**Week 3 Vendor Selection DO ONE**

1. Vender #1 is Siemens and Vender #2 is MacPractice
2. Phone interviews were conducted on the Chief Financial Officer and the Head Nurse of the transplant unit at University Hospital.
* When asked about what attributes were important to them, there was a general consensus on three criteria: Compatibility with existing systems in the practice, Ease of Use, and Cost.
* Criteria ratings of each vendor on a scale of 0 to 100.
* **CFO Ratings**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Compatibility** | **Ease of Use** | **Cost** |
| **Siemens** | 80 | 60 | 50 |
| **MacPractice** | 45 | 75 | 80 |

* **Head Nurse Ratings**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Compatibility** | **Ease of Use** | **Cost** |
| **Siemens** | 75 | 75 | 65 |
| **MacPractice** | 30 | 70 | 90 |

* The CFO feels that the compatibility is the least important, ease of use is 4 times more important than compatibility, and cost is 6 times more important than compatibility. (Compatibility-10, Ease of Use-40, Cost-60)

|  |  |  |
| --- | --- | --- |
|  | **Score** | **Weight** |
| **Compatibility** | 10 | .09 |
| **Ease of Use** | 40 | .36 |
| **Cost** | 60 | .55 |
| **Sum** | 110 | 1 |

* The Head Nurse feels that cost is least important, compatibility is 3 times more important than cost, and ease of use is 5 times more important than cost. (Cost-10, Compatibility-30, Ease of Use-50)

|  |  |  |
| --- | --- | --- |
|  | **Score** | **Weight** |
| **Compatibility** | 10 | .11 |
| **Ease of Use** | 30 | .33 |
| **Cost** | 50 | .56 |
| **Sum** | 90 | 1 |

1. Published Literature and Expert Opinion: Siemens is extremely compatible with a large variety of EMR software, simplifies the complexities of large organizations, and makes healthcare more cost-effective. (Compatibility 90, Ease of Use 85, Cost 85). MacPractice’s compatibility variety is slowing increasing, it is extremely user friendly and training can be completed in 1 to 2 days, high-quality software at a reasonable cost. (Compatibility 50, Ease of Use 90, Cost 75)
2. At the conclusion of the phone interviews the preference of both decision makers appeared to be Siemens. See number 2 above for a table model and description.
3. CFO overall scores: Siemens = 100, MacPractice = 0 Head Nurse overall scores: Siemens = 44, MacPractice = 13.75. Based on these individual scores the recommendation is **Siemens**.
4. Description of the process. See next page.
5. **Vendor Selection:** **Siemens vs. MacPractice**
6. In a group meeting, the one-on-one interview results were presented to the group in the form of a “straw model” with flip charts. I first presented the list of attributes that were mentioned by both decision makers. There was a general consensus on the top three most important attributes between both decision makers. They are marked with asterisks (\*) below:
* Compatibility with other systems already in place\*
* Cost Pricing\*
* Reputation
* Outside access to EHR
* Information Flow
* Authentication features
* Periodic reports capabilities
* System interoperability
* Ease of Use\*
* System location
* Security features

The individual rankings and levels of importance were presented and they were asked to revise the information as a collective group based on vendor performance. Group discussion took place. In the group setting each member was individually asked to write down the relative importance of each criterion. [Which is more important, cost or ease of use? If we assign 10 to the least important attribute, how many times more important is the other? ] I collected the responses, which were very similar and noted them on the flip chart for display. The group was able to come to a consensus on the level of importance of each criterion. However, differences could not be resolved regarding the ratings of each criterion. This issue was mathematically resolved by averaging the estimates from the group members’ ratings. For each attribute the performance of the system is ranked on one level, which represents the ranking for the entire attribute. An overall score is then assigned using the calculation illustrated later in this process. The vendor with the highest score is selected as the best.

1. **Individual Models: Also see Page 1 of this document.**

**CFO Interview Questions and Responses:**

Analyst: I would like to introduce myself, my name is Rashida Brown and I will be interviewing you today as a part of the EHR vendor selection process. Please introduce yourself.

CFO: Jane Doe, CFO at University Hospital.

Analyst: What are some important attributes that you look for in an EHR system?

CFO: Cost Pricing, Reputation, Outside access to EHR, Information Flow, Authentication features, Ease of Use, Compatibility

Analyst: Which three attributes are most important?

CFO: Cost, Ease of Use, Compatibility

Analyst: Which is the least important?

