STUDENT LIFE

# Consulting Report

Prepared For

**Student Life at the University of Michigan**

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## 1. Executive Summary

Team Design Forge worked with Student Life at the University of Michigan for a semester long project for the course SI 501 Contextual Inquiry and Consulting Foundations, conducted at the School of Information at the University of Michigan. We, Design Forge, were tasked with helping Student Life improve their data flow and collection processes.

The process of contextual inquiry made the problems in the data flow very apparent to the team. Such problems include difficulty with the template that was provided for data input, lack of incentives for those who were sending data, inefficient collaboration, scattered and inconsistent data, overwhelming responsibility and loss of knowledge in staff transitions.

Clearly, there are several diverse contributing factors to this inefficient data flow but after further investigation we realized these were merely symptoms of a larger problem. There is a lack of transparency and collaboration in this data flow. Each stakeholder in the process has different expectations of each other stakeholder and these expectations are not being communicated.

We recommend that Student Life increase transparency and collaboration in the data flow. There are several ways that this can be achieved. First, there could be general meetings that involve stakeholders as well as a listserv / mailing list, where the data team and Student Life can share updates with the data stewards. Data stewards may also communicate with other data stewards about the collection process here. In this process of assessing Student Life's data flow, it became very apparent to us that stakeholders in the data flow, especially data stewards, do not know each other. Establishing relationships and points of contacts could prove to be very helpful.

We have included several recommendations for all stakeholders in the process to consider. We believe that data stewards would be more motivated to collect student involvement records if they received regular updates on funding. This would allow them to see that their participation in this process will literally pay off. Additionally, we believe that it would be beneficial for the data team to clearly communicate how they would like data to be collected so that the "cleanup" of data would be minimized.

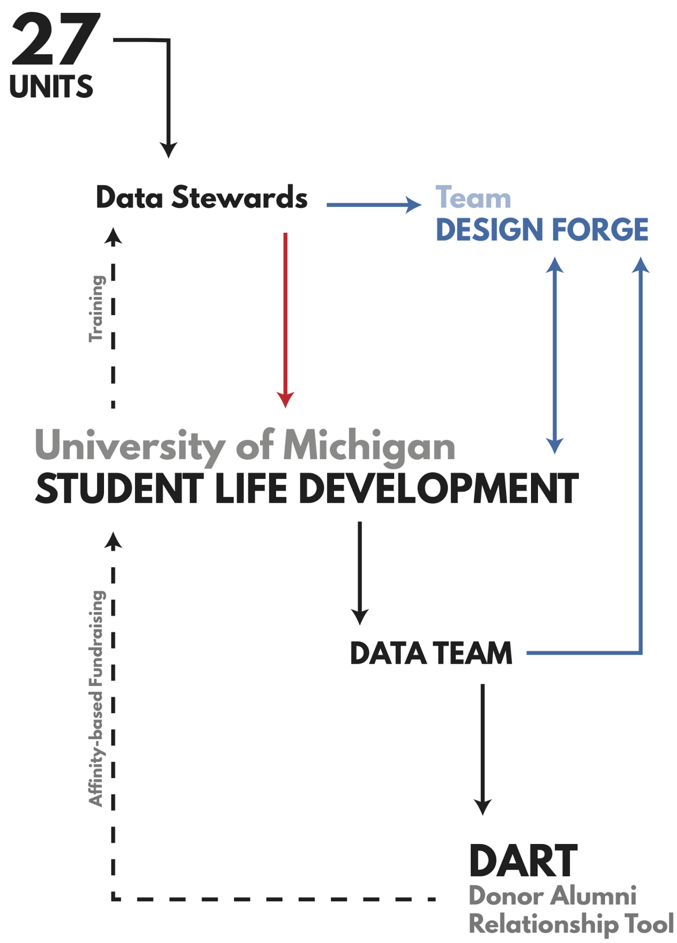
## 2. Introduction

Student Life is an organization at the University of Michigan that coordinates and manages various sub-units related to helping students make the most out of their university experience. There are 27 units and over 1000 student organizations that are part of Student Life. Together, the units and student organizations provide services in the areas of Campus Involvement, Student Support, Healthy Living and Identify & Justice *(“Student Life.” What Is Student Life?).* Student Life was initially named 'Student Affairs' but the title was changed on October 1, 2013 to resolve ambiguity and represent the diversity of the units in the organization. *(Harper, Royster)*

Over the years, as state appropriation of funds has declined and tuition and fees have increased, fundraising has become even more important to ensure a fulfilling student experience at the University of Michigan, which is evident from the Finances & Fundraising report of the Michigan Almanac. Various fundraising efforts have enabled the university to grant more financial-aid every year and continue to extend and improve services, programs and facilities provided by the units of Student Life *(Finances & Fundraising)*.

A donor can choose to gift funds to President’s Unrestricted Funds or a specific category. Each category is further divided into 2 levels of subcategories that leads to a list of specific endowment funds which one can donate to out of about 7,800 funds available. *(Leaders & Best Giving)*. This choice is empowering but at the same time, overwhelming. Hence, each university department makes use of its collected data for affinity based fundraising campaigns, matching previous and potential donors to the right fund.

In the past, some of the biggest donors have been Charles Munger gifting $110 million and Stephen M. Ross and A. Alfred Taubman gifting $100 million each. Another notable donation was made by Penny and E. Roe Stamps, gifting $32.5 million to the art school, which was the largest donations made to an art school in the US *(Woodhouse, Kellie)*. It is worth to note that the target of these large gifts matched the relationship of the donor to the school.




*Stakeholders and information flow*

The Data Management Team (DMT), as part of the Development Services at U-M, helps different units or departments by cleaning their acquired data and uploading it in batches to an information system known as Donor Alumni Relationship Tool (DART) that manages information about all current, past and potential donors. The DMT provides templates, that can be used by various units of Student Life to send back this information that can be processed and loaded into DART *(Data Management Team)*.  Once this data is available in DART, it can be used to generate reports that use intent and affinity values to visualize the strength of relationship between a donor and the University *(Who's Donor Is It Anyway?)*. This can be used to match the donor to the right endowment fund and customize the communication with the donor, leading to affinity-based fundraising.

Although funding campaigns prioritize on specific funds, donors are free to choose any fund, and most donors will choose the one they identify with. This could potentially lead to an imbalance in available funds across different units, and some units might remain underfunded. The data collected from the units is later available in DART through the efforts of the Data Management Team, where it can be used to direct a donor to gift to other funds that may be lacking which they might identify with.

The University of Michigan, Student Life and its units, students, donors, and the Data Management Team are all important stakeholders in the smooth functioning of affinity-based fundraising efforts. Missing data from various units of Student Life will likely lead to a less effective campaign and imbalance in funds available for these units.

## 3. The Problem

Student Life units collect "student involvement" records to track various activities. These records are also beneficial to Student Life Development, as they can be used for affinity-based fundraising. Every unit is supposed to submit these records at the end of the term. Also, each unit has its own data collection mechanism and this flexibility is required due to the diverse functions of every unit. The data team cleans this received data and uploads it into the Donor Alumni Relationship Tool (DART). This entire process of gathering data from each unit, cleaning it and updating it into DART is inconsistent, time consuming and requires a lot of coordination. Currently, this manual process is followed as needed on a project basis, making it inconsistent and time consuming for both the unit partners and the fundraising team. Student Life development would like team Design Forge to investigate and offer recommendations to improve this information flow and data collection process, in order to improve the efficiency and impact of fundraising efforts.

## 4. Methodology

In order to thoroughly understand the problem presented to us, our group used the process of contextual inquiry. Contextual inquiry is a user-centered research method that allows the researchers to understand the user's work processes and their environment. We frequently used the book Rapid Contextual Design by Holzblatt et. al as guidance.

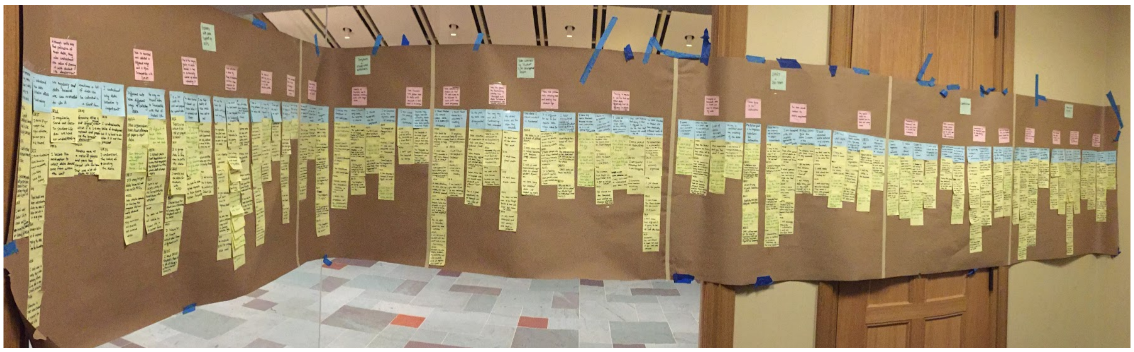
Shortly after meeting with our client contact for this project, each member of the group wrote a background research report so as to gain further insight into the problem and its respective field. Research was conducted on background of our client and their problem as well as on fundraising completed by student affairs offices at other universities. A literature review was also completed. As part of the literature review best practices in University fundraising and the impact on student privacy was also explored. Further, established performance analysis model such as DEA was studied with a view to analyse the performance of data sources.

Next, our group prepared for interviews. We wrote interview protocols for each interviewee consisting of about ten large questions that would help us understand the interviewee and their role in the data flow. These protocols served as a guide for the interviews but did not need to be strictly adhered to.

Our team interviewed five people who represented various stages of the information flow: one representative from the data team, one representative from the development team and three data stewards. Interviews were conducted at the interviewee's place of work by two members of Design Forge. One member conducted the interview while the other took notes. All interviews were recorded. The interviews lasted anywhere from 45 minutes to two hours.

Within 48 hours of each interview, Design Forge gathered to do an interpretation session. In the interpretation session, the two members of the team who attended the interview recounted the interview to the other two team members who took affinity notes. Affinity notes included big ideas mentioned in the interview, questions, insights and design ideas.

Once the interpretation sessions were completed, construction of the affinity wall was under way. Affinity notes were written down on yellow sticky notes with a code in the corner of the note that corresponded to the interview that the note came from. The yellow sticky notes were placed on the wall with other like affinity notes into columns of no more than six. The columns of yellow notes were then grouped with like columns. Once these groups were created, they were labeled with blue sticky notes that summarized the notes of that group with a statement. From there, blue sticky notes were further grouped into like groups which were then summarized with a pink sticky note. Finally, the pink sticky notes formed five separate groups that were labeled with green sticky notes that represented key themes that were uncovered in the contextual inquiry process.



*The Affinity Wall*

The affinity wall took a total of ten hours to build. Once constructed, the wall proved to be very helpful for us in terms of visualizing key issues in the process. Walking through our affinity wall once it was completed allowed us to see inconsistencies and obstacles in the data flow.

The penultimate stage of this process was to brainstorm solutions for improving Student Life's data flow. The brainstorming process began with a meeting with our professor. The team members who attended the meeting reported back our professor's suggestions to the rest of the group in our initial brainstorming session. Once those suggestions were heard, the group walked through the affinity wall once more in order to think of solutions of our own. Walking through the wall also raised a few questions to the group. The questions that arose were sent to the interviewees.

After our additional questions were answered, we used the background information we had on the client in addition to the information we gathered from the interviews to create a suggested solution for Student Life's data flow issue. Our findings were presented to fellow classmates and then to Student Life.

## 5. Findings

The problems became apparent once we made the Affinity Wall and walked through it. Our key findings lead to our overarching recommendation, whereas the rest of the findings highlight underlying problems faced especially by the Student Life Units.

### Key Findings

#### Problems using the Template

To facilitate data collection, Student Life Development created an excel template in collaboration with the Data Team and distributed it to all Data Units. Over the last two years the template has undergone a lot of changes with the goal of creating  a standardized template. *This was not so well received by the Data Units primarily due to the usability issues.*

> "The template is ugly"
>
> "Drop down is ridiculous, when I paste data it disappears"
>
> "Not easy to paste information and move things around"

Many of our interviewees told us that a standard template will not work in the long run since it doesn't scale with respect to the size of the data units. They also felt that if Student Life Development is going to create a standard template, they might have to keep adding additional columns, making  the template more complex and unusable.

> "Template cannot work for a big unit"
>
> "New columns have to be added regularly"

Surprisingly, few Data Stewards and the Data Team indicated in their interviews that they would prefer the template not to change since a change in the template would change their work.

> "If template changes it will affect my work"

When asked about the use of templates, Student Life revealed that it was understood between the units that the template is the only way forward and that Student Life Development is trying hard to make the data flow smoothly from the Data Stewards to the Data Team. Further, the Student Life Development also confessed the following about the use of template:

> "No one reads the help information in the template"

### Lack of Incentives

> "I think small organizations won't see the value of sending data"

The above statement made us look further into other interviews which lead to our second key finding. We realized that none of the participating Data Units have any incentive associated with data collection.

> "I don't know exactly what my efforts do"

Further, many of the Data Stewards also confessed that they are not aware of their contribution towards the fundraising as quoted above by a Data Steward.

> "I write thank-you letters to donors who contribute"

Interestingly enough, we found that Student Life Development sends out thank you cards to their Donors who contribute to the fundraising through donations as stated above. We as a team realized that it would make a huge difference when something like that is done towards all contributing Data Units to recognize their contribution.

> "I believe that the motivation to collect data
> should come from within the unit"

> "Student life might not consider us a priority"

> "My unit's budget keeps getting cut by student life"

The major issue however, is that these Data Units understand that the motivation should come from within the Data Units but the fact that these Units are not recognized by Student Life makes it hard for them to cultivate the motivation from within.


*Donor Recognition Wall at Services for Students with Disabilities*

### Inefficient Collaboration

Our third key finding was about collaboration. The organizational structure of Student Life is complex and hence confusing. This has contributed to the misconception about the data required and many of the Data Units are unaware about the type of data that needs to be collected.

> "When I send data, I sometimes only send new data"

> "I am not sure if Student Life Development wants all names or just new names"

> "In some situations the data doesn't matter until the student graduates"

Also, there seems to be a gap in communicating expectations regarding the type of data to be captured.

> "Other organizations don't give the data I want"

Due to this there also seems to be a strained relationship between these various units where the Data Team feels that Student Life Development isn't asking the right questions about the data and Student Life Development thinks that Data Stewards are not efficient. This results in reduced trust between the parties which can be observed from the below statement:

> "I am not sure if the data from the units is accurate"

Finally, these findings were confirmed when Student Life Development and the Data team provided conflicting requirements about the quality of data they need for work on.

> "I don't encourage granular information"
>
> - vs -
>
> "I need granular information to be recorded"

## Other Findings

### Loss of knowledge in staff transition

It was observed that there is a loss of knowledge about handling data when a staff transition takes place and that most of the existing knowledge is not documented for the new incoming Data Stewards.

> "Some organizations don't transfer knowledge
> when people quit"

It was also observed that not all Data Stewards are less experienced. A few Data stewards have been around for so long that they know exactly where to find the data. This knowledge is gained by experience and is not shared to everyone.

> "I think people who do not know short-codes
> will have trouble finding funds on websites"

> "I am very organized and can give data
> student life development wants in 4 hours"

Further, changes in the technology infrastructure also affect the efficiency of knowledge transfer:

> "I need to take another class about accessing
> DART since DART changed"

> "Every Unit needs to understand and learn DART"

### Lots of responsibility for a person to handle

It became very apparent from our interviews that both Data Stewards and Student Life Development have a lot of responsibilities. Due to this, data collection is usually at the bottom of their list of priorities.

> "Data collection is not a priority for me
> when I have other work"

> "In my position, I worry about much more than fundraising"

This can be attributed to the fact that the team size is smaller in many of the cases like below.

> "I have a very wide role with a small team of 5"

Few have also open about hiring assistant to help them with their work.

> "I might need an assistant"

### Scattered Data

It was also observed that the data required to be entered in the template was scattered and that Data Stewards go through a lot of trouble to fetch the data and sort it.

> "I need to write down every interaction
> with every single student and sort it by date"

> "The data is in a bunch of different places"

This also leads to other problems such as revisiting the data collected to correct any problems or to find specific records. Essentially, the data collected is not organized in any form and hence is difficult to make sense of.

> "It is hard to pinpoint specific data points
> when I am asked for it"

> "We don't have all the data they *(Student Life Development)* need"

This is more difficult since most of the work is manual and hence leads to a lot of frustrations and poor data handling.

> "I need to manually get data from handshake to template"

> "There is inconsistency in the format of data
> between handshake and template"

### Inconsistent Data Format

It was interesting to note that some Data Units contributed data in the correct format and some didn't. The Data Team said that few data units like Athletics and Housing provide data the way they need it.

> "I get Athletics data in the right format"

> "Athletics have a very good data foundation"

There was also no shared consensus about the way data needs to be organized. There seems to be a lot of assumptions about the quality of data as well as when and how the data should be collected. This leads to a lot of differences between the data provided by units.

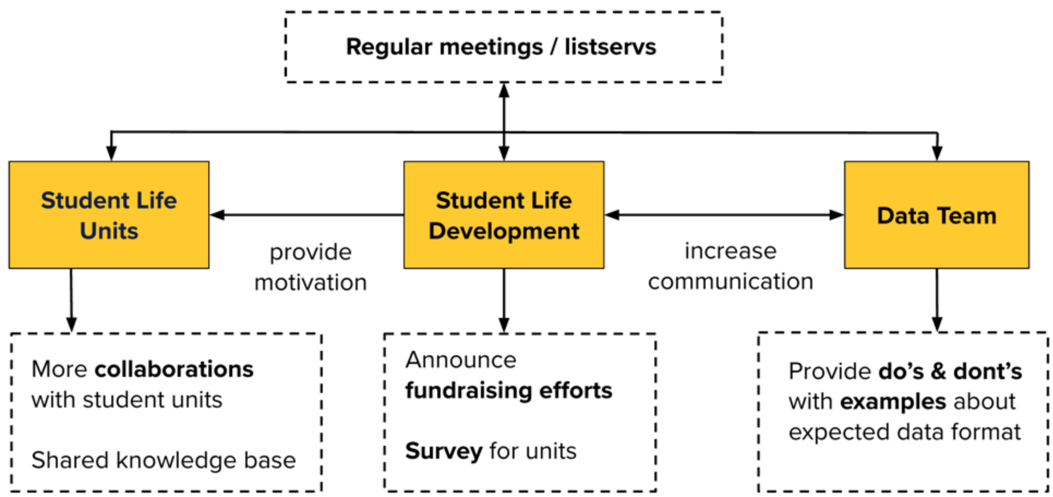
> "I want information grouped into semesters and not by date"

## Findings: Conclusion

The key findings reveal that most of the problems arise because of a lack of transparency between the Units and the Student Life Development. This further leads to missed opportunities, reduced collaboration, limited knowledge transfer, and eventually inefficient data collection and communication.

## 6. Recommendations

The findings of our inquiry reveal critical incoherent expectations of responsibilities and communication barriers across student units, Student Life Development, and the data team, which are the main roots that hindered smooth data collection. Thus, given that the problem lies deeply across three stakeholders, our team has pinpointed specific means of achieving better transparency and collaborations for not only the three entities as a whole but also individual stakeholders.




*Recommendation at a Glance*

### Recommendation For Student Units

To start off, we found out that although the 27 student units perform similar data collection and reporting tasks, they rarely collaborate or share knowledge on the subject matter. In fact, the units themselves presented extreme individualism and failed to communicate with each other or share resources that could streamline the process. Our team believes that building a communication channel (or other knowledge management system) within the student units could lead to not only better data collecting and reporting efficiencies among all units, but also individual benefits.

