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## Introduction

The purpose of our study is to determine which notebook would be the best for employees travelling on business trips. As a team we chose four different notebooks and evaluated and compared them in regard to their price, processor, size, weight, and battery life. Our audiences are department managers who are recommending the purchase of these notebooks for their traveling staff. Employees travelling have to make sure that they possess a notebook that is essential for their work; the notebook has to fulfill employees' needs and expectations.



## Overview of the Options and Criteria

For our options on tablets or laptop computers, Stark Industries has decided to choose to use laptops as our primary source of tech for our traveling salesmen and women. We chose laptops due to the fact that they are more compatible than tablets when it comes to issues of hardware connectivity. People have been using laptops and connecting them to external hardware, such as a projector, for many years now. Most people have not had the chance to upgrade their technology to suit the use of tablet devices.

Once the company had reached the decision to use laptops, we needed to figure out which laptop would best suit the needs for our mobile sales people. The company took into consideration a few factors: Price, size, weight, memory and speed, and battery life. The first factor, price, is obviously for the company, whereas the rest are all for our sellers best interests. Price had to be somewhat reasonable since the company is going to be buying in mildly large quantities. The size and weight categories are for the associates comfort needs, the machine cannot be too large and heavy for a seller who is constantly on the move. Memory and speed take into account the processor and its clock speed, which affects the computer's overall speed and performance, the amount of ram available for multiple applications to run smoothly, and the hard drive storage space and disk speed for large amounts of work to be saved and to be written to the disk quickly. Finally battery life is important because our associates never can predict where the next power outlet will be and must be ready for any unexpected work hours.

After hours of research, Stark Industries has found four possible options for our traveling sales associates to use for work in the field:

1. Apple's MacBook Air
2. Apple's MacBook Pro
3. Dell's Inspiron Ultrabook
4. ASUS's N56VJ-WH71 Laptop

We as a company have chosen these four options of machines for further testing and research so that Stark Industries can provide the most efficient and effective sales associates so that the company can prosper and excel in the business world and provide a better future for all.





## **Test Methods**

### ***Battery life test***

#### Method

1. Gather all of the laptops and a timer
2. Make sure the laptops are full charged
3. Turn them on and leave them idle. Start the timer.
4. Check in periodically (every 30mins) or so
5. Record percentage of battery remaining at every checkpoint
6. Record time of laptop if it has shut down.

### ***Processor test***

#### Method

1. Gather information on the laptop's processor brand and speed (in GHz)
2. Compares GHz.

### ***Weight test***

#### Method

1. Gather laptops and a weight scale (either digital or mechanical)
2. Weigh each laptop
3. Record weights and compare



## Test Results

### *11-inch MacBook Air specs*

#### **Price:**

- \$999 / \$1099

#### **Memory and Speed:**

- 1.7GHz dual-core Intel Core i5 (Turbo Boost up to 2.6GHz) with 3MB shared L3 cache
- \$1099 model configurable to dual-core 2.0GHz Intel Core i7 (Turbo Boost up to 3.2GHz) with 4MB shared L3 cache.

#### **Size:**

- Height: 0.11-0.68 inch (0.3-1.7 cm)
- Width: 11.8 inches (30 cm)
- Depth: 7.56 inches (19.2 cm)

#### **Weight:**

- 2.38 pounds

#### **Battery life:**

- Up to 5 hours of battery life unplugged with wireless web us





## ***13-inch Macbook Pro Specs***

### **Price:**

- \$1499

### **Memory and Speed:**

- 2.9GHz dual-core Intel Core i7 processor (Turbo Boost up to 3.6GHz) with 4MB L3 cache

### **Size:**

- Height: 0.95 inch (2.41 cm)
- Width: 12.78 inches (32.5 cm)
- Depth: 8.94 inches (22.7 cm)

### **Weight:**

- 4.5 pounds

### **Battery life:**

- Up to 7 hours of battery life unplugged with wireless web us





## *14-inch Dell Inspiron 14z Ultrabook*

### **Price:**

- \$599.99

### **Memory and Speed:**

- 1.7 GHz Dual Core Intel i5 with 6GB of RAM

### **Size:**

- Height: .081-.083 inch
- Width: 13.66 inches
- Depth: 9.45 inches

### **Weight:**

- 4.12 pounds

### **Battery Life:**

- 6 cell lithium ion
- 8 hours and 57 minutes







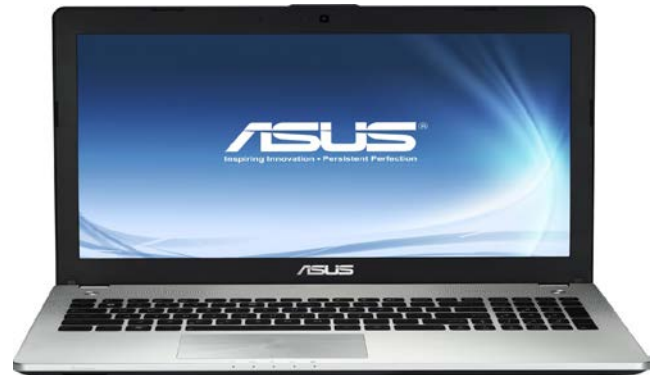
## ***15.6-inch Asus N56VJ-WH71 Laptop***

### **Price:**

- \$699.99

### **Memory and Speed:**

- Intel i7-3630QM (2.4GHz)
- Ram 6GB of DDR3



### **Size:**

- Width: 15in,
- length 10in,
- weight 5lbs,

### **Weight:**

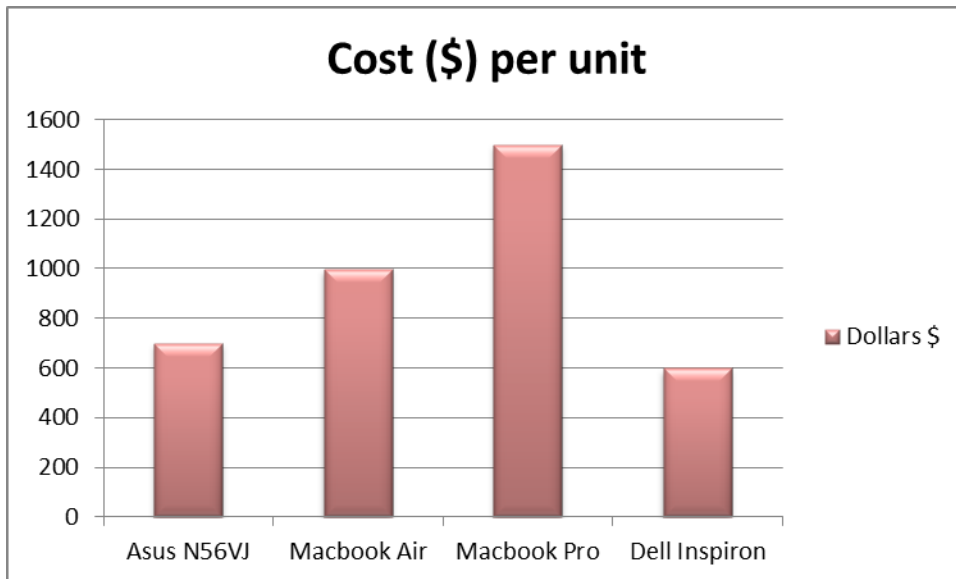
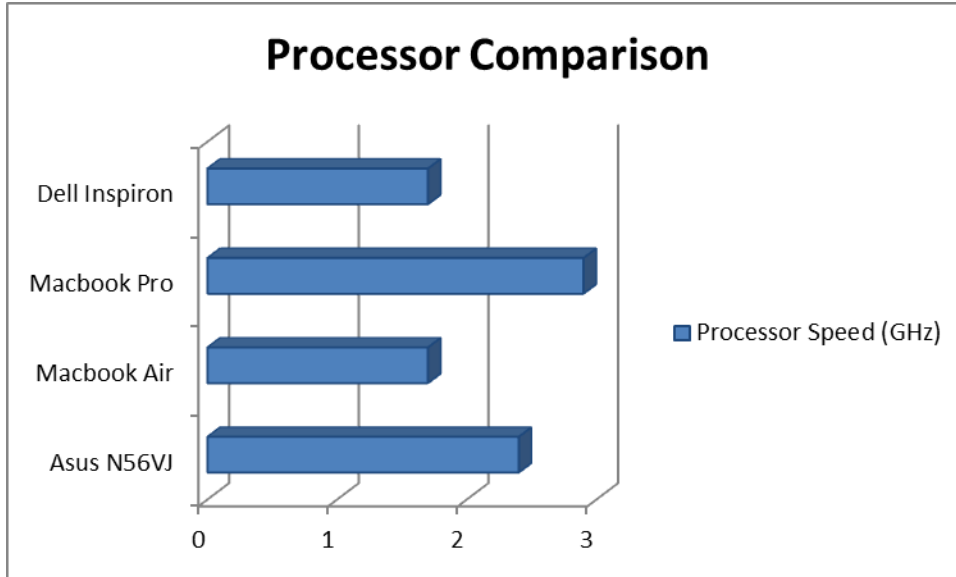
- 5 pounds

