

**Strategic Assessment**

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Table of Contents

[1. Executive Summary 3](#_Toc279479683)

[2. History and Purpose 4](#_Toc279479684)

[2.1 History of Louisville Urban League 4](#_Toc279479685)

[2.2 Purpose of Louisville Urban League 5](#_Toc279479686)

[3. Management and Business Processes 6](#_Toc279479687)

[3.1 Housing Services and Revitalization 6](#_Toc279479688)

[3.2 Youth Development and Education 7](#_Toc279479689)

[3.3 Center for Workforce Development 8](#_Toc279479690)

[3.4 Miscellaneous Services and Programs 9](#_Toc279479691)

[3.5 Management and Employee Structure 9](#_Toc279479692)

[4. Current IT Environment 9](#_Toc279479693)

[4.1 Workstation, Server Hardware and Network 10](#_Toc279479694)

[4.2 Software 12](#_Toc279479695)

[4.3 Security 14](#_Toc279479696)

[4.4 Website 15](#_Toc279479697)

[4.5 Staff IT Skills/Training 16](#_Toc279479698)

[4.6 IT Budgeting and Spending 17](#_Toc279479699)

[5. Envisioned IT Capabilities 20](#_Toc279479700)

[5.1 Leadership’s Vision 20](#_Toc279479701)

[5.2 Top 10 Technology Issues 21](#_Toc279479702)

[6. Closing the Gap 23](#_Toc279479703)

[6.1 Develop a plan to consolidate data resources for all three business areas. 24](#_Toc279479704)

[6.2 ERP Alternative: MiddleWare 26](#_Toc279479705)

[6.3 Continue Reviewing Backup Plans 27](#_Toc279479706)

[6.4 Review Purchase Used Server Hardware. 28](#_Toc279479707)

[7. Conclusion 29](#_Toc279479708)

[8. Appendices 32](#_Toc279479709)

[8.1 Basis of Analysis (Appendix A) 32](#_Toc279479710)

[8.1.1 Environment 32](#_Toc279479711)

[8.1.2 Control Systems 33](#_Toc279479712)

[8.1.3 Organizational Structure 34](#_Toc279479713)

[8.1.4 Bargaining Power of Customers 35](#_Toc279479714)

[8.1.5 Bargaining Power of Suppliers 35](#_Toc279479715)

[8.1.6 Threat of New Entrants 36](#_Toc279479716)

[8.1.7 Threat of Substitute Products 36](#_Toc279479717)

[8.1.8 Intra- Industry Competition 37](#_Toc279479718)

[8.2 Technology Inventory (Appendix B) 38](#_Toc279479719)

[8.3 IT Budget and Spending Documents (Appendix C) 38](#_Toc279479720)

[8.4 Vision Document (Appendix D) 39](#_Toc279479721)

[8.4.1 Introduction 39](#_Toc279479722)

[8.4.2 Positioning 40](#_Toc279479723)

[8.4.3 Stakeholder and User Descriptions 41](#_Toc279479724)

[8.4.4 User Summary 41](#_Toc279479725)

[8.4.5 User Environment 41](#_Toc279479726)

[8.4.6 Summary of Key Stakeholder or User Needs 41](#_Toc279479728)

[8.4.7 Alternatives and Competition 42](#_Toc279479729)

[8.4.8 Product Overview 42](#_Toc279479730)

[8.4.9 Product Features 43](#_Toc279479731)

[8.4.10 Other Product Requirements 43](#_Toc279479732)

[8.5 SWOT Analysis and Top Ten Technology issues (Appendix E) 43](#_Toc279479733)

[8.5.1 Strengths: 43](#_Toc279479734)

[8.5.2 Weaknesses: 44](#_Toc279479735)

[8.5.3 Opportunities: 44](#_Toc279479736)

[8.5.4 Threats: 44](#_Toc279479737)

# Executive Summary

This report contains an analysis of the current state of Louisville Urban League’s IT systems. In addition, this report contains a summary of Louisville Urban League’s business process as laid out from interviews conducted through group analysis. Following the current state of Louisville Urban League’s IT systems is the future state as derived from group meetings and analysis with Artie Robertson, CPA and Benjamin Richmond, Louisville Urban League’s President. The gap analysis section ties the current and future states of Louisville Urban League’s together by mentioning ways Louisville Urban League’s IT can meet the future needs of the company.

Upon initial interviews with Artie Robertson at Louisville Urban League it was determined that the organization had few specific actual technology problems. Couple this with a previous Strategic assessment and the Salesforce implementation of Workforce Development project through Dr. Strickland’s Center it was clear that Louisville Urban League was “squared away” with their technology. Therefore, the plan was to gather as much information from a company culture, structure and strategic point of view to see what it would take to get them to the “next evolutionary step.” This assessment possibly could assist Louisville Urban League in determining organizational IT strategy towards the future. With a well designed technology plan already in place, the future IT concerns and needs of Louisville Urban League can be more easily attained. Subsequently, the IT plan should assist staff members in attaining funding for future donations. The direct goal of the IT plan should be to assist Louisville Urban League in serving more clients, reducing cost per client, and fulfilling more client requests.