In fact, as the paper *The Motivators and Benefits of Sharing Knowledge to a KMS Repository in an Omani Organization* suggests, shared knowledge improves organizations' system quality as well as individual employees' performance and productivity. (Al-Busaidi, page 930) Sharing resources and knowledge among a workplace creates tangible benefits such as decreased time in knowledge transfer and smoother operation process as well as intangible benefits like an increase peers' trustworthiness and social interactions. (Al-Busaidi, page 931)

Student units are the individual employees in a workplace that share similar tasks: all 27 student units have to collect student records data and report to Student Life regularly in a similar format. Hence, while units may have different preferences or limitations in how they individually like to collect or report data, sharing this knowledge can greatly benefit existing and onboarding units in the following ways:

- Units can learn about pros and cons of each other's collection and reporting methods and gain insights into how to improve their own.

- Units can brainstorm together for any challenges that emerge during data collection and reporting.

- Existing units can provide tips and help newer units get into the data collection and reporting routine faster.

- Knowledge sharing can increase collaboration and result in more familiarity among the units in general.

To further emphasize the benefits of having a shared managed knowledge among the units, specific examples of benefits are laid out below.

### Units can learn about the pros and cons of different data collection and reporting methods

The career center, for instance, uses card readers and Sessions to collect their events' attendance information. While this method uses automation to ensure accuracy, and data consistency, it is more difficult for a data stewards to customize the data. That is, once put into sessions software, the data format is already decided. Multi-Ethnic Student Affairs (MESA), on the other hand, uses paper and pen to collect their events' attendance information. While this method ensures customization and increased interaction of attendees with hosts, it is one extra step to transition the data into an electronic format. Sharing such pros and cons of different data collection methods can help units to understand which data collection tools or methods may be best for different type of events.

### Units can share challenges they face and brainstorm solutions

When a unit is faced with challenges either with data collection or reporting, chances are other units may have already encountered the same issue in the past and could provide guidance. For example, one unit mentioned that they have been facing issues regarding the “date of register” among students since their student memberships are yearly based instead of event based. Such issues have been faced by other organizations and each organization has came up with a different way to deal with each issue which has caused inconsistency in the data. Hence, if they could come together and decide on a consistent solution to their problems, or report to Student Life together efficiency and consistency of work could be greatly enhanced.

### Units can help newer units for better transition

Right now, newer units have to learn about data collection and reporting solely from Student Life with no pre-established knowledge. In fact, our team has obtained a long instructional e-mail exchange from Student Life to a new unit. The how-to information in the e-mail is comprehensive but complicated for a new organization to absorb all at once. Hence, our team believes that if a shared knowledge space exists (with tips and resources provided by other existing units), the new units could quickly get into the routine and would not regard data collection and reporting as a tedious task.

Our team recommends that units adopt a knowledge management system that will be available for all 27 units on data collection and reporting in order to increase collaboration, efficiency, and data consistency as as a means of  avoiding extra steps and repeating mistakes.

## Recommendation For Student Life

From our interviews and research with Student Life, our team recognizes the importance of good data for affinity-based fundraising: the more Student Life knows about an alumni's experiences when he/she was in school, the easier it is for Student Life to appeal to each alumni’s interests as a means of effective fundraising. However, when speaking to the units, our team found that the units were mostly in the blind about the effect of their data collection and reporting efforts. That is, most units had no idea what Student Life used their data for and if their data collection had made any impact. . In fact, one unit was only able to find out how the data was used by  personally donating to their unit's funds. This lack of transparency obstructs units' motivations to turn in data because they see no impact on their unit's funds which leads them to believe that there is no incentive.

Being that Student Life has no authority over the units, our team concluded that it would be important for Student Life to make their efforts much more transparent. Otherwise, the units will have have no incentive to turn in good data in a timely manner. We recommend Student Life to announce their fundraising efforts to the units either by compiling an annual report or something as simple as an e-mail. Something along the lines of "great data efforts this year increase 10% of funds" can be very powerful in keeping the units in the loop and decreasing that communication barrier.

We also recommend Student Life to reach out to the units regularly and understand what their needs are and what data or resources they would want from Student Life. As it is important to make their efforts transparent, it is equally important to understand what type of fundraising data the units would like to see. Moreover, from our interviews we found out that some units would really benefit from having card readers to streamline their student records collection process but they are unsure how to obtain one within their limited budget. We also found out from Student Life that they would be happy to provide these card readers but they were unsure if the units would find them useful. These two findings suggested a communication gap between what is needed and what can be provided, which is why we recommend Student Life to conduct an inquiry process regularly (i.e send out a survey or conduct face-to-face interviews) with the data units to understand what they need and what factors would motivate them.

