IT Strategic Assessment Report

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# Executive Summary

This is the CIS 410 Strategic Assessment for the Fall of 2010 semester. The organization being assessed is the Louisville Urban League. It will cover not only technological aspects but also the overall health of the organization from a business standpoint. Through this report, it is the goal of the consultant to discuss areas that are well-managed within the Louisville Urban League. In addition, it is also the consultant's intention to identify and convey key concerns to those in positions of power (including, but not limited to, the Board of Directors; Ben Richmond, the president and Chief Executive Officer of the organization; and the Senior Vice President and Chief Operations Officer, Artie Robertson) so that they may correct any weaknesses and improve the effectiveness of the organization for the future.

# History and Purpose

## History of the Louisville Urban League

The Louisville Urban League has been in existence since 1920 and was incorporated in 1921. It was originally known as The Urban League of Louisville for Social Service Among Negroes and later as The Louisville Branch of the National Urban League before the name was settled to the Louisville Urban League. Within the last year, a strategic assessment was performed on the Louisville Urban League (prior to this current one). As a result of the assessment, it was determined that the Urban League could benefit from the use of a Customer Relationship Management (CRM) system. Research was undertaken and Salesforce seemed to be the most viable solution – it was part of a new movement known as “cloud computing,” which is when resources are stored elsewhere by a vendor, and are accessed through the internet.

Salesforce was tested and implemented for the Louisville Urban League for their Center for Workforce Development with the combined efforts of the University of Louisville's Fall 2009 section of CIS 320 (Systems Analysis and Design), the Spring 2010 section of CIS 420 (Project Development), and the Center for NonProfit Excellence (CNPE). The implementation seems to be a success, with little to no rejection of the system as well as the desired result of increased productivity.

## Purpose of the Louisville Urban League

The purpose of the Louisville Urban League is to act as an equlaizer in the community for people of different races. This is embodied in their mission statement:

*As an active partner, leader and catalyst we will assist African Americans, other minority groups and the disadvantaged attain social and economic equality and stability through direct services and advocacy.1*

The Louisville Urban League is responsible for many different programs to help those in difficult situations in the metropolitan Louisville area. However, since most of Louisville Urban League's service to the community focuses around three main programs, this assessment will be based around those. The Louisville Urban League's main three outlets for contributing help are the Center for Workforce Development Services, the Housing Services and Neighborhood Revitalization Center, and the Youth Development and Education Center.

The Center for Workforce Development is in charge of all things career oriented, from job training and resume building to referrals for interviews. The Center's Making It Work program receives funding from Making Connections Network as well as Louisville Metro in order to help rehabilitate individuals ages 18 and older who have criminal records. The end goal is to provide job training to those individuals and place them in employment positions as well. The Center also puts on many Career Expos to allow job seekers to meet prospective employers, educational opportunities, or just general information about employment. Lastly, the Center operates the “Kentuckiana Works Construction One-Stop Career Center,” a medium in which women and minorities may receive training that will prepare them for employment in the Building Trades and Construction industry.

The Housing Services and Neighborhood Revitalization Center provide help to not only families that require better housing but also families that are experiencing difficulty making payments on their homes. These functions are performed through counseling sessions with specially trained Louisville Urban League staff. In addition to helping specific families and individuals, the Louisville Urban League also organizes REBOUND, Inc. (REBuilding Our Urban Neighborhood Dwellings). The purpose of this organization is to help restore neighborhoods that are victims of the recent foreclosure crisis and to also help low-to-moderate income families locate decent quality housing.

The third center of Louisville Urban League is the Youth Development and Education Center. This program is designated the task of ensuring the best possible upbringing for children that mat be at risk in school. The Youth Development and Education program is part of the NUTILES (National Urban League Incentives to Excel and Succeed) initiative, which attempts to instill seven main values into its participants:

* *Strive for excellence at home, school, and within one's community.*
* *Work within one's neighborhood to further its development.*
* *Respect one's mind and body as well as the minds and bodies of others.*
* *Celebrate one's heritage and culture as well as those of others.*
* *Care for the world's people and environment.*
* *Promote a universal spirit of cooperation and peace.2*

The Youth Development and Education Center hosts many programs such as Project Ready, a program designed to provide leadership development and prepare middle and high school students for college. They also participate in Level II Reading, a No Child Left Behind initiative whose goal is to help students read at their recommended reading level. In addition to programs for children, the Youth Development and Education Center also establishes workshops for parents to attend. The newest program created by the Louisville Urban League to accomplish this goal was the Parent Leadership Academy, which is geared towards stronger involvement of parents in local schools.

