

**Generic Strategy for Competitive Advantage**

If we look at the table below, we can see that the Generic Strategy for Walmart is in the upper left quadrant, Broad Market and Low Cost.  You can see how they compare to the other retailers shown in this example.
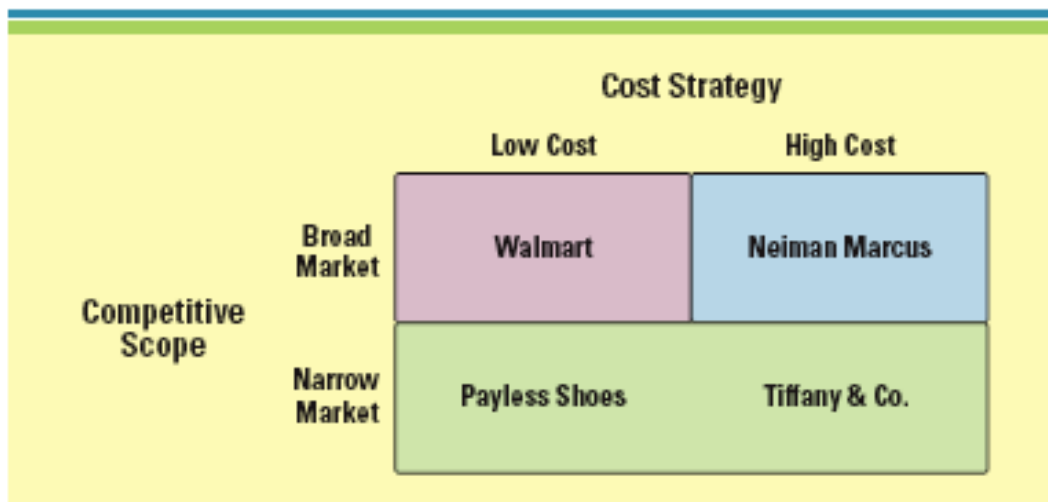


(Baltzan, 2014, p. 22)

The broad market will bring in the largest number of buyers, which would have the effect of lowering buyer power.  The Low Cost indicates that many things could affect Walmart's costs, but their biggest cost is for the goods that they sell and therefore the Suppliers are important and Walmart uses their size to decrease the Supplier power.  The Generic Strategy identified makes sense.

The Five Forces analysis above indicates that two areas of highest concern for Walmart would be

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- Supplier-related activities, like Supply Chain Management (SCM), supplier training, supplier selection, and supplier facilitation, that would reduce Walmart's costs; and
- Customer-related activities, like easy payment, easy return of merchandise, web purchasing with free delivery to the nearest store, and stocking the items wanted in the community, which would increase the number of customers and retain the ones they have; these also help reduce operating costs.

Note that neither the Five Forces Analysis nor the table of Generic Strategies for Competitive Advantage mentions IT or computer systems. IT is not a strategy; the initial focus is on improving the business processes, which may or may not have anything to do with IT.

**Business Process to be Improved**

If Walmart decided to improve its business processes to increase profits, it would begin with the processes related to the identified strategy for competitive advantage (Low Cost Strategy). Each process that needs to be improved would have its own team. Walmart would then assemble a team of individuals from different areas that are involved in the process, and are familiar with the current process. The next step is for the team to document the As-Is process, its objective, its inputs and outputs, and the steps in the process. This is usually done with some kind of a process diagram or model, or written step-by-step description of the how the process works. The process selected to help reduce overall costs is the **item return process**. The team believes that improvements in how the store accepts returned items from customers can help reduce costs.

For this Walmart Example, the following would apply:
**GENERIC STRATEGY FOR COMPETITIVE ADVANTAGE:** Low Cost Strategy
**BUSINESS PROCESS TO BE IMPROVED:** Item Return Process
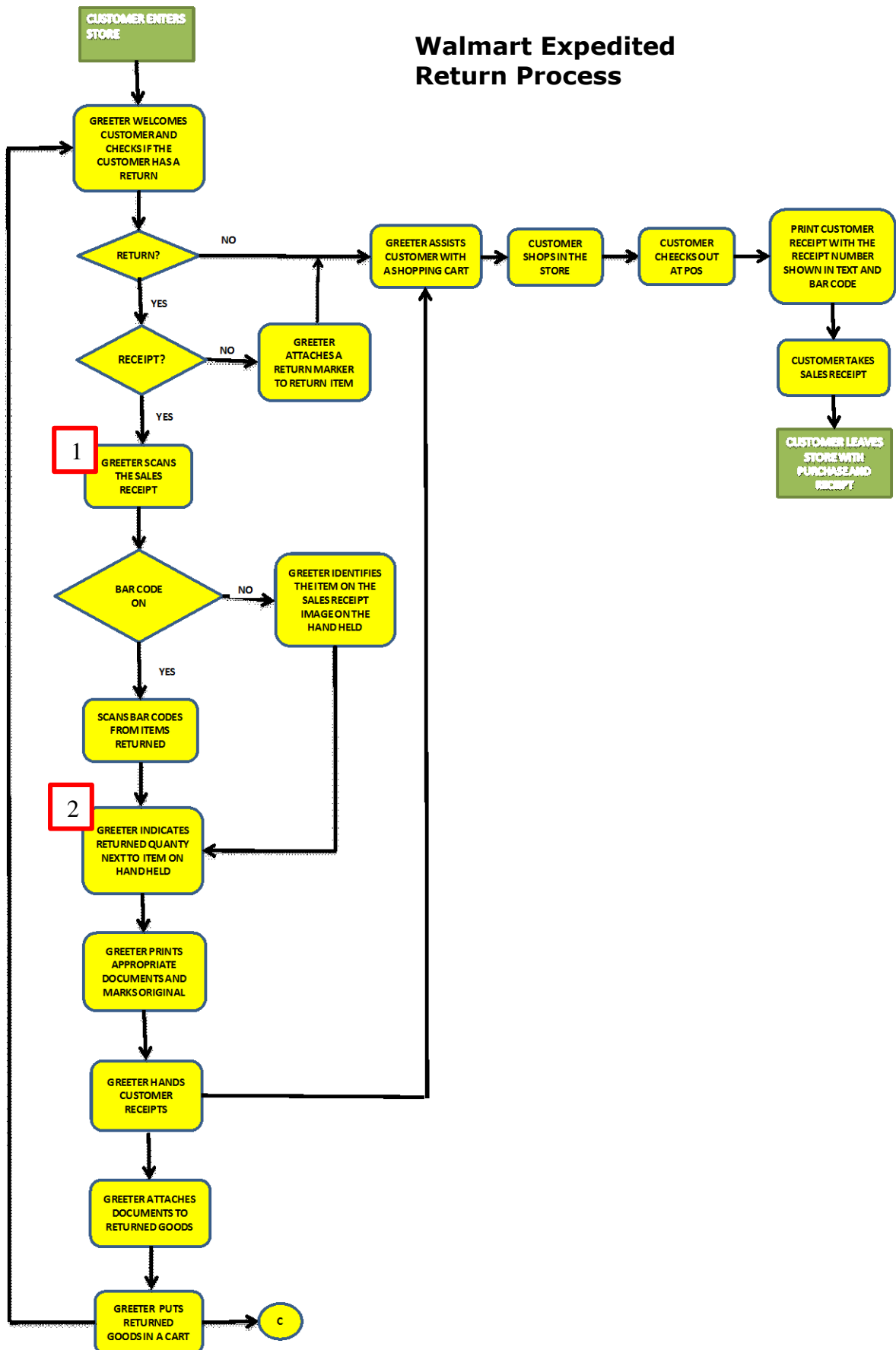
## Background for Stage 2

The Walmart team has come up with the following idea for improving the Item Return Process:

Upon entering the store, the customer is met by the Greeter, who determines if the customer has an item to return. If there is no return, he assists the customer with a cart. If the customer wishes to return an item, the Greeter asks if the customer has a receipt. If the customer says "no," the Greeter attaches a "To be returned" tag to the item and assists the customer with a cart. If the customer has a receipt, the Greeter scans the Sales Receipt Number using a hand held wireless device and if the item is bar coded, the Greeter will scan the bar codes of all items to be returned using the hand held device and indicate that these are returned items. If there is no bar code on the item the Greeter will select the appropriate item from the sales receipt image on the hand held device and indicate the item being returned. The Greeter will then indicate the quantity of each item being returned. The Greeter's hand held device will print a credit slip that can be redeemed for credit (if it was a credit or debit card purchase) or cash at any cashier. The handheld device will also print two copies of the return receipt. One will be attached to the returned item and one will be given to the customer along with the original receipt with the returned items crossed out. The greeter will attach the appropriate documents to the returned items and place them in a cart for later processing.

This new process will reduce the amount of time overall in handling returned items, help expedite the restocking of returned items or determining their final disposition, and help Walmart keep its costs low.

The **Process Diagram** for the Walmart Expedited Return Process (WERP) is shown below (use the plus sign at the top of the Adobe screen to increase the font for readability):

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# Walmart Expedited
# Return Process

```
┌─────────────────┐
│ CUSTOMER ENTERS │
│ STORE           │
└─────────────────┘
        │
        ▼
┌─────────────────┐
│ GREETER WELCOMES│
│ CUSTOMER AND    │
│ CHECKS IF THE   │
│ CUSTOMER HAS A  │
│ RETURN          │
└─────────────────┘
        │
        ▼
    ◇ RETURN? ◇ ──── NO ────────────────────┐
        │                                    │
       YES                                   │
        │                                    ▼
        ▼                          ┌──────────────────┐
    ◇ RECEIPT? ◇ ── NO ──┐        │ GREETER ASSISTS  │
        │                │         │ CUSTOMER WITH    │
       YES               ▼         │ A SHOPPING CART  │
        │       ┌──────────────┐   └──────────────────┘
        │       │ GREETER      │            │
        │       │ ATTACHES A   │            ▼
        │       │ RETURN MARKER│   ┌──────────────────┐
        │       │ TO RETURN    │   │ CUSTOMER SHOPS   │
        │       │ ITEM         │   │ IN THE STORE     │
        │       └──────────────┘   └──────────────────┘
        ▼                                   │
┌─────────────────┐                         ▼
│ GREETER SCANS   │  [1]            ┌──────────────────┐
│ THE SALES       │                 │ CUSTOMER CHECKS  │
│ RECEIPT         │                 │ OUT AT POS       │
└─────────────────┘                 └──────────────────┘
        │                                   │
        ▼                                   ▼
    ◇ BAR CODE ◇ ── NO ──┐        ┌──────────────────┐
    ◇ ON      ◇          │        │ PRINT CUSTOMER   │
        │                ▼        │ RECEIPT WITH THE │
       YES      ┌──────────────┐  │ RECEIPT NUMBER   │
        │       │ GREETER      │  │ SHOWN IN TEXT AND│
        │       │ IDENTIFIES   │  │ BAR CODE         │
        │       │ THE ITEM ON  │  └──────────────────┘
        │       │ THE SALES    │           │
        ▼       │ RECEIPT IMAGE│           ▼
┌─────────────────┐│ ON THE     │ ┌──────────────────┐
│ SCANS BAR CODES ││ HAND HELD  │ │ CUSTOMER TAKES   │
│ FROM ITEMS      │└────────────┘ │ SALES RECEIPT    │
│ RETURNED        │               └──────────────────┘
└─────────────────┘                        │
        │                                   ▼
        ▼              [2]         ┌──────────────────┐
┌─────────────────┐                │ CUSTOMER LEAVES  │
│ GREETER INDICATES│               │ STORE WITH       │
│ RETURNED QUANTY  │               │ PURCHASE AND     │
│ NEXT TO ITEM ON  │               │ RECEIPT          │
│ HAND HELD        │               └──────────────────┘
└─────────────────┘
        │
        ▼
┌─────────────────┐
│ GREETER PRINTS  │
│ APPROPRIATE     │
│ DOCUMENTS AND   │
│ MARKS ORIGINAL  │
└─────────────────┘
        │
        ▼
┌─────────────────┐
│ GREETER HANDS   │
│ CUSTOMER        │
│ RECEIPTS        │
└─────────────────┘
        │
        ▼
┌─────────────────┐
│ GREETER ATTACHES│
│ DOCUMENTS TO    │
│ RETURNED GOODS  │
└─────────────────┘
        │
        ▼
┌─────────────────┐
│ GREETER PUTS    │
│ RETURNED        │──── ( C )
│ GOODS IN A CART │
└─────────────────┘
```

# Functional (Business) Requirements (Stage 2) – Follow the directions in the Stage 2 Assignment

Your assignment specifies the content and format to be used for your paper. See Background for stage 2 above.

For this Walmart Example, the following apply:
**GENERIC STRATEGY FOR COMPETITIVE ADVANTAGE:**  Low Cost Strategy
**BUSINESS PROCESS TO BE IMPROVED:**  Item Return Process

The Stage 2 assignment calls for a table like the following one to be completed.  Using the above process model, for the steps labeled "Greeter scans the sales receipt" (labeled with the "1" in the red box) and "Greeter indicates returned quantity next to item on handheld" (with the "2" in the red box), the following input, process and output entries would be appropriate:

| Process Step | Input | Process | Output |
|---|---|---|---|
| | Information/data item entered into the system as part of this step | Processing or action the system must perform for this step | Information/data item displayed or printed out for the user in this step |
| 1 | Sales receipt data | Read, store and display sales receipt | Scanned sales receipt |
| 2 | Quantity of item returned (entered next to the item on the receipt shown on the handheld device) | Record quantity of item returned, calculate amount to be refunded and print results | Return receipt showing item returned, quantity and total amount to be refunded (one for customer, one to be attached to returned item(s)) |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |

*Table of Functional (Business Requirements)*

*Steps in the Item Return Process*

These inputs, processing, and outputs will become the **functional (or business) requirements** for the system.

# IT Requirements (Stage 3) – Follow the directions in the Stage 3 Assignment

Your assignment specifies the content and format to be used for your paper.

For this Walmart Example, the following apply:
**GENERIC STRATEGY FOR COMPETITIVE ADVANTAGE:**  Low Cost Strategy
**BUSINESS PROCESS TO BE IMPROVED:**  Item Return Process

In addition to the functional requirements for a new system, the **IT requirements** must also be developed. We will do this by evaluating the applicability and importance of each IT requirement listed. The requirements that are identified <u>as relevant</u> to the business process will form the IT (technical) requirements for a system. In evaluating and selecting an IT system, both the functional (business) requirements and the IT requirements need to be considered. The areas that need to be considered in developing the IT requirements are listed below in the Table of IT Requirements, which is similar to the one you will complete in the Stage 3 assignment. Only a few of the rankings and explanations are filled in here, but your table will rank and explain them all. (Be sure to use the table and instructions provided in the assignment.)

| | IT Requirement | Importance/ Relevance<br><br>High,<br>Medium,<br>Low, or<br>Not Applicable<br>(N/A) | Explanation for Ranking<br><br>(Write a minimum of <u>3 good sentences</u> for each; both the process to be improved and the case study should be mentioned in <u>each</u> explanation; the data used in the process should be included in the explanation where applicable.) |
|---|---|---|---|
| 1 | Usability | | |
| 2 | Maintainability | | |
| 3 | Scalability | Medium | The system must be able to handle an increase in the number of users and devices being used for Returns during peak hours. Also, during the holiday season Walmart handles a large volume of returns. Walmart expects its business to continue to grow, and returns will grow along with the rest of the business. |
| 4 | Reliability/ Availability | | |
| 5 | Extensibility | | |
| 6 | Portability | | |
| 7 | Security | | |
| 8 | Data Accuracy | | |
| 9 | Data Completeness | | |
| 10 | Authentication | High | Walmart does not want customers to use the device. The system will require the Greeter to provide specified login information. This protects Walmart from fraudulently recorded returned items. |
| 11 | Enterprise Systems (ERP, CRM, SCM) | | |
| 12 | Networks | | |
| 13 | Database | | |
| 14 | Data Warehouse | | |
| 15 | Data Mining | | |

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| | | | |
|---|---|---|---|
| 16 | Business Intelligence | | |
| 17 | Decision Support System | High | Mart will use a DSS to evaluate returned items. Data from all Walmart stores can be compared. The data can then be used to further improve the process. |
| 18 | Business-to-Business eCommerce | | |
| 19 | Business-to-Consumer eCommerce | | |

In this particular case, only a few of the IT requirements are evaluated above, to provide an example.

# IT Solution and Next Steps (Stage 4) – Follow the directions in the Stage 4 Assignment

Now that the Walmart team has identified the business (functional) and IT (technical) requirements, it is time to propose a solution and develop a document of the Next Steps that can be used operationally. Please note that you will research and propose an IT solution as part of Stage 4. That is different from what is shown in this example document where we are simply adding capabilities to a current Point of Sale (POS) system.

## IT Solution and Next Steps

Your assignment is to write a short paper. Below the content of the sections is just outlined to give you an idea of what would be in a paper for this Walmart Example. Your paper should completely explain each area. Your assignment specifies the content and format to be used for your paper.

I. **Introduction**
   A. (Overview of the proposed solution and next steps)
   B. Generic Strategy for Competitive Advantage: Low Cost Strategy.
   C. Business Process to be improved: Item Return Process.
II. **Proposed IT Solution -** No new technology will be needed as the hand held POS that is used for inventory has the necessary capabilities, but three additional units will be required for the Greeters at each store. Programming changes will be required to print the Sales Receipt Number and the Bar Code on the receipt, and to enable the hand held device to access the programs needed for returned items and the algorithm for how the credit is processed. The system is operated at the Walmart Headquarters, and the WiFi needed for this process is currently available in all stores, which are connected by the Internet to Headquarters. The cost of the programming changes would be minor as they would be done by existing programming staff, that currently operate and maintain the system.

III. **Implementation Steps**
   A. Vendor agreement – No new vendor agreements are needed for the expansion of the POS system.
   B. Hardware and Telecommunications – three additional handheld units will be required for the Greeters at each store. WiFi is currently in the stores.

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C. Configuration – Programming changes will be required to print the Sales Receipt Number and the Bar Code on the receipt, and to enable the hand held device to access the programs needed for returned items and the algorithm for how the credit is processed.

D. Testing – When the programming changes are complete, the Walmart headquarters quality assurance section will validate that the system is working correctly; a few Greeters will then test the system.

E. Employee preparation – Greeters and personnel handling returns/restocking will need to be trained.

F. Data Migration – No currently existing data will need to be entered into the system.

G. System use – This WERP capability will be used primarily by Greeters in the stores; if they have questions or problems, their managers will first attempt to answer or correct the problem; additional support will be provided by the headquarters help desk.

H. Maintenance – Will be provided by the programming staff at headquarters.

## IV. Conclusion – In implementing WERP, Walmart can expect that the effort associated with returned items will be reduced and customer satisfaction will also increase. Simplicity in returns should lead to increased sales and profits.

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# References

Balzan, P. (2014).  *Business Driven Information Systems.*  New York, NY: McGraw-Hill Irwin.

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