In summary, our team recommends Student Life to recognize the importance of keeping their unit partners informed and adopt ways in which they could provide such motivation to the units.

## Recommendation For Data Team

Finally, our team has also discovered many miscommunications between the data team and other stakeholders that, if clarified, could result in smoother data collection and reporting process as well as better collaboration in general. In particular, the data team has been rather passive in terms of communicating the format of the data they expect and providing examples of good data for other stakeholders.

Since the data team is ultimately the party that manipulates and uploads the data into the DART system, their preference regarding data format and frequency should really carry the most weight. However, as our findings suggested, there seems to be a knowledge gap between the data team and Student Life. In fact, there are instances in which we found that data collected by Student Life contains much more fields of information than the data team actually needed and used. Such gaps and differences in expectations of data should be addressed and communicated.

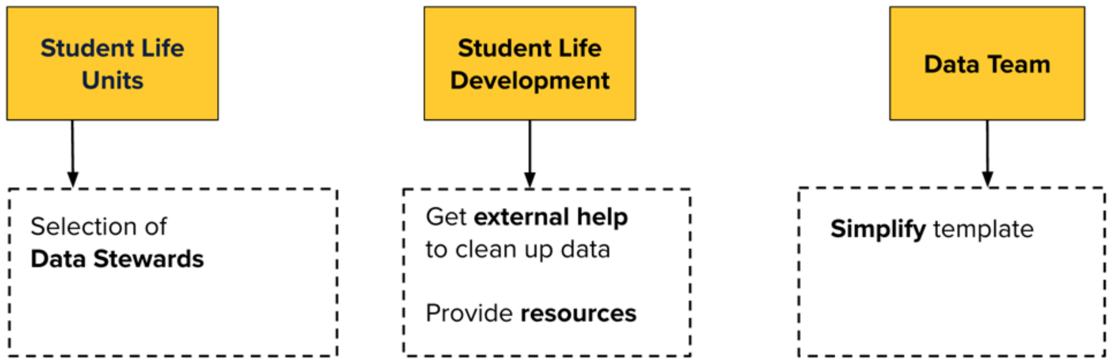
Our team recommends the data team to provide good examples of what type of data they need in order to accomplish the goals Student Life is trying to meet, pointing out the do's and don't's along the way so that there is an understanding of how the data is to be collected and uploaded.

Through our interaction with the data team, we learned that the data team has experience in working with different entities at the University of Michigan other than Student Life as well as experience in data collection. Hence, we believe the data team could be also a good mentor for the student life units, especially the data stewards.

The main recommendation hence again lies within building a channel of communications for the data team, Student Life, and its units to set up standards and expectations of what should be collected.

## Other Recommendations

Besides recommendations regarding increasing transparency and collaboration among the stakeholders, our team also has additional recommendations that address  specific issues that came up during user interviews and affinity wall discovery.




*Other Recommendations at a Glance*

### Units' selection of data stewards

Through our contextual inquiry process, our team realized that the 27 units are extremely different in terms of their purpose, size, expertise, and resources. For larger or more established units, the data collection process may be easy and simple, but for smaller or less experienced units, it is definitely a challenge. Thus, besides collaboration of the data stewards, our team recommend each unit choose its data stewards based on two criteria:

- This person should be familiar with data collection technology (i.e. excel sheets, sessions, or other platform)

- This person preferably should also be connected to the financial department of the units

We recommend these selection criteria because the process of collecting data and sending it to Student Life is an extra task not included in an employee's job description but someone who is experienced with data collection methods and the appropriate software would not see the task as such a burden. Moreover, for individuals involved in the financial department, they understand how their data is impacting the funds and hence would have extra incentive to complete the task.

### Student Life's allocation of resources

As our findings suggest, Student Life is trying to comprehend and accomplish too much at one time. Therefore, we recommend that Student Life prioritize their tasks at hand and delegate low-priority or time consuming tasks. In particular, time-consuming and unrelated tasks such as data cleaning, data formatting, and even data requesting could potentially be delegated or outsourced so that Student Life could focus on tasks that directly relate to the big picture of fundraising. Hiring an intern or outsourcing the data cleanup activities to student organizations or events like Data Dive (School of Information), could help ease Student Life's responsibilities.