CFO: Compatibility.

Analyst: If I assign a rate of 10 to compatibility, how many more times is important is Ease of Use and how many more times important is Cost?

CFO: 4 and 6 times respectively

Analyst: For the Siemens system, how do you rank on a scale of 0 to 100 the compatibility with existing systems, the ease of its use, and the cost and how do you rank those same attributes for MacPractice system?

CFO: 80, 80, 75 for Siemens and 45, 75, 65 for MacPractice.

Analyst: Thank you very much for your time ma’am. We will see you at the group meeting.

CFO: Thank you.

 **Head Nurse Interview Questions and Responses:**

Analyst: I would like to introduce myself, my name is Rashida Brown and I will be interviewing you today as a part of the EHR vendor selection process. Please introduce yourself.

Head Nurse: John Doe, Head Nurse of the Transplant Unit at University Hospital.

Analyst: What are some important attributes that you look for in an EHR system?

Head Nurse: Authentication features, Periodic reports capabilities, Compatibility with our lab system, System interoperability, Ease of Use, System location, and definitely cost.

Security features

Analyst: Which three attributes are most important?

Head Nurse: Cost, Ease of Use, Compatibility

Analyst: Which is the least important?

Head Nurse: Compatibility.

Analyst: If I assign a rate of 10 to compatibility, how many more times is important is Ease of Use and how many more times important is Cost?

Head Nurse: 3 and 5 times respectively

Analyst: For the Siemens system, how do you rank on a scale of 0 to 100 the compatibility with existing systems, the ease of its use, and the cost and how do you rank those same attributes for MacPractice system?

Head Nurse: 75, 75, 65 for Siemens and 30, 70, 90 for MacPractice.

Analyst: Thank you very much for your time sir. We will see you at the group meeting.

Head Nurse: Thank you very much.

1. Consensus Model

**Compatibility with systems already in place**

* Compatibility with managed care system—Allscripts (Siemens 80, MacPractice 50)
* Compatibility with laboratory and pharmacy systems (Siemens 95, MacPractice 40)

 **Ease of Use**

* Simplicity if navigating through the applications of the system (Siemens 90, MacPractice 85)
* Amount of time needed for training to learn the system (Siemens 85, MacPractice 75)

 **Cost**

* Cost of first year software licenses (Siemens 85, MacPractice 65)
* Yearly maintenance and support costs (Siemens 90, MacPractice 80)
* Cost of productivity loss (Siemens 75, MacPractice 60)
* Cost of incorporating old records into new systems (Siemens 95, MacPractice 80)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Compatibility** | **Ease of Use** | **Cost** |
| **Siemens** | 95 | 90 | 90 |
| **MacPractice** | 40 | 85 | 80 |

**Standardized Rates:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Compatibility** | **Ease of Use** | **Cost** |
| **Siemens** | 100 | 100 | 100 |
| **MacPractice** | 0 | 0 | 0 |

**Standardized Weights of Importance:**

Compa0tibility is lease important—assigned a value of 10

Ease of Use is 3 times more important than compatibility- assigned a value of 30

Cost is 5 times more important than Ease of use---assigned a value of 150

|  |  |  |
| --- | --- | --- |
|  | **Score** | **Weight** |
| **Compatibility** | 10 | 0.05 |
| **Ease of Use** | 30 | 0.16 |
| **Cost** | 150 | 0.79 |
| **Sum** | 190 | 1 |

1. Overall Scores and System Recommendation:

**Equation**: weight for compatibility (rating of Siemens for compatibility)+weight for ease of use (rating of Siemens for ease of use) + weight of cost (rating of Siemens for cost) = overall score for Siemens [this same equation applies to the MacPractice data]

**Siemens**: .05 (100) + .16 (100) + .79(100) = **100**

**MacPractice:** .05 (0) + .16 (0) + .79 (0) = **0**

**Recommendation:** Although such dividing scores as these are not likely in a vendor selection process involving more vendors, the clear recommendation is Siemens!

1. Introspection:
* Comment on value of participatory vendor selection: It facilitates communication, creates consensus, and improves documentation on selecting the BEST vendor of EHR for your organization.
* Comment on value of quantification: Value models help us quantify decision makers’ preferences and to associate this the highest value with the chosen system.
* Comment on value of conducting interviews before the general meeting: They model the preferences of each individual participant. It introduces them to the process, the attributes that will be used, and the associated scoring system.

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |