

Technology Consulting in the Community

Spring 2015

Mai Aye
CISV Pittsburgh

Final Consulting Report

Carnegie Mellon University Pittsburgh, Pennsylvania www.cmu.edu/tcinc



CISV Pittsburgh Executive Summary

Student Consultant, Mai Aye Community Partner, Jennifer Burns

I. About the Organization

The Children International Children International Summer Village (CISV) is an independent non-profit organization that operates at the international, national, and local levels and consists of a network of volunteers. CISV Pittsburgh is one of the twenty-two chapters of CISV USA and is exclusively run by volunteers. CISV Pittsburgh's mission is as follows:

[To create] opportunities for people of all ages to experience the excitement and enrichment of cultural diversity through our educational programs. We are founded on our belief that peace is possible through friendship - and that the real difference can be made by starting with children.

In order to enable all board members and volunteers to focus on short-term and long-term activities and planning that support its mission, CISV Pittsburgh sought to implement a comprehensive and integrated information system that will streamline the day-to-day operations of the organization. Such information system consists of an interoperable customer relationship management system (CRM) that manages all of the organization's data from its three business applications: the website, accounting software (QuickBooks), and electronic communication platform (Constant Contact).

Because CISV Pittsburgh's data currently comes from disparate sources, such as Excel spreadsheets, paper forms, and its three business applications, deploying an interoperable customer relationship management platform was the scope of work for this consulting project.

II. Improving Management of Constituent Data *And* Enabling Data-Driven Strategic Planning and Decision-Makings

Salesforce Non-Profit Starter Pack (Salesforce NSP), an interoperable and customizable CRM system, was deployed and customized during this consulting period. Such deployment consisted of the following two projects:

- 1. Salesforce NSP's data model and front-end layouts were customized and tested weekly during this consulting engagement in order provide CISV Pittsburgh with the capability to manage its data in one centralized platform; and
- 2. Three reporting templates and their respective dashboards were created in order to provide CISV Pittsburgh with the analytical functions and insights on its constituent data.

A centralized platform to manage all data and the respective reporting and dashboard features are crucial in enabling CISV Pittsburgh to leverage data and analytics in order to better meet its mission as described in the following section regarding outcomes of the aforementioned projects.

III. Outcomes

Salesforce NSP's data model and front-end layouts were customized and tested weekly during this consulting period. Eight additional tables with more than fifty fields had been added to the Salesforce NSP's data model, and the default tables had also been customized with additional fields. Furthermore, three reporting templates and their respective dashboards were created. These outcomes enabled CISV Pittsburgh to have the capability to manage its data in one centralized platform and provide the organization with the analytical functions and insights on its constituent data. Improved data management, coupled with analytical/reporting functions that enable users to glean insights from the data, increased CISV Pittsburgh's capacities to leverage data and analytics in order automate business processes and better engage its constituents and current and prospective donors. Efficient business processes and better engagement with its constituents will enable the organization to acquire more resources in the forms of time saved and money saved and/or raised. More resources available will allow CISV Pittsburgh to improve and grow their international and diversity programs and hence amplify their mission to promote intercultural friendships and diversity. However, because Salesforce NSP requires training and CISV Pittsburgh has a high-turnover of short-term volunteers, it is recommended that the community partner trains the board members who are long-term volunteers in order ensure Salesforce NSP's sustainability.

IV. Recommendations

The community partner should train all current and existing board members on the usage of Salesforce NSP. Because the CISV Pittsburgh has a high turn-over of short-term volunteers and the community partner did not find Salesforce NSP user-friendly, training all current and existing board members will provide more man-power in familiarizing new volunteers with Salesforce NSP and foster effective knowledge management of the platform itself.

When the board members gain familiarity with Salesforce NSP and Salesforce NSP becomes part of CISV Pittsburgh's culture, CISV Pittsburgh should then create web forms in which their constituents could enter data and integrate their data with those in Salesforce NSP. This integration will provide cross-marketing/fundraising opportunities through additional web content on the forms and reduce volunteers' data entry and form processing time altogether. Having more resources available in the forms of time and money saved will enable the volunteers to focus more on the organization's long-term growth.

Furthermore, it is also recommended that CISV Pittsburgh integrate the data from their most commonly-used business applications (QuickBooks and Constant Contacts) with those in Salesforce NSP in order to further reduce volunteers' data entry time and automate and/or enhance the ways the organization the communicates with its constituents. Having more resources available in the forms of time and money saved as a result of automated and efficient processes will enable the volunteers to focus more on the organization long-term growth.

Community Partner

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About the Consultant

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She will be interning at Chegg Inc. this summer in
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I. About the Organization

Organization

The Children International Summer Village (CISV) is an independent non-profit organization that operates at the international, national, and local levels and consists of a network of volunteers. CISV Pittsburgh is one of the twenty-two chapters of CISV USA and is exclusively run by volunteers. CISV Pittsburgh's mission is as follows:

[To create] opportunities for people of all ages to experience the excitement and enrichment of cultural diversity through our educational programs. We are founded on our belief that peace is possible through friendship - and that the real difference can be made by starting with children.

CISV Pittsburgh seeks to accomplish its mission through multicultural camps and international exchange programs for youth between ages eleven to eighteen. CISV Pittsburgh is a grass-root organization with a small budget; most of its funding comes from fundraising events, volunteers, and small businesses and non-profits. The organization is currently seeking to expand its capacities by applying for grants from larger donors, such as Fortune 500 corporations.

Facilities

CISV Pittsburgh does not have an office; all meetings are conducted at coffee shops or the board members' homes.

Programs

Since its inception in 1989, CISV Pittsburgh has been providing multicultural camps and international exchange programs to a total of approximately 500 youth ages eleven to eighteen in order to promote peace, cultural diversity, and friendship. Board members, volunteers, and the youth participants of the programs each use their own laptops and other mobile devices regularly.

Staff

CISV Pittsburgh currently has approximately six board members who are responsible for strategic planning. They have also been managing the day-to-day operations of the organization, such as budgeting and website maintenance, for the past years. Volunteers are mostly parents of the youth participants and alumni of CISV Pittsburgh's programs. These volunteers are also involved in the

day-to-day operations of the organization, such as chaperoning the youth participants and building the website. Because the organization has a high turnover of volunteers, the board members are the stakeholders who will be impacted the most. Because each individual in the organization relies on his or her laptop or mobile device for work, not all of the board members and volunteers have access to business office applications and also are not aware of how to utilize open-sourced tools available.

Technology Infrastructure

The board members use their own laptops either with Windows operating system or Macintosh operating system. However, CISV Pittsburgh's problems are not related to its technology infrastructure. In fact, they are related more to the applications of open-sourced tools and/or lack of such tools thereof in order to automate and improve processes.

Technical Management

All board members of the organization are involved in technology management based on their capabilities and the resources available to each of them from their own personal devices. For example, the President is an accountant and hence manages an accounting software called QuickBooks for the organization. The other two board members who are consultants manage an Excel spreadsheet containing data on donors and other constituents. Another board member who is proficient in HTML and some programming manages the website and update the content. The organization currently has no IT support team, as the board members and the volunteers each rely on the resources from their own personal devices.

Technology Planning

All board members are involved in technology planning. Technical issues are raised during meetings, and possible resolutions to address them are discussed. The organization started its strategic plan to integrate its database, website, and electronic communications platforms to automate and improve processes starting last year.

Internal and External Communication

Each board member and volunteer use their own computers to send files via email. Liability forms from youth participants and adult chaperones are often submitted via email and mobile devices or by hand. The organization interacts with its donors and other constituents through an electronic newsletter platform called "Constant Contact", individual emails, personal meetings, and telephone.

Information Management

Information is feed and managed by various sources and applications. The contact information and other data on the organization's donors and other constituents are downloaded from Constant Contact to the Excel spreadsheet or are manually entered into the same spreadsheet that is located in a board member's laptop. Board members also manage, share, and edit Google spreadsheets consisting of data on the youth's participations in CISV's programs. The data on donors in the Excel spreadsheet is not comprehensive, because QuickBooks also has new and redundant data on the same donors. In addition, the data on other constituents, such as students and alumni, in the Excel spreadsheet is not comprehensive, because Constant Contact and the paper forms stored in the basement of the President's home also carry new and redundant data on these constituents. Because information is coming from disparate sources that are often exclusively accessed by different board

members, issues stemming from the redundancy, integrity, and availability of data obstruct the organization from its goals to automate and improve processes. For example:

- 1. Providing data on student demographics has been time-consuming and difficult when applying for grants from larger donors, because such data is spread out among multiple sources, such as the Excel spreadsheet, Constant Contact, and paper forms.
- 2. Retrieving contact information on students with split or multiple families and alumni for fund-raising events has been error-prone, because there is no relational database in place to track such individuals.

Business Systems

QuickBooks currently serves as the accounting software for the organization. If data on donors and other constituents were transferred to a customer relation management (CRM) platform, QuickBooks could be integrated into such platform in order to promote the fluidity and unity of the data on donors. Furthermore, Constant Contact serves as a tool for CISV Pittsburgh to send electronic newsletters to its constituents. The fluidity and unity of the data on constituents will also be ensured if such data is being synced with those in Constant Contacts.

II. Improving Management of Constituent Data

Motivation

Data on the demographics of CISV Pittsburgh's constituents, such as program participants, donors, board members, and volunteers, currently come from multiple Excel spreadsheets on board members' individual laptops and paper boxes in their homes. When applying for grants, conducting outreach or fundraising campaigns, and planning for fundraising events, being able to quickly retrieve demographics data is crucial for CISV Pittsburgh's long-term growth. Such long-term growth entails raising more funds and increasing the number of program participants and its brand awareness. By having more funds to send more youth participants to diversity camps and international exchange programs and hence an increased brand awareness and the number of program participants, CISV Pittsburgh will have more capacity to meet its mission of fostering global friendships and peace. Therefore, the first project of this consulting engagement entailed deploying a robust platform that manages constituent data. Such deployment of the platform involved 1) customizing the default objects ("tables") in the data model as well adding additional tables based on the organization's needs and 2) customizing default front-end lay-outs as well as adding new ones to enable the users to enter, modify, and view the data.

Salesforce Non-Profit Starter Pack (Salesforce NSP) customer relationship management system is free for non-profit organizations and customizable. It could also be integrated with other applications, such as QuickBooks and Constant Contacts. Multiple users could log into the Salesforce NSP platform and use it without compromising the integrity of the data. Salesforce NSP was implemented and customized. The data Salesforce NSP encompass information on program participants' and volunteers' demographics, such as household, contact information, travel history, chapter and program participation history, and age. The data model for Salesforce NSP was designed and customized via weekly in-person requirement gatherings,

which consisted of getting the community partner feedbacks as she used Salesforce NSP's interface and improving the data model and features based on such feedbacks.

Outcomes

- 1. Customization of Salesforce NSP's Data Model and Front-End Layouts: Eight additional tables with more than fifty fields had been added to Salesforce NSP's data model based on the community partner's requirements and feedbacks. Furthermore, the front-end layouts, the front-end aspects of these tables and fields that enable the users to view, modify, and enter data, were tested by the community partner through weekly data entry. Modifications to both Salesforce NSP's data model and front-end lay-outs were then made weekly based on the community partners' continuous feedbacks.
- 2. *Before:* Before the deployment of Salesforce NSP, CISV Pittsburgh faced the following issues:
 - i. Multiple board members could not perform data entry at their convenience, because the spreadsheets containing constituents data are all located in different board members' laptops; and
 - ii. When entering data on constituents, the community partner had to navigate through multiple spreadsheets which proved to be error-prone, time-consuming, and laborious.
- 3. *After:* Because Salesforce NSP was implemented and continuously customized throughout this consulting engagement, CISV Pittsburgh experienced the following outcomes:
 - i. The organization now has the a scalable and centralized CRM system to enable its board members and volunteers to view, enter, and modify constituent data at the same time without compromising the integrity of the data;
 - ii. Instead of navigating through multiple spreadsheets that apparently do not provide data synchronization, the community partner could now seamlessly and quickly move from one table in the front-end lay-outs of Salesforce NSP to another as she enters and updates data in multiple tables through the "related list" features;
 - iii. The community partner, who tested Salesforce NSP through data entry, did not find the interface user-friendly;
 - iv. Although the community partner did not find Salesforce NSP's interface userfriendly, she now has over eighteen hours of first-hand experience with data entry on NSP;
 - v. The community partner also indicated that she will gather group of volunteers and board members, register them into Salesforce NSP, train them how to use the CRM, and have them enter more data this coming summer;
 - vi. The community partner has been always expressed continuous desire and willingness to learn Salesforce NSP;

- vii. The community partner attended a Salesforce training session for non-profits on April 20 and plans to attend more sessions in the future;
- viii. CISV USA, the national chapter of CISV had expressed strong interest in adopting CISV Pittsburgh's Salesforce NSP's data model for their Salesforce consultant to work from; and
- ix. CISV USA had also requested the community partner to make a presentation of CISV Pittsburgh's use of Salesforce NSP and conduct a training session for its volunteers during the upcoming CISV national conference in October.
- 4. Sustainability: The outcome described in section ii of number three poses as a risk to Salesforce NSP's sustainability, because Salesforce NSP might not be used by CISV Pittsburgh's volunteers and hence not be part of the organization's culture if the stakeholders, such as the community partner, did not find the data entry experience intuitive. However, this risk was mitigated, because the community partner gained hands-on experience using Salesforce NSP weekly and expressed willingness to train others as indicated in sections iv, v, and vi of number three.
- 5. Potential Impact on CISV Pittsburgh's Mission: Salesforce NSP could amplify CISV Pittsburgh's mission through better information management. Retrieving data on constituents through effective information management will empower CISV Pittsburgh to leverage data for its long-term growth, such as running more targeted fundraising campaigns, applying for larger grants, and etc.

III. Enable Data-Driven Strategic Planning and Decision-Makings

Motivation

Activities that are crucial for CISV Pittsburgh's long-term growth, such as running targeted fundraising campaigns and applying for larger grants, not only require effective management of constituents' data but also the analysis and visualizations of such data. For example:

- 1. When CISV applies for grants, it would like to include the statistics of the history of programs and the youth participants' demographics and their respective visualizations in order to show prospective donors that it is a grass-root organization; and
- 2. Noticing the changes in the youth participants' demographics, such as age, gender, and ethnicity would also enable CISV Pittsburgh to better design their local programs and even give feedback for improvement for the international programs based on demographic changes of its youth participants.

Therefore, the second project of this consulting engagement entailed deploying and testing such tools for data analysis and visualizations on the same customer relationships management platform. In order to retrieve the statistics and visualizations on constituents data, Salesforce NSP's reporting and dashboard functions were designed and utilized. Salesforce NSP enables users to customize reports to obtain statistics of constituent data and allows them to visualize the same reports in graphs and metrics on its dashboards. CISV Pittsburgh could then export the reports into Excel when CISV USA asked for certain reports on programs and youth

participants for compliance and then quickly assess the nature or health of the programs through the graphs and metrics on the dashboards.

Outcomes

- 1. Reporting and Visualizations: CISV USA requires all the local chapters sending youth participants to international exchange and diversity camps to send statistics on the youth participants and the program information, such as their emergency contact information, birthdays, and program identification number. In addition, CISV Pittsburgh would like to get a sense of its programs and the youth participants' demographics more specifically for grant-application purposes. To meet CISV Pittsburgh's organizational needs and its reporting requirements that it has with CISV USA, three reporting templates to automatically keep track of general information on programs, the youth participants' demographics, and a history of program participations were created. Dynamic visualizations or graphs of these reports were also created on the Salesforce NSP dashboard.
- 2. *Before:* Before the implementation of Salesforce NSP's reporting and dashboard features, CISV Pittsburgh faced the following issues:
 - i. The process of sending reports in spreadsheet formats to CISV USA was timeconsuming and laborious because of merging different data from multiple spreadsheets; and
 - ii. CISV Pittsburgh could not quickly assess the health of the programs or the changes/trends in the constituents' demographics in spreadsheets without having to take extra steps.
- 3. *After*: In order to meet CISV USA's reporting requirements and CISV Pittsburgh's analytics needs:
 - i. CISV Pittsburgh could now easily pull reports from the aforementioned reporting templates to meet its own organizational needs and the reporting requirements it has with CISV USA;
 - ii. Visualizations and graphs on Salesforce NSP dashboards now appear on the home page when the community partner logs in, enabling her to quickly assess the health of the organization and/or the changes in the constituents' demographics;
 - iii. These visualizations and graphs could also be used in CISV Pittsburgh's applications for grants;
 - iv. The community partner was trained on running these reports, creating new reports, and quickly assessing the status or the health of the programs on the dashboards for more than six hours;
 - v. The community partner did not find the process of running reporting templates and creating new ones user-friendly; and
 - vi. However, the community partner had also expressed continuous desire to learn the reporting and dashboard features of Salesforce NSP.
- 4. *Sustainability:* The sustainability of the reporting and dashboard features in Salesforce NSP will also depend on the sustainability of Salesforce NSP as a whole system.

Section v of number three poses as a risk to Salesforce NSP's sustainability. However, this risk was mitigated, because the community partner received trainings on using the reporting and dashboard features and had express a continuous desire to learn.

5. Potential Impact on CISV Pittsburgh's Mission: Automated data analysis and visualizations through Salesforce NSP's reporting and dashboard features amplify CISV Pittsburgh's mission by allowing the organization to better engage its constituents and perform outreach to prospective donors based on insights gleaned from such analysis and visualizations themselves.

IV. Recommendations

Vision

Because CISV Pittsburgh is an all-volunteer organization, technology at the organization should be robust and user-friendly when streamlining the day-to-day operations. Having a fluid workflow via a robust and simple technology will enable the volunteers to focus more on what they are truly passionate about – CISV Pittsburgh's mission to promote peace and global friendships by sending youth participants to intercultural camps and international exchange programs. In order to ensure that this vision is sustainable, incremental investments in new technologies and/or incremental improvements of existing technologies are crucial.

Goal 1: Maintain The Sustainability of Salesforce Non-Profit Starter Pack

The sustainability of Salesforce NSP at this point seems to be mainly ensured by the trainings the community partner had received and her willingness to learn. Furthermore, Salesforce NSP's robust architecture enables integration with CISV Pittsburgh's business applications and thus supports the organization's long-term vision and goal to stream-line its day-to-day operations. However, the following factors pose as risks to such sustainability:

- 1. Salesforce NSP's User Interface: Salesforce NSP allows customization of its default data model, serves as a central repository for all of the organization's data, offers reporting and visualization needs for such data, and enables integration with other business applications. Because Salesforce NSP has a lot of these capabilities, its user interface is not user-friendly; and
- 2. Organizational Factors: CISV Pittsburgh has a high-turn of volunteers. In other words, most volunteers usually do not regularly attend to the day-to-day operations of the organizations. The board members, such as the community partner, have been running the day-to-day operations of CISV Pittsburgh for the last couple of years. If Salesforce NSP is not user-friendly and/or if upcoming volunteers are not given adequate training, the sustainability of Salesforce NPS is not ensured.

In order to mitigate the aforementioned risks, the community partner who had been receiving trainings on using Salesforce NSP throughout this consulting engagement must train the current board members who have been volunteering for at least one year and the upcoming board members who will be volunteering for at least one year.

Benefits

Training the current and the upcoming board members will ensure that Salesforce NSP is part of the organization's culture by:

- 1. *Effective Knowledge Management:* Better knowledge transfer is ensured when multiple board members are trained on the usage of Salesforce NSP;
- 2. Scaled Trainings For Volunteers: More board members could train more short-term or seasonal volunteers on the usage of Salesforce NSP; and
- 3. *Improved Professional Image:* Because Salesforce NSP is widely used by non-profit organizations and CISV USA, CISV Pittsburgh's professional brand will be improved among its non-profit counter-parts if board members are at least familiar with Salesforce NSP.

Implementation Strategies

Date	Task	Resources	Cost
1st Week of June, 2015	Data entry training on the Accounts and Contacts tables	Jennifer Burns (community partner for this consulting period); See Appendix E	Free;~ 3 hours
2 nd Week of June, 2015	Data entry training on the Programs and Program Participation tables	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
3 rd Week of June, 2015	Data entry training on the Interchange and related tabs	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
4 th Week of June, 2015	Data entry training on the Opportunities and Leads tables	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
1 st Week of July, 2015	Data entry training on the Chapter Roles, Schools, and School Attendance tables	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
2 nd Week of July, 2015	Data entry training on the remaining tables	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
3 rd Week of July, 2015	Reporting training related to Programs and Programs Participation	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
4 th Week of July, 2015	Reporting trainings related to Accounts and Contacts	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
1st Week of August, 2015	Dashboard training related to Programs and Program Participation	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
2 nd Week of August, 2015	Dashboard training related to Accounts and Contacts	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
3 rd Week of August, 2015	Reporting training related to Opportunities and Leads	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour
4 th Week of August, 2015	Dashboard training related to Opportunities and Leads	Jennifer Burns (community partner for this consulting period); See Appendix E	Free; ~ 3 hour

Expected Outcomes

Areas of Impact	Outcome Status (Positive/Negative/Neutral)
Organization	Positive; and Provides knowledge transfer management by getting all board members trained on NSP.
Programs	Positive; and Provides hands-on experience with gleaning insights from the data regarding programs and youth participants to better engage constituents and improve the programs.
Board Members and Volunteers	Positive; Enhances professional image and credibility in the non-profit industry, since Salesforce NSP is widely used by other non-profit organizations; Improves technical skills; and Gains knowledge of programs and day-to-day operations of the organization through data entry and reporting and better sense of how technology amplifies the organization's mission.
Technical Environment	Positive Tech-savvy work environment
Technology	Positive

Goal 2: Improve Operational Efficiency and Enhance Communications With Stakeholders Through The Integration of Existing Technologies

Website Integration

CISV Pittsburgh should embed forms on its website to enable program participants to enter their data when they are participating in various programs and/or attending events and integrate the data from the forms with Salesforce NSP's database. Because the website could also serve as marketing/fundraising tool for the organization, integrating it with the forms will bring opportunities for cross-marketing/fundraising as the constituents enter their data.

Benefits

Integrating web forms for program participation and events with Salesforce NSP will stream-line CISV Pittsburgh's data management and increase the organization's brand awareness with the following benefits:

- 1. Reduction of board members' and volunteers' data entry time on Salesforce NSP in tables related to program participations and events: The community partner currently spends approximately 30 hours per week processing applications and related forms during CISV Pittsburgh's recruiting season for its programs; and
- 2 Increased brand awareness and opportunities for cross marketing/fundraising: On the web forms, CISV could put content and links to promote the organization's brand and raise donations.

Implementation Strategies

The following implementation strategies assume that Salesforce NSP had been successfully adopted by CISV Pittsburgh and is effectively used by board members and volunteers alike throughout 2015. In addition, a development team is strongly recommended to implement this task, such as the undergraduate capstone project team at the Information Systems department at

Carnegie Mellon University, because integrating Salesforce NSP with web applications and customizing its data model as needed at the same time are very time-consuming and complicated processes.

Implementation Plan For Integration of the Website with Salesforce NSP

Date	Task	Resources	Cost
Fall 2015	Research on the application process for the undergraduate capstone project team at the Information Systems department and other alternatives Apply to be a client for the undergraduate capstone project team or alternatives	Jennifer Burns (Current President) Amy Raslevich (Upcoming President starting August 2015) See Appendix E	Free; approximately ~ 5 hours
January 2016	Perform initial research on integrating the website with Salesforce NSP	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone See Appendix E	Free; approximately 3 hours per week
February 2016	Gather and analyze requirements	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone	Free; 3 or more hours per week
March 2016	Begin to deploy and test integration in phases agile fashion Test integration in each phase and get feedback	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone	Free; 10 or more hours per week
April 2016	Continue testing integration in each phase and get feedback Prepare final product	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone	Free; 10 or more hours per week
May 2016	Showcase the final product and provide training to community partner	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone	Free; 3 or more hours pe week

Expected Outcomes

Areas of Impact	Outcome Status (Positive/Negative/Neutral)
Organization	Positive; Improves technical capacities of CISV Pittsburgh; and Provides additional brand awareness and fundraising opportunities for cross-marketing/fundraising through additional content and links on the web forms

Areas of Impact	Outcome Status (Positive/Negative/Neutral)
Programs	Positive; and Streamlines day-to-day operations of programs by reducing data entry and form processing time for board members and volunteers.
Board Members and Volunteers	Positive; Enhances professional image and credibility in the non-profit industry, since Salesforce NSP and its integration of websites/web forms are carried out by other non-profit organizations; Improves technical skills; and Gains a better sense of how technology amplifies the organization's mission
Technical Environment	Positive; Fosters tech-savvy work environment; and Lays the technical groundwork for more data coming in as the organization grows
Technology	Positive

QuickBooks and Constant Contact Integration

Conducting research on integrating QuickBooks and Constant Contact did not occur during the consulting period due to lack of time. Because QuickBooks and Constant Contact are widely used by the organization and contain a plethora of data on its constituents, integrating them with Salesforce NSP will further reduce data redundancy stemming from having data in different applications and streamline the organization's day-to-day operations that involve tracking donations, communicating with constituents, and etc.

Benefits

Integrating QuickBooks with NSP will streamline the organization's management of data on donors with the following benefits:

- 1. Reduction of data redundancy stemming from having new and/or the same data on donors and donations in both QuickBooks and Salesforce NSP;
- 2. Reduction of data entry time associated with having to enter new and/or the same data on donors and donations in both QuickBooks and Salesforce NSP; and
- 3. Automated email messages to donors regarding their tax documents for their donations: Instead of emailing and/or mailing tax documents to donors based on QuickBooks's data alone, integration with Salesforce NSP will enable an automatic email to be sent to a donor based on his/her donations.

Furthermore, integrating Constant Contact with Salesforce NSP will also streamline communication with constituents by bringing the following benefits:

- 1. Reduction of data redundancy stemming from having new and/or the contact information on constituents in both Constant Contact and Salesforce NSP;
- 2. Reduction of data entry time associated with having to enter new and/or the contact information in both Constant Contact and Salesforce NSP; and
- 3. Automated process of sending electronic newsletters via Constant Contact based on data regarding constituents' activities and demographics in Salesforce NSP.

Implementation Strategies

The following implementation strategies assume that Salesforce NSP had been successfully adopted by CISV Pittsburgh and is effectively used by board members and volunteers alike throughout 2015 or 2016. In addition, the Technology Consulting In The Community Program is recommended to implement this task, because there are already pre-built applications made by Salesforce and other vendors in order to support such integration.

Implementation Plan For Integration of QuickBooks and Constant Contacts with Salesforce NSP

Date	Task	Resources	Cost
Fall 2016	Research on the application process for Technology Consulting In The Community Program and its alternatives Apply to be a client in the Technology Consulting In The Community Program or alternatives	Jennifer Burns (Current President) Amy Raslevich (Upcoming President starting August 2015) See Appendix E	Free: approximately ~ 5 hours
January 2017	Perform initial research on integrating Constant Contact and QuickBooks with Salesforce NSP	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone See Appendix E	Free: approximately 3 hours per week
February 2017	Gather and analyze requirements	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone	Free: 3 or more hours per week
March 2017	Begin to deploy and test integration in phases agile fashion Test integration in each phase and get feedback	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone	Free: 10 or more hours per week
April 2017	Continue testing integration in each phase and get feedback Prepare final product	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone	Free: 10 or more hours per week
May 2017	Showcase the final product and provide training to community partner	Jennifer Burns Amy Raslevich (Upcoming President starting August 2015) Carnegie Mellon University's undergraduate information systems capstone	Free: 3 or more hours pe week

Expected Outcomes

Areas of Impact	Outcome Status (Positive/Negative/Neutral)
Organization	Positive; Improves technical capacities of CISV Pittsburgh; and Saves money and time through operational efficiency
Programs	Positive; and Streamlines day-to-day operations of programs by enhancing communication with constituents on important information about programs.
Board Members and Volunteers	Positive; Enhances professional image and credibility in the non-profit industry, since Salesforce NSP and its integration of other applications are carried out by other non-profit organizations; Improves technical skills; and Gains a better sense of how technology amplifies the organization's mission
Technical Environment	Positive; Fosters tech-savvy work environment; and Lays the technical groundwork for more data coming in as the organization grows
Technology	Positive

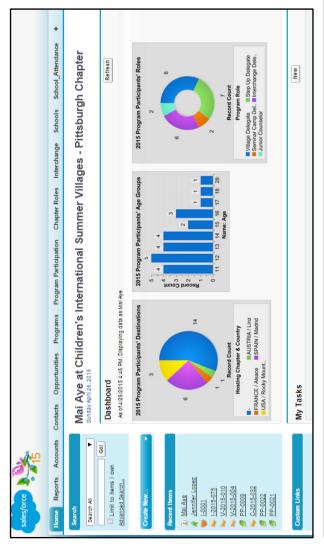
Appendix A - Descriptions of Tables In Salesforce NSP

Table	Definition/Purpose	Related Tables	History
Account	This table keeps track of all the households and organizations associated with CISV Pittsburgh. Each household or organization is linked to an individual in the Contact table.	Contact	Default table of Salesforce NSP; additional fields added by student consultant
Contact	This table keeps track of all the contact and demographics information of the members of household and organizations	Account; Program Participation	Default table of Salesforce NSP; additional fields added by student consultant
Opportunities	This table keeps track of all the donations made by the households and organizations	Account	Default table of Salesforce NSP
Leads	This table keeps track of all the prospective members of CISV Pittsburgh. It enables the user to "convert" the lead into a household in the Account table once the "lead" becomes a member through his/her activities in the organization	Account	Default table of Salesforce NSP
Programs	This table keeps track of all of CISV's International programs that CISV Pittsburgh is involved with. It also tracks the households in Pittsburgh that hosts CISV local programs hosted in Pittsburgh	Program Participation; Account	Added by Student IT Consultant and Community Partner
Program Participations	This table keeps track of a history of a student's program participation	Program; Contact	Added by Student IT Consultant and Community Partner
Application	This table keep track of a student's application process for a particular program	Program; Contact	Added by Student IT Consultant and Community Partner
Interchange	This table keeps track of Interchange, a specific program where a student spends time at multiple households. It contains information on the households hosting Interchange, the date ranges, and the participating students	Program; Contact; Account	Added by Student IT Consultant and Community Partner
Chapter Roles	This table keeps track of all the chapter roles, such as President, Treasure, and etc., of all the members in the Contact table.	Contact	Added by Student IT Consultant and Community Partner
School	This table keeps track of all the schools CISV Pittsburgh's youth participants are affiliated with.	School Attendance	Added by Student IT Consultant and Community Partner
School Attendance	This table keeps track of the attendance history of the CISV Pittsburgh's youth participants at particular schools	School; Contact	Added by Student IT Consultant and Community Partner
Chapter Events	This table keeps track of all the chapter activities at CISV Pittsburgh's members and volunteers are involved in, such as gala dinner and board meetings	Contact	Added by Student IT Consultant and Community Partner