### The infamous template

Finally, our team recommends a redesign or simplification of the user-unfriendly template. It is one of the most brought-up pain points from the student units and negatively impacts the quality of data collected. Our team recommends that Student Life take an iterative approach into optimizing the template so that it tailors to their needs and units' abilities. We recommend to start by making small changes such as getting rid of the drop down menus since they are impossible to use when it comes to entering over 10,000 entries, which is a realistic number of data points for several units. Student Life should also be in communication with the data team about how to best tailor to different unit's needs. That is, would it make sense to build different templates for different units? Would that be easier for the units and the data team? Or are there other ways they can compromise on the design of the template? Our team believes that solving the template component could greatly enhance the quality of data collected.

With the different symptoms that were brought up during the interviews, our team was able to successfully identify the disease: lack of consensus and communications between the three stakeholders. That is, the problem is a communication problem, not a technological one. Thus, our team believes that if each entity embraces our tailored suggestions, the data collection and reporting process could be greatly enhanced.

## 7. Conclusion

The process of contextual inquiry revealed several problems about the usability of template, difficulties with data collection by the units, and unclear expectations between the stakeholders. However, when we took a step back, these findings led to a more general observation about lack of communication and transparency. Some of our recommendations include technological solutions like using automated systems for data collection, simplifying the template, and using a listserv / mailing list for improved communication. However, in the long run, Student Life would benefit by understanding the data stewards, and their need for transparency, motivation and clear communication.

We believe our overarching recommendation for improved transparency and collaboration presents a long term solution, which if not considered, could still remain a problem even after implementing recommended and planned technological solutions. We hope our reported findings will be successful in communicating the long standing issues of and between the stakeholders, and our recommendations would help kickstart future improvements.

## 8. Bibliography

Al-Busaidi, Kamla Ali, Lorne Olfman, Terry Ryan, Gondy Leroy. "The Motivators and Benefits of Sharing Knowledge to a KMS Repository in an Omani Organization." *Innovation and Knowledge Management in Business Globalization: Theory and Practice - Proceedings of the 10th International Business Information Management Association Conference,* 2008, Kuala Lampur, Malaysia, International Business Information Management Association, 2008.

"Data Management Team." Development Services - University of Michigan , http://services.dev.umich.edu/index.php?base=team&page=dmt.

"Finances & Fundraising." Michigan Almanac 8th Edition, Aug. 2016, http://obp.umich.edu/wp-content/uploads/almanac/Almanac_Ch10_Aug2016.pdf

"Leaders & Best Giving." Leaders & Best, The Regents of the University of Michigan , 2016, http://leadersandbest.umich.edu/.

Harper, Royster. "Student Affairs Transitions to Student Life." Student Affairs Transitions to Student Life | Student Life Groups, The Regents of the University of Michigan , 10 Oct. 2013, http://staff.studentlife.umich.edu/studentlife/article/student-affairs-transitions-student-life

Holtzblatt, Karen, Jessamyn Burns. Wendell, and Shelley Wood. *Rapid Contextual Design: A How-to Guide to Key Techniques for User-centered Design*. San Francisco: Elsevier/Morgan Kaufmann, 2005. Print.

"Who's Donor Is It Anyway? Using Data to Make Decisions." Human Resources University of Michigan, The Regents of the University of Michigan , 5 May 2016, http://hr.umich.edu/working-u-m/workplace-improvement/voices-staff/u-m-staffworks-best-practices-technology-conference/u-m-staffworks-2016-poster-presentations/who%E2%80%99s-donor-it-anyway-using-data-make-decisions.

"Student Life." What Is Student Life? | Student Life, The Regents of the University of Michigan , http://studentlife.umich.edu/what-is-student-life.

Woodhouse, Kellie. "Top 10 Donations to the University of Michigan Total $580 Million." AnnArbor.com, The Ann Arbor News, 25 May 2013, http://www.annarbor.com/news/u-m-donations-top-10/.