

**Jane Holmes Residence – Final Consulting Report**  
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Community Partner, Marie Timpano

## **ABOUT THE ORGANIZATION**

### **Organization**

#### **Mission**

*Jane Holmes Residence is a gracious, historic home where compassionate professionals foster independence and provide personal care for seniors.*

Jane Holmes Residence is a private, non-profit, assisted living facility located at 441 Swissvale Avenue, in Pittsburgh, PA. Their mission, as stated above is achieved through several goals: *providing a safe, clean environment; ensuring privacy; addressing each resident's needs individually; maintaining ties with families and the outside world.*

### **Staff**

The total staff of Jane JHR is about 30 people. The staff encompasses a diversity of positions from senior maintenance, administrative assistants, receptionists and housekeepers, to the kitchen staff, the nursing staff, the Activities Coordinator, and other upper management positions: Carole Tokosh in the Resident Care Manager position, Chuck Kirby as the Business Manager, and finally Marie Timpano as the Executive Director. The Board of Managers oversees the overall operation of the residence. This Board makes the main policy decisions that guide the residence down specific paths in their care.

Most staff members that use or make use computers while performing their jobs are familiar with basic office applications and computer tasks, such as sending email; such people are: Marie Timpano, Carole Tokosh, Chuck Kirby, Roslyn Bryant, the Activities Coordinator and the receptionist.

### **Technical Environment**

JHR has reasonable computing facilities and some knowledge of how to use them. Presently, they have 6 unnetworked computers with various versions of Windows, one computer with a DSL connection to the internet, and none connected to their directly networkable copier/printer. Some computers do have personal printers attached to them and such printers are in use. Excluding the computer that is connected to their DSL line, and one other with dial-up internet access, all other computers are only used for Microsoft Word, Microsoft Excel, Microsoft Access, Microsoft Publisher and Quicken QuickBooks; the computer on the DSL line and the one with dial-up access are also used for internet browsing and for personal and organizational email checking. The organization does not currently provide personal email to any of its staff members, and its email address is from a web email provider, icubed.com. Likewise, JHR does not have a website. No computers have wireless network cards installed, which is a requirement of the first consulting task.

The technical environment of JHR is basic and with currently available funds, they are ready to upgrade.

## **Technology Management**

One staff member, Roslyn Bryant, who is attending college part-time for IT training, is unofficially responsible for IT and technical concerns of Jane Holmes Residence. Thus, that is not her official position, though she is their advisor for most technical issues. No formal methods are used for problem solving or logging and matters seem to be handled on a case-to-case basis. As Roslyn is mostly an advisor to them for these matters, she has recommended that they hire contractors/consultants for certain issues that she could not handle by herself. Previous to Roslyn being looked to for technical advice, matters were occasionally handled by the Business Manager, Chuck Kirby. Chuck, while also not officially responsible for anything technical, would give general IT advice, and also helped to build a database.

## **Internal & External Communications**

Files are shared internally through methods such as floppy diskettes and CD-RWs. In addition, few measures are in place to secure or protect data on these diskettes, on CD-ROMs and on personal computers.

JHR does not currently have a website. They feel there is a strong need for one, and plan on getting one soon. And, though they have an organization-wide email address, only the ED uses it for the formal distribution of information; Roslyn and Marie respond to email that comes into this account.

## **Information Management**

JHR currently keeps track of almost all of its information in an Excel spreadsheet on a not-networked computer. This information includes records on residents, residents' family and friends, residents' doctors, staff members, staff members' family and friends, board members, donors, funders, etc. This information is constantly being updated and referenced. Attempts have been made to convert this to an Access database, with input and output forms, but no successful conversion has been made thus far. As for the use of this information, various people share the responsibility of updating, viewing and extracting from it. Such people include the Board, the Executive Director, and Administrative Assistants.

## **CONSULTING TASK: INTERNAL AND EXTERNAL COMMUNICATION**

### **Description of Problem**

Jane Holmes Residence relies on marketing as a means of making service offerings known to those in need. Constantly, they must be presenting their organization well to the surrounding community. However, in order for the community to see such promotions, the promotions must reach their intended audience. JHR has not kept up with the pace of technology in terms of external communications. Within several years, effectively using technology for communication will not just be crucial, but it will be absolutely necessary. Without such channels adequately presenting their organization, many people seeking care for themselves or their loved ones, will not learn of JHR, nor will they realize the level of personal care provided.

As two of the currently standard technical means of communication are email and the web, Jane Holmes Residence can use these areas to enhance their communication. As their email abilities are very limited

and their web presence is nonexistent, moving in these directions will significantly improve their overall communications.

### **The Problem, as Related to the Mission**

The JHR mission is achieved through several goals mentioned above: providing a safe, clean environment; ensuring privacy; addressing each resident's needs individually; maintaining ties with families and the outside world. Internal and External Communication relate directly to *maintaining ties with families and the outside world*. By using slower, less salient communication methods, maintaining such ties is more difficult and rarely achieved in its fullest.

### **Description of Task**

First, relevant staff members (decided by the CP) will be given Internet access from their personal computers. Then, the internet domain "janeholmesresidence.org" will be purchased, email accounts for the relevant staff will be created on this domain, and the residence will be prepared for having an external consultant create a website at this domain. A main email address for JHR will be created and its responsibilities will be assigned to a staff role.

### **Approach**

- The student consultant and some staff will price the hardware required to install a wireless network in the building.
- After the CP has approved this, some staff and the student consultant will wirelessly network relevant computers by installing a wireless-access-point/DSL-router, as well as wireless PCI cards in the computers.  
Once networked, the student consultant and staff will configure the computers for internet access through the existing DSL connection, via the wireless-access-point/DSL-router; the CP will subsequently cancel the dial-up account.
- With the assistance of the student consultant, the CP will purchase janeholmesresidence.org. Meanwhile, the student consultant and staff will consider web/email hosting plans and purchase the best option for JHR. After the plan has been purchased, the CP, staff and student consultant will create and configure an email account for the organization as well as accounts for relevant staff members; the responsibility of the Jane Holmes main email account will be given to some staff role.
- In parallel to these activities, the CP will contact a known listings website in order to get their information presented there. The student consultant and CP will work together to propose the website that will be developed by an external consultant at a later date. This proposal will include all necessary information for hosting the website on the web-hosting plan that will be purchased.
- Finally, the terms of the email/hosting plan will be documented by the student consultant for the CP's records; such terms include the provider's contact information, plan details such as backup frequency, and details of the plan's usage (e.g., FTP access and email setup). In addition, the student consultant will produce documentation for setup and troubleshooting of the network.

## Task Impacts

- **Organization:** Jane Holmes Residence will have a professional email appearance; Jane Holmes Residence will have a consistent, professional voice through their main email address; Jane Holmes Residence will have a professional venue for presenting information on their care to the Internet community
- **Staff:** Some staff members will now have internet access. They will need to learn to use this effectively as part of their job, rather than as a novelty or personal activity. Additionally, one staff member will be responsible for the main JHR email account, and so their position will change somewhat.
- **Technical Environment:** The networking of computers will put JHR at a new level technically. This is a major advancement over individual, not networked computers. Support of these PCs and other network components will be addressed later in a recommendation.
- **Internal and External Communications:** This task directly improves this area. JHR will be able to professionally distribute information externally. Internally, the staff will be able to communicate more efficiently, and will be better organized in terms of communication.

## CONSULTING TASK: CONTACT MANAGEMENT

### Description of Task

To better manage contact information, the existing method will need to be updated and organized. Currently, such information is stored in an Excel spreadsheet on one not-networked computer. Once this format is updated and organized, it will be stored at a central location on the network (assuming a successful completion of the previous consulting task). Moreover, methods will be established to ensure consistent input and output of relevant information.

### The Problem, as Related to the Mission

An intrinsic part of the Jane Holmes Residence's mission is maintaining accurate, consistent information on people related to their organization. Ideally, information on residents, staff, the board of managers, donors and a number of people that are related to the categories aforementioned, would be stored in such a way that not only could this information be easily retrieved and entered, but also that various outputs could be quickly generated with it.

### Approach

- The student consultant will work with the CP to understand and reorganize this information into an Access database, built with some staff.
- To facilitate ease of editing and viewing the database, and to ensure consistent input and output, Access forms and reports will be created by the student consultant and some staff.
- Once complete, this database will be placed at a central location where people go to update it; this central location (i.e., network share drive) relies on a successful network implementation from the first task.
- Finally, a recommendation will be made to make it someone's responsibility to manage/administer this database.

## Task Impacts

- **Organization:** All operations based on such data, as well as presentation of such data will be more easily performed and will be more accurate.
- **Staff:** CP and staff will gain greater understanding of the workings and potential of Microsoft Access; The notion of restricted file sharing will be understood by the CP and related staff; The database may become a staff member's responsibility; JHR will have more up-to-date contact information.
- **Information Management:** The sole purpose of this database is to effectively manage their information management. Thus, it will reengineer their processes.

## ANALYSIS OF OUTCOMES

**Work Task One:** Improved Internal and External Communication through giving staff internet access, organization email addresses and placing a temporary website on-line.

### Overview

The Jane Holmes Residence relies on marketing as a means of making service offerings known to those in need. Constantly, they must be presenting their organization well to the surrounding community. Their former situation included limited web access for staff in need, no formal (i.e. @janeholmesresidence.org) email address, and no web presence. The consultant worked with the CP, the President and staff to implement individual solutions to each problem. First, the janeholmesresidence internet domain was purchased. Then, a network was installed to give certain staff members internet access through the legacy DSL connection. To complement this, these staff members were given the formal (i.e. @janeholmesresidence.org) email addresses, and had their PCs set up to use the accounts. These email addresses are maintained by a provider under the web-hosting plan that was purchased in Outcome Two, which was to place a temporary website on-line. This site is intended to be a temporary marketing tool, as well as resource for the distribution of relevant email contact information to the public.

### Outcome One: Computer Network

The SC and staff worked together to research, purchase and install a CAT5-wired/wireless network in Jane Holmes Residence. The staff had their PCs connected to this network to share files more easily, as well as to gain internet access through JHR's DSL connection (Appendix A). Now, the new database (Work Task Two) as well as other files are being accessed from a central location by several staff members. Communication has already picked up as the ED, Business Manager, President and others have begun using their email accounts daily for internal and external correspondence. Finally, the Internet connection is being freely utilized by all who are connected as they now have it as a new tool for their positions.

- **In Contrast:** Before this network, no computers within JHR were networked. Files were shared via floppy disks and CD-RWs. Two computers were connected to the internet: one through the still active DSL connection and the other through a dial-up account. Since the installation, the dial-up account has been cancelled to save JHR the monthly fee.
- **Sustainability:** Without support, there is the imminent risk that this network could go down or that certain nodes could lose connectivity. JHR currently has a staff member who is able to

provide support, and so long as she remains at the organization, the network will certainly be sustainable. She actively participated in all phases of the network's installation, along with the Student Consultant. Her skills are exemplified by her part in the installation and troubleshooting of: the firewall/hub/wireless-router, wireless network interface cards, CAT5 cabling and Microsoft Windows. A recommendation will later be made in regards to the possible event of her absence.

- **Expanded Capacity:** Expanding the capacity of JHR through this network depends on how it is used. In Outcome Two, specific uses of this network are described in order to specify how Outcome One and Outcome Two together expand the capacity of JHR.

### **Outcome Two: Internet Domain / Email / Web Hosting**

The SC, President and staff worked together to purchase the internet domain [janeholmesresidence.org](http://janeholmesresidence.org). To use this, they then researched and purchased a web/email hosting plan with [4dwebhosting.com](http://4dwebhosting.com). Email accounts were setup and configured for staff and the organization in general. A temporary website was placed the internet domain [janeholmesresidence.org](http://janeholmesresidence.org), likewise at [www.janeholmesresidence.org](http://www.janeholmesresidence.org), to promote some general information and the new formal email contacts.

- **In Contrast:** JHR had solely been using the email account through their dial-up provider, [janeholm@icubed.com](mailto:janeholm@icubed.com); it was decided to cancel that dial-up account, along with the email address, as the cost was extraneous (along with the DSL account) and the email address wasn't widely promoted enough to justify keeping. Also, prior to the temporary website, JHR had no web presence.
- **Sustainability:** As for the web domain, it was setup to be annually renewed automatically, so the domain will never become unregistered; it is perfectly sustainable. Similarly, the email/web-hosting plan is simply billed monthly to JHR, and so it will not be canceled due to contract expiration. However, email accounts as well as the website could easily be lost, damaged or disabled if naïve users attempt to manage them. With Roslyn Bryant on staff, as in the situation of Outcome One, such problems are avoided. A recommendation will later be made in regards to the possible event of her absence.
- **Expanded Capacity:** As a major use of the network established in Outcome One, the staff now use their email addresses to more easily contact each other, future residents and their families, other non-profit organizations related to and not-related to personal care, granters, etc., in a timely, professional manner. In fact, when their email/web-hosting provider had a brief, unprecedented outage, the staff immediately had concerns, as they were unable to access their email, which had quickly become relied upon; this service issue is not a major concern. Moreover, the website, once extended, will serve as a valuable marketing tool, thus spreading the message of their care to more people.
- **Unobserved Outcomes:** The only unobserved outcome was that of a full website. This component was unreachable within the time of the semester, and will become part of a recommendation for the future.

### **Recommendation One: Web Consultant**

It is recommended that Jane Holmes Residence hires a web consultant to professionally build a website for the organization. As its timely completion is a big factor in the expanded capacity of JHR through this entire work task, a consultant, rather than internal resources, is the best option for such quick, high quality work. With a professional, up-to-date website, JHR can reach more people with their care.

Using the diagram provided by student consultant (Appendix B), a web consultant could quickly build a site at the level that JHR needs.

Moreover, as the student consultant has stated the most efficient process by which the organization should be able to update the site in the future (Appendix C), the consultant will easily be able to develop the site for such concerns.

### **Recommendation Two:** Technical Support Staff

Based on the expanded technical capacity of this work task, the student consultant recommends that Jane Holmes Residence choose some formal technical support. This recommendation is made to achieve sustainability of the two outcomes in this work task, as well as to assist JHR when expanding further.

#### *Job Description: Responsibilities*

- Regular support, maintenance and administration of the 6 current computers as well as future additions – Specifically, this includes supporting software such as Microsoft Windows, Microsoft Office, Microsoft Outlook Express, installation of hardware, and supporting the PCs’ wired and wireless network connections
- Installation of future machines – Specifically, this includes installing and configuring the previously mentioned software as well as the proper network interface card for JHR’s email and network specifications.
- Managing and administering the network – This includes supporting the firewall/hub/wireless-router.
- Maintaining and administering the email system – This includes working with the service provider’s web interface for the system to add/edit/remove accounts as needed.
- Maintaining the website – This includes making any needed updates to the JHR website, as they are deemed necessary. Specifically, this will include HTML development and possibly graphic design.

#### *Job Description: Background, Skillset, Education*

- Background: A qualified candidate will have 3+ years of computing experience in a Microsoft Windows environment and possibly 1+ years of desktop support experience. Additionally, the candidate must be friendly, considerate and highly reliable.
- Skillset: It is imperative that this person is skilled in the previously mentioned technologies (e.g., Microsoft Windows, Office, Outlook Express) as well as general software/hardware troubleshooting. Strong internet experience, html knowledge and personal maturity are also necessary.
- Education: Candidates’ non-computer-related education should not be a primary factor. Any candidate with a High School diploma or in pursuit of one is qualified for this position.

#### *Staffing Suggestions*

Provided are two plausible options that will provide JHR with a satisfactory level of support to achieve sustainability.

1. **Full-time Staff Member:** JHR could make this IT support position a full-time role in conjunction with another position, such as administrative assistance. Such a role would be a full-time position

that would support the desktop computers, the network, email accounts, the website, file sharing, the database and other related concerns. This position could also assist with other roles, such as administrative assistant in the event of no IT problems or actions being necessary.

2. **Part-time High School / College Student:** Contrasted to the full-time IT role, a part-time student mature enough and capable enough to support the IT concerns of JHR might be more practical and cost effective. This role could be for varying intervals of working hours, as the residence sees fit. Students also are willing to work for lower wages than full-time staff, as there are other benefits, which entice their talent. High school students are commonly seeking community service as this is a nice perk on college applications. College students are always seeking experience, and so a lower wage than that of a professional would still recruit their talent.

**Work Task Two:** Improved Contact Management by constructing a database with input and output capabilities.

### Overview

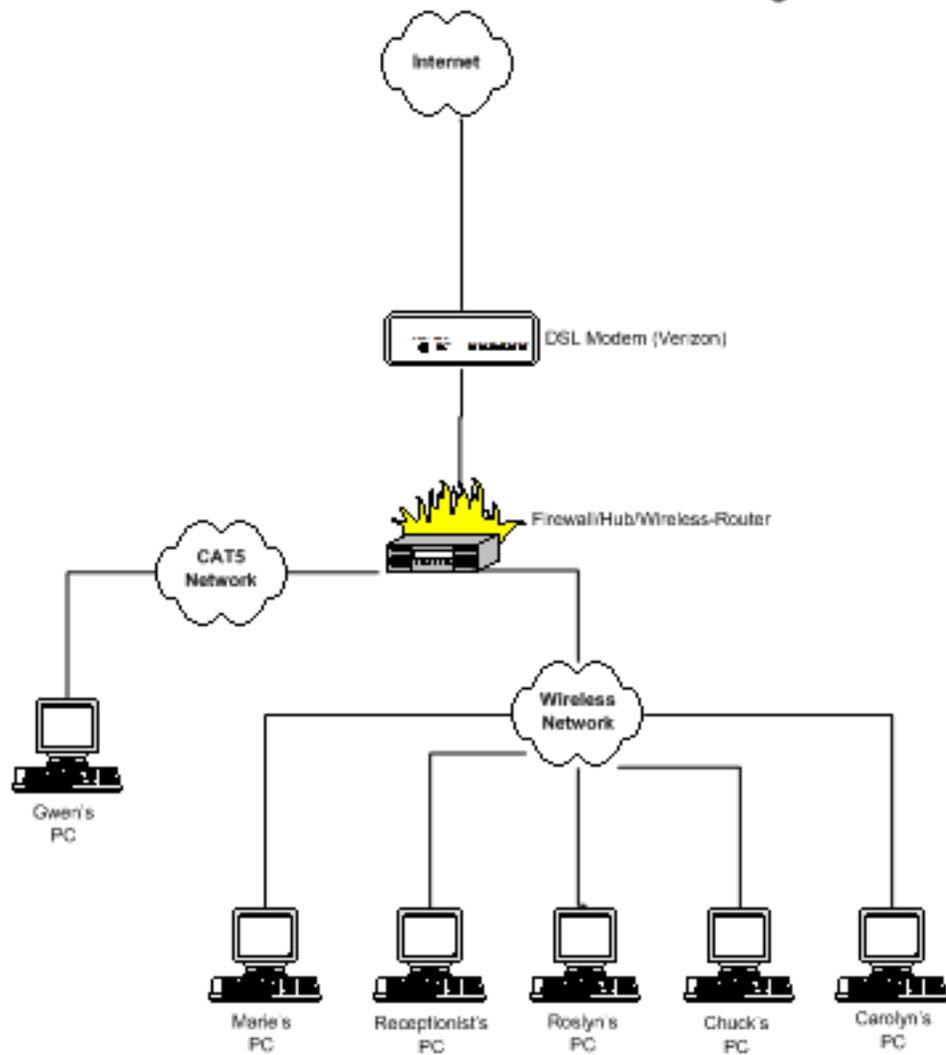
To better manage contact information and to ensure its integrity, a contact management database was built by the student consultant, President and staff. This database is replacing a Microsoft Excel spreadsheet that was the root of much disorganization, many errors, and logistical problems with the data. To expand upon the idea of data storage, and to ensure clean, consistent inputs and outputs from this database, input forms were created, and output reports were developed.