# Management and Business Processes.

## Organizational Process 1

One of the main business processes of the Louisville Urban League involves their Center for Workforce Development Services. When clients walk into the Louisville Urban League for career assistance, assessments must be made to discover their skillset. Clients can be paired with counselors or may perform individual work in a computer lab at the Louisville Urban League. Depending on a client's career path, they may need to partake in various workshops or seminars before they are eligible to be referred to an employer for an interview. By finding employment for a diverse group of individuals throughout the Louisville area, the Louisville Urban League directly fulfills its mission statement. This action allows the attainment of both social and economic equality and stability to minorities and the disadvantaged, as steady income streams can accomplish both goals.

## Organizational Process 2

Another main business process of the Louisville Urban League involves the Housing Services and Neighborhood Revitalization Center. When an individual approaches the Louisville Urban League for assistance with housing issues, they will go through the process of meeting with a counselor and discussing possible solutions, as well as increasing their knowledge of finances. On a social basis, this directly correlates with the Louisville Urban League's mission statement as this helps their clients maintain a traditional living arrangement. Additionally, this meets the Louisville Urban League's mission statement indirectly, as clients will begin to realize a growth in their economic status (through meeting with the couselor, the client will learn standard financial knowledge which will have a positive impact on their spending habits in the future).

## Organizational Process 3

A third main business practice that the Louisville Urban League employs is that of the Youth Development and Education Center. In this program, youth are brought into the Louisville Urban League and given a location to use computers for their homework. They are also given assistance on various other school-related tasks such as reading, cultural diversity, community service opportunities, and tutors are made available to them as well. From a strategic standpoint, this program also in aligned with the mission statement of the Louisville Urban League – the youth participating in these programs are increasing their social status through knowledge, which in the future should increase their economic status.

# Current IT Environment

## Hardware

The Louisville Urban League recently upgraded their entire organization's personal computer hardware. The purchase was for roughly $80,000, and with that the Louisville Urban League acquired 68 new desktops, 10 new laptops, and 10 new printers. All hardware was the same make and model to allow standardized repairs if need be. In this manner, the technician maintaining the hardware need only know how to deal with three pieces of equipment – one a desktop, one a laptop, and one a printer. With those three individual models understood, a single technician could maintain much of the information technology infrastructure and this would allow him/her the ability to focus on other more important and more diverse aspects more easily.

As far as servers are concerned, the Louisville Urban League employs used servers (purchased on average every two and a half years). Before the servers are purchased, the IT director researches known issues for servers so that he may choose the least potential hassle for the Louisville Urban League's IT dollar. All servers are backed up once a week – a copy of the data on a drive stays on-site and tape backups are taken off-site. The tape backups are kept for a month, while the drive backups are overwritten every two weeks. In addition, there are two servers that act as constant backups at the Louisville Urban League.

There are only 45 monitors on the Louisville Urban League inventory worksheet that the consulting team was provided.

## Software

All computers use the same image loaded onto the computer. This allows minimal issues if a computer becomes infected by a virus – the director simply re-images the computer and the virus is gone. All software is installed via policy, so based on what credentials the user has, they may or may not have access to software (even though it is still installed on the computer). The computers that were recently purchased were all outfitted with Windows 7 and Microsoft Office 2007, and it is the client's plan to migrate to Microsoft Office 2010 after the first service pack is released. In addition, all computers have the capability to print to PDF files locally.

All of the servers are 64-bit servers, and vary in functionality. Three are operating on Microsoft Windows Server 2008 Standard, two are operating on Microsoft Windows Server 2008 R2 Enterprise, one is operating with ClearOS 5.2, two are running Microsoft Windows Server 2003 Standard, and there are also two VMWare ESX 3.5i servers (the first of which has two Microsoft Server 2008 R2 and one Microsoft Windows Server 2000 VM, and the second of which has two PARKED Microsoft Windows Server 2008 R2 Vms and one PARKED Microsoft Windows Server 2000 VM).

## Staff IT Skills/Training

While the staff at the Louisville Urban League have some IT skills, the organization on the whole still seems to follow closely the messages conveyed by the IT director. The staff seem to know what they need to know to perform their job functions, and (with the exception of a small handful of employees) take Mr. Robertson's word for all other technology applications. This is not necessarily a bad thing to have, as it is important to have someone in the organization that can champion projects and suggest new ideas that most of the employees will accept and go along with on good faith that the director is correct.

## IT Budgeting and Spending

The IT budget for the Louisville Urban League was conveyed to the consulting team as somewhere around $30,000 to $40,000 per year (which equates to anywhere from roughly 1.37% to 1.82% of their annual expenses). Of that amount, it is estimated by Mr. Robertson that $20,000-25,000 is spent on their IT consultant, Mr. Paul Frederick (Trust Tech, LLC.), $5,000 is spent on upgrades of equipment, and the rest of the yearly budget is spent on software. This is an acceptable budget to have allocated to technology. However, spending roughly 1% of the IT budget on a consultant may be considered slightly high for a non-profit organization. But given that the Louisville Urban League is different than most non-profit organizations, it could be said that the IT consultant fees paid are around where they should be.

The main problem with the expenditures is that I sense there may be a pattern of a large expenditure of capital every four or five years (in addition to the standard IT costs). From a cost-accounting perspective, it may appear fine – you spend $80,000 presently, and it gets split up as $20,000 a year for the next four years. But realistically, upgrading all hardware at the same time can be a major drain on funds, and from many standpoints can turn what seems to be a good investment into a bad one.

# Envisioned IT Capabilities

## Leadership’s Vision

The President and CEO of the Louisville Urban League, Mr. Benjamin Richmond, seems to recognize that IT is necessary in any organization in today's world. With Artie's help and suggestions, he is able to influence the organization into taking paths that will allow the Louisville Urban League to be more efficient in what they do on a day-to-day basis. He also seems to have a fairly good grasp of technology on his own, as during the consulting team's interview with him he made mention of several types of new technology. For a non-profit organization, this is a major benefit as most non-profit organizations today have little or no budget for IT, nor a desire to implement any IT in their organization.

## Top 10 Technology Issues

1. Louisville Urban League recently had a tremendous outlay of capital in new technology. While technology can be a very sound investment, and if used correctly can greatly increase returns, large expenditures are not always the best way to upgrade the technology of an organization. It is widely known that hardware only lasts for a certain time, and being that all hardware was bought at the same time, the odds are fairly high that (given a long enough time-frame) all of the equipment will begin failing within a few months of one another.
2. The hard drives in the computers at the Louisville Urban League are much too large in size to be used for the purposes they are used for. Rather than purchasing large drives with brand new computers, perhaps it would be more beneficial to downgrade the size of the hard drives in the machines before the vendor ships them to something smaller (perhaps 80GB).
3. The Louisville Urban League chooses to purchase used servers instead of brand new ones, all while knowing that what is stored on their servers is much more valuable and mission critical than what is on their workstations. This seems to be a backwards thinking solution, as one would expect something so easily replaceable as an imaged hard drive in a desktop would be less important than the data stored on the servers.
4. The Louisville Urban League did not allow the assessment team to access their computers personally, instead substituting their own acquisition of the technology inventory. While it is understandable that those in charge of securing the network will be wary of allowing someone unrestricted access to your network, at the same time this is necessary for a full and unbiased assessment of the technology and organization as a whole. As a result, there are missing factors on the technology inventory that should be there (for instance, there only 45 monitors listed, yet the Louisville Urban League recently purchased 68 desktop computers).
5. The Louisville Urban League participates in an excessive amount of backups, so much so that it is a drain of time and resources. Backing up data once a month is perfectly acceptable, and even once every two weeks would be understandable if a medium-sized amount of data were added weekly. Mr. Robertson estimated that roughly ¾ GB of new or updated data is contributed per week, and he estimates that given two weeks loss of data, it would take the organization around 80 hours to recreate the lost data.
6. The Louisville Urban League performs full backups every week. This is a large waste of time and space, especially given the small amount of new data added weekly.
7. The Louisville Urban League does not utilize virtualization of their desktops, instead relying on imaging the hard drives with the same load. With virtualization, desktops could be reset with a click of a button instead of having to manually rewrite the disk image data onto the drive.
8. At the Louisville Urban League, the IT director is in a sense the IT guru. While this is sometimes necessary, this can also be bad. The person in charge of IT expenditures is also the main person who researches new technology. This can cause a close-minded strategy from an IT standpoint.
9. While the technology upgrades may have been cheaper than they are for corporations, what practical purpose does brand new software/hardware serve? Will 4GB of RAM really increase productivity that much? Does the Louisville Urban League currently use any applications that require even a minimum of 1GB of RAM? Is there really any value in switching from Microsoft Office 2007 to Microsoft Office 2010?
10. The Louisville Urban League does not utilize online backups. For a small amount of money per month, the Louisville Urban League could backup all of their new data daily.

# Closing the Gap

## Recommendation 1

The Louisville Urban League seems to have fairly functional software for each department of their organization. The next logical step would be to implement some form of technology that will allow the systems of each department to interact with one another. This would allow all the staff to track clients within multiple systems, meaning that they could suggest different services in other departments to their clients based on what programs they are currently enrolled in. One way to reach this goal is through the use of an Enterprise Resource Planning (ERP) system. An ERP allows for multiple systems to interact with one another and can port data from one program to another based on business rules defined by the customer and the vendor. While ERPs are very beneficial, they come at a very high price, and there is also a trade-off associated with them. The trade-off is that you must use software that the vendor's system will work with (or you may attempt your own adaptive code on your own). This is not a realistic solution for the Louisville Urban League due to its extremely high cost, where with implementation the organization could be spending upwards of $1 million in one year.

## Recommendation 2

The Louisville Urban League could utilize Enterprise Application Integration (EAI), which is the use of several types of bridges (both software and hardware) to allow for the formation of middleware for systems integration. Middleware is a solution that allows for the integration of systems based on ports that are built between each one. While the middleware solutions must be purchased separately, they give the user the flexibility to continue to use multiple different programs. But a big downside is that middleware must be purchased or built for each individual connection between different systems.

## Recommendation 3

The Louisville Urban League could expand upon Salesforce, adding additional tables for other programs that the organization hosts. Then with the addition of checkboxes or dropboxes, the end-user of Salesforce would be able to cross-list clients in the Salesforce system for multiple programs. While this would require the Louisville Urban League to purchase licenses for Salesforce (as this solution would more than likely place them well over the 10 users that Salesforce allows for) it is still the cheapest solution for having a more integrated system.

## Recommendation 4

The Louisville Urban League does need not backup so often, and definitely does not need a full backing up of all data so often. If the organization still feels it so necessary to backup weekly, then perhaps an online solution for backing up would be best. Many online backup providers offer discounts to non-profit organizations. Some possible solutions could be MozyPro, Carbonite, Jungle Disk, or CloudBerry Backup. These solutions would cut monthly backup costs to roughly $5, and would allow data to be automatically redundantly stored off-site and easily accessible if need be. They also archive older versions of the backups.

# Conclusions

The Louisville Urban League is definitely a leader in the technology field as far as non-profits are situated. With an IT director that can champion projects and a CEO who is believes fully in the ability of the IT director to choose the best solution, the Louisville Urban League has the right mindset on technology relative to their business goals. But with being a leader comes the responsibility of having to make bold decisions without having a basis of how well you're performing. The Louisville Urban League is making strides to greatly influence the smaller and less-IT driven non-profits in the metropolitan area, and that is something to be proud of. But the question arises from time to time of where to go from here, and that is where this particular organization is located.

Regarding the want for an ERP (or a similar system), the Louisville Urban League would be best to utilize Salesforce as much as they possibly can. Expand the database and allow for more programs to be entered into it, and this will allow you to cross-sell, so to speak, as well as track clients throughout the organization instead of throughout a single center. While the Louisville Urban League would need to purchase licenses to go over the 10 that are allocated for free, the cost of all of the licenses would be minute compared to the amount of capital that would be needed for any other solution offering collaboration between all of the systems that the Louisville Urban League employs.

As far as other general suggestions, backing up so often does not seem necessary, especially with all of the redundancy already built into the hardware at the Louisville Urban League. If you still absolutely have a desire to backup so often, perhaps a cheaper and automatic option would be cheaper (such as one of the online solutions suggested).