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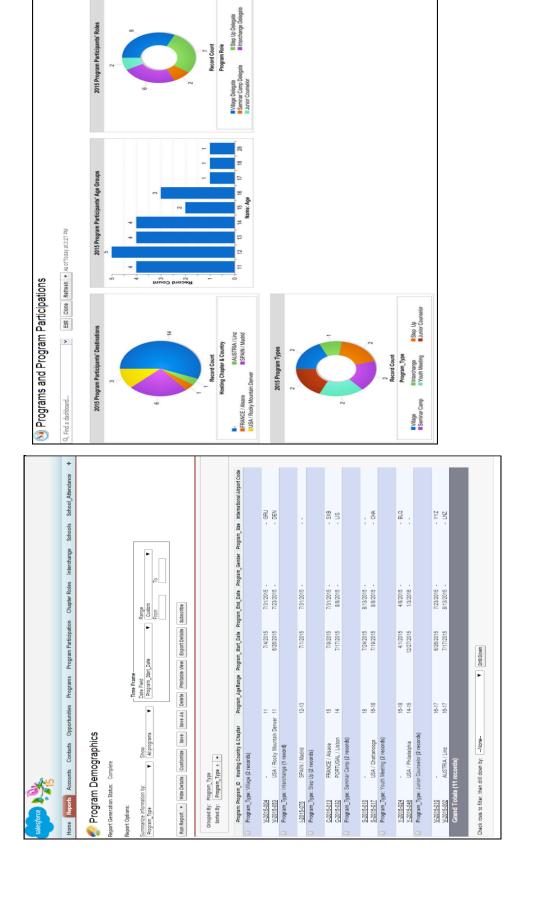
Appendix B - Salesforce NSP Data Model

Appendix C - Salesforce NSP's Front-End Layouts





Appendix D - Salesforce NSP's Sample Report and Dashboards



Appendix E - Resources

Resource Types	squil
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Carnegie Mellon University's Technology	Main Page http://www.cmu.edu/tcinc/
Community Program (Graduate)	Becoming a Client Partner http://www.cmu.edu/tcinc/partners/form.html
Carnegie Mellon	Main Page http://www.cmu.edu/information-systems/
University s Information Systems Capstone Project (Undergraduate)	Becoming a Client Partner http://www.cmu.edu/information-systems/client-partner/index.html
Salesforce NSP For	Hands-on Training: Get Started with the Nonprofit Starter Pack Part 1: https://www.youtube.com/watch?v=fRIPquEwISI
Beginners	Hands-on Training: Get Started with the Nonprofit Starter Pack Part 2: https://www.youtube.com/watch?v=bTqrqpwF06E
	Hands-on Training: Extend Salesforce with Custom Objects and Apps https://www.youtube.com/watch?v=ehcXKizoNyû
Salesforce NSP Customization	Hands-on Training: Extend and Customize the Nonprofit Starter Pack https://www.youtube.com/watch?v=Y9y1hGJrTG0
	Hands-on Training: Customize Salesforce using Custom Fields and Page Layouts https://www.youtube.com/watch?v=RrR42pc5chQ
	Hands-on Training: Get Started with Sales Reports and Dashboards https://www.youtube.com/watch?v=0CMX96wMrWs
Salesforce NSP Reports and Dashboard	Hands-on Training: Extend Reports w/ Buckets, Cross Filters & Joined Format https://www.youtube.com/watch?v=46 KYYq6nYk
	Analytics Snapshots: Common Use Cases That Everyone Can Utilize https://www.youtube.com/watch?v=fj7yd4g4Gos
Salesforce NSP	Salesforce Integration https://www.youtube.com/watch?v=-NLUf7O4NX0_
Integration	Integrating Salesforce.com and Google Apps https://www.youtube.com/watch?v=i7TzbcON -Q

Resource Types	Links
Salesforce NSP Manual and Documentation	https://powerofus.force.com/articles/Resource/Nonprofit-Starter-Pack-3-Documentation https://powerofus.force.com/articles/Resource/Nonprofit-Starter-Pack-Workbook
Salesforce and Constant Contact Integration Guide	How to Integrate Salesforce with Your Constant Contact Account http://img.constantcontact.com/training/docs/final_guide_salesforceent_unlim.pdf
Salesforce and Quick Books Integration Guide	http://quickbooks.intuit.com/salesforce-integration-quickbooks Salesforce Integration for QuickBooks - frequently asked questions http://support.quickbooks.intuit.com/support/articles/INF16314

About the Consultant

Mai Aye is a first-year student in the Master of Information Systems Management Program at Heinz College of Carnegie Mellon University. She will begin her work at Chegg Inc. in Santa Clara, California this summer as an Analytics Intern.