### Outcome One: Contact Management Database

A contact management database was built by the student consultant, President and staff. This was an iterative process which involved the SC meeting with stakeholders, the SC creating data-model diagrams, and these diagrams being reviewed by the mentioned stakeholders. After such planning, the SC, with help from the President and staff, created the database. This database replaces a Microsoft Excel spreadsheet that was the root of much disorganization, many errors, and logistical problems with the data. With input forms and output reports, this database allows JHR to store data on any associated person (e.g., residents, family/friends, employees, board members, donors, donations, etc.) as well as to generate reports on these data (e.g., mailing labels, weekly census, etc.)

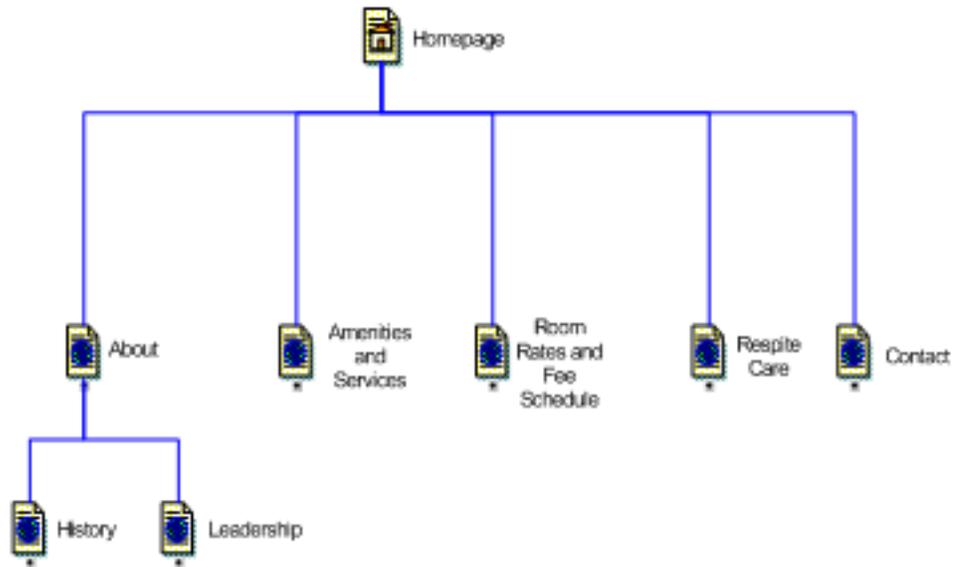
- **In Contrast:** As was aforementioned, the former process was centered around a Microsoft Excel spreadsheet. As this document resided on one computer, accessing it and updating it was not an easy task for all who needed to. As a result, multiple asynchronous copies would exist, and integrity issues quickly arose.
- **Sustainability:** An additional reason for building input forms and output reports was so that users would not need to ever use the database's tables. These tables, which are its core, are linked by a complex set of relations, which would be unusable by a novice user. Thus, the input/output capabilities solve this issue. Secondly, the issue of maintaining and enhancing the database could arise. While some staff members have data entry experience, only staff knowledgeable in relational databases could handle this. To ensure such skills, it is recommended that only Technical Support Staff (Work Task One, Recommendation Two: Technical Support Staff) maintain and enhance the database.
- **Expanded Capacity:** To provide the highest-level personal care, JHR must have very accurate and up-to-date information. This database promotes these attributes in the data, and thus supports the mission.

## Jane Holmes Residence: Network Diagram



Appendix B

**Jane Holmes Residence: Conceptual Website**



## Jane Holmes Residence: Conceptual Web Update Process