For the next upgrade of hardware, I would suggest to build in rolling upgrades. Instead of spending $80,000 every four years, spend $20,000 each year on new hardware. Through this, if there are ever any bugs in a computer that do not come to light until some time down the road, you don't have your entire batch of hardware going bad simultaneously, and instead only ¼ of your hardware would be affected.

# Appendix A

## Basis of Analysis

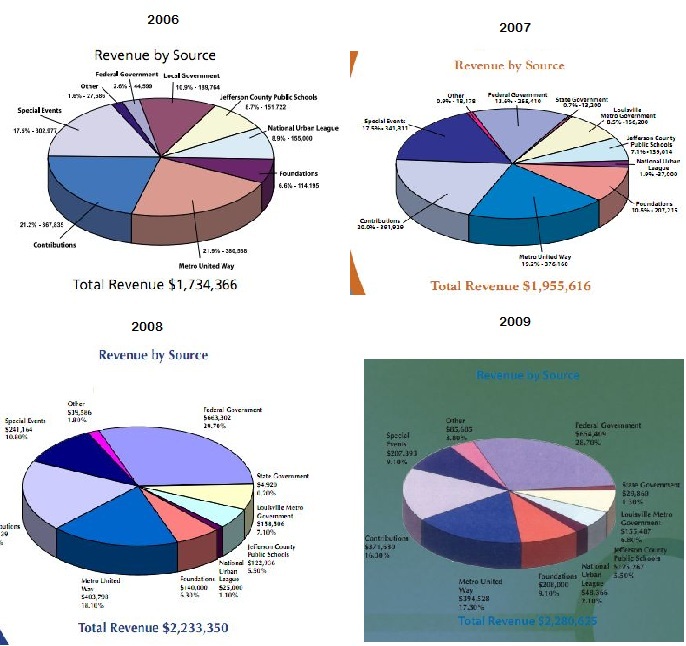
The Louisville Urban League's mission is to help minorities gain equal economic and social status in the the city of Louisville. They perform this through cost leadership.

Porter's Five Forces:

* New Entrants – There is not really much of a market for wanting to help others and making small margins doing so, so little to no threat.
* Substitution – Little, short of the unemployment office. There are some organizations that perform similar functions, but not enough where it would cause any issues. Additionally, people who need the sort of help that the Urban League offers don't usually shop around, they want to go where they will get results (and they assume the best about the name that they recognize).
* Intra-Industry Competition – Little. With the exception of the unemployment office, there are not many other options when you need money and are unemployed. And as for losing a house, I know of very few organizations that can help with that excluding the Louisville Urban League.
* Suppliers – Funding is a very competitive market, and the funds are drying up. There are few suppliers, and the demand is high. Louisville Urban League cannot go elsewhere.
* Customers – The base is fairly large, and the switching costs are high because there are not many options out there for those who need help such as their clients do.

The Louisville Urban League has been gaining less and less money per year in funding, and as such has had less to spend (as shown in the pie charts on the next page).

As you can see, from 2006 to 2007 the Urban League recognized growth in funds of roughly 12.8%, from 2007 to 2008 they realized growth of 14.2%, then from 2008 to 2009 they only gained slightly over 2% growth. The Urban League is looking for new ways to squeeze more value out of their funding. Unfortunately, Artie Robertson keeps purchasing pricey new technology in the hopes that it will allow them to stretch their funding further. However, spending money on new technology is useless without a long-term plan, and Mr. Robertson does not seem to have a plan other than an ERP in the future. While that is not a bad idea (for a normal business), there is no way that the Urban League will ever be able to afford one (especially so if Mr. Robertson continues to spend, spend, spend instead of saving). The Urban League does not make enough funding in a year to be able to purchase an ERP, much less keep it operating constantly.



Pretty much done on increasing their revenue, and hence their expenses cannot grow so they cannot spend any more on IT.

## Top 10 Technology Issues

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## Strategic Planning/Visioning Documents

None available.

## IT Budget/Spending Documents

The Louisville Urban League did not have documents supporting their budget, and instead gave us rough estimates.

# 9. Appendix B

## Technology Inventory

The attached spreadsheet documents all of the technology inventory that was provided to the consulting team.

### 10. Citations

1: *Louisville Urban League 2009 Annual Report*, Pg. 2

*2: Louisville Urban League 2009 Annual Report, Pg. 6*