### **Battery life:**

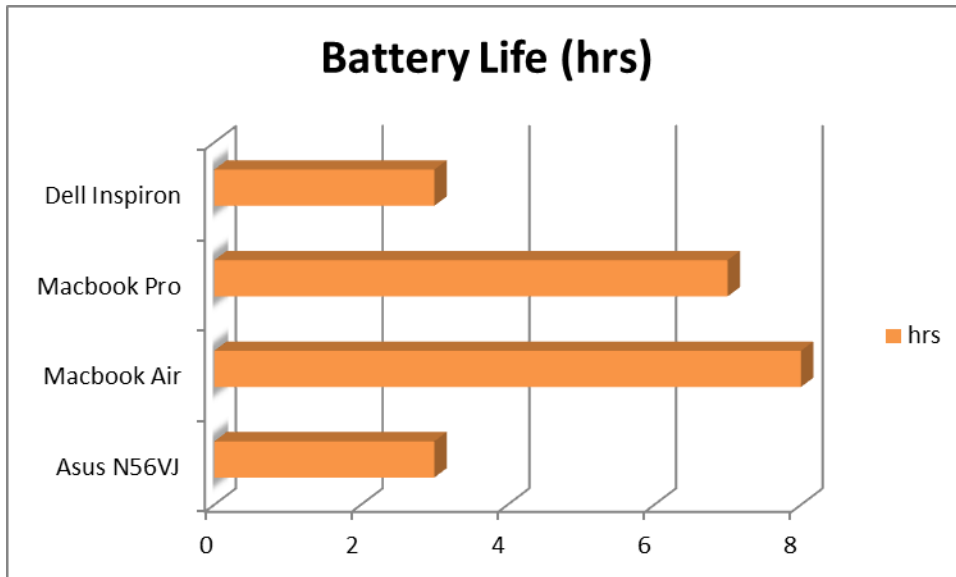
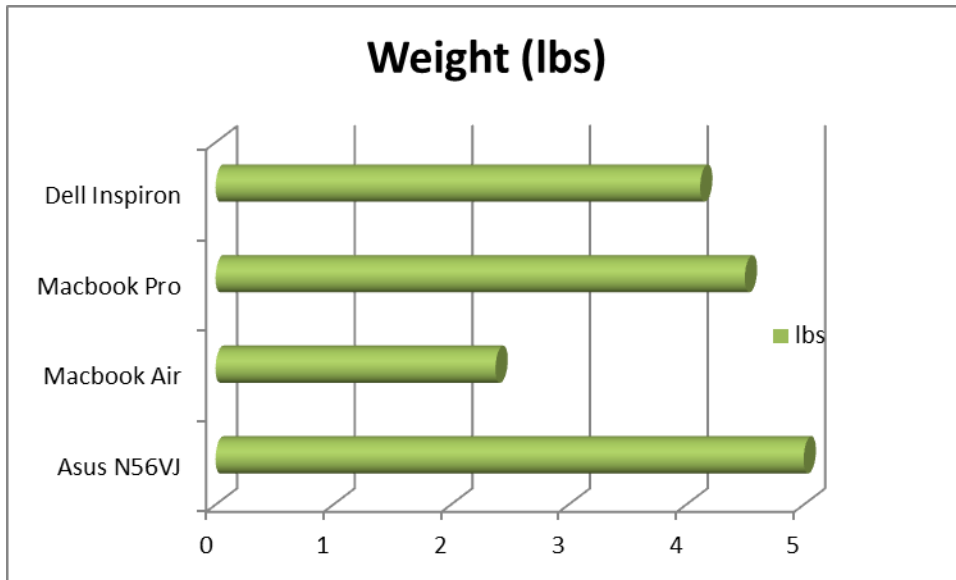
- 6-cell Lithium ion



## Test Results Tables









## Conclusion

Our group decided to use Stark Industries as our company. We specifically focused on the traveling salespeople. Traveling salespeople have four different important parts to a computer: memory and processor speed, size, weight, and battery life. Also our group had to take price into account, as Stark Industries has several traveling salespeople. The cheapest computer is the Dell. The computer with the best memory and processor speed is the Macbook Pro computer. This is important because a fast processor with great memory means that the computers will be able to quickly download something, such as a new weapon schematic, or a buyer's contract. The computer that has the smallest size is the Macbook Air. A small size is important for travel because our traveling salesperson will most likely travel on many airplanes. The airplanes being very cramped would require a small computer for easy transport and usage. The computer with the lightest weight is the Macbook Air. A lightweight easy to carry computer is important to a traveling salesperson because if it was too heavy it would seriously hinder their mobility. The computer with the best battery life is the Dell computer. A long battery life is important because the traveling salesperson will be going to places that might not have places to charge their laptops.





## Recommendation

After further testing and much deliberation between our finance department and sales performance team, Stark Industries has decided to select the ASUS N56VJ as the laptop of choice for our travelling sales associates. The ASUS is the most cost efficient machine out of the four. The MacBook Pro is easily the most powerful machine; however it also has the highest price tag. The ASUS is a fairly cheap machine that doesn't sacrifice too much performance. It has processor speeds second only to the Pro and a high amount of RAM and hard drive space which is needed to fit our associate's needs. Coming in at 5 pounds, it is the heaviest laptop out of the four but to put it into perspective, it is only 1 pound heavier than the Pro and the Dell. The main downside to the ASUS laptop is that its battery life is a little less than favorable coming in at an average life of 3 hours. However, PCs are very versatile and their batteries can be replaced by longer lasting ones that are sold for cheap.

With the selection of the ASUS N56VJ laptop, Stark Industries hopes to bring a stronger and more efficient team of sales associates to the world to provide better customer service, while at the same time, maximizing profits for the company.