This report is one of three being prepared. Although it is written as objectively as possible it will nonetheless contain the writer’s viewpoint on Louisville Urban League’s IT structure. Objectivity is sought in every section of the document and, coupled with the other two reports, will create an accurate and fair report for Louisville Urban League to create sound IT policy. (Gareth Morgan, Images of an Organization, Chapter 4)

Since Louisville Urban League is in the unique position of being “ahead of the curve” at present this report is serving more as an update from the last strategic assessment with the goal of “sharpening of the tools” already in place plus any uncovering of new strategies. This being said, a full assessment is still being written for those who may become involved not familiar with Louisville Urban League’s business for future reference of current status of IT infrastructure and strategy.

# History and Purpose

How did Louisville Urban League reach their current business state, and what does the organization’s history indicate of Louisville Urban League future goals? This section provides a brief history and purpose of Louisville Urban League. The purpose of this section is to gain insight into the culture and value surrounding Louisville Urban League.

## History of Louisville Urban League

Louisville Urban League was founded on the premise of helping disadvantaged individuals attain economic and social awareness. They were founded in 1921 when a group of African American leaders sought to give these individuals the opportunity to gain social and economic equality. Louisville Urban League is a branch of the National Urban League which was founded in 1910 in response to the large amount of African Americans moving from the south into more urban areas. Based on this the National Urban League, and subsequently the Louisville Urban League, sought to develop and instill the skills and knowledge needed for minorities and the disadvantaged become socially and economically equal to others in the communities they live.

Over the years Louisville Urban League has continued to grow in Louisville through its leaders in the past. It has continued to forge a positive relationship with the surrounding community while assisting the disadvantaged and minorities in Louisville through its Workforce Development Programs, Youth programs, housing assistance and computer training.

## Purpose of Louisville Urban League

Mission:

Louisville Urban League is a leader of community involvement to energize and assist African Americans, other minority groups and the disadvantaged become economically independent, socially aware and equal to other community members. Through Louisville Urban League’s services and assistance individuals increase their self-confidence. This enables awareness to sustain, enrich their own life in conjunction to the lives of their family and those with whom they interact everyday.

Louisville Urban League is currently lead by Mr. Benjamin Richmond and staffed by volunteers and full-time employees. *“The Louisville Urban League has worked diligently to mitigate the negative and capitalize on the positive impacts of these changes. We are pleased that LUL has had a positive impact on many, due to the continued financial support of our donors, and unwavering commitment of our volunteers. The League continues to be a driving force in the areas of workforce development, housing and home ownership, youth development and education, and diversity and inclusion.”*

The services offered by Louisville Urban League to achieve the goals previously quoted are youth programs that help young children become involved in the community positively, also develop into high achieving students and productive participants of family in their homes. The program tracks child development at school through “KidTrax,” through JCPS, (<http://www.nfocus.com/orgKids.aspx>) that reports directly back to the schools their development. Urban League aids children in becoming confident in their work to achieve high self-esteem.

For adults Louisville Urban League offers housing programs that helps the individuals fix credit problems, home ownership and mortgages (SalesForce), credit counseling (Counselor Max Software) and issues with renting a place to live. Louisville Urban League also offers assistance in the form of workshops to help obtains jobs through resume development, dressing for an interview and job training.

# Management and Business Processes

In this section, the current state of Louisville Urban League’s management and business processes is assessed. This section explains the processes of how Louisville Urban League achieves their mission of services and education to promote minority and disadvantaged services in the community. This will help gain insight into how they serve the community and obtain funding for future projects through clarity of financial and strategic goals.

## Housing Services and Revitalization

Louisville Urban League provides services to those in low to mid income levels gain knowledge on how to improve their home and ultimately their neighborhoods. This assistance is geared towards establishing a better living environment for families to live and raise their children. Furthermore, due to the economic downturn recently this service has been especially helpful to those not knowing how to manage financial crisis when faced job loss or loss of income.

Programs that have been established by Louisville Urban League include educating individuals on how to manage their money to become eligible to rent or purchase a home. In addition they also help those who may face losing their homes meet mortgage demands through credit counseling and budget planning.

The neighborhood revitalization helps neighborhoods and homeowners improve either neglected or abandoned homes become more viable for ownership and living.

As of 2010 Louisville Urban League served 2,142 people in this specific area of assistance with 30 individuals improving their credit scores, 80 individuals being referred to landlords, 19 individuals purchasing homes at a value of $1.24 million, 128 delinquencies resolved saving $11.7 million in terms of value of homes saved. ([www.lul.org](http://www.lul.org/))

## Youth Development and Education

Louisville Urban League secondary services includes professional guidance to school aged children to help develop life skills in order to prepare them for future employment through education and value based incentives. These values, such as respect for one’s family, community and the environment around them promote cooperation. A system called NULITES at Louisville Urban League (National Urban League Incentives to Excel).

Some of the activities that are in place to instruct and aid the children in learning these values are academic achievement programs through the local community and schools, reading programs, youth lead sports events and a parent leadership academy to help build strong parent involvement.

Through these programs Louisville Urban League assisted 302 children and all either advanced to the next grade level while 27 advanced to high school, 8 graduated high school, 3went on to college and 3 earned scholarships. ([www.lul.org](http://www.lul.org/))

Currently, Louisville Urban League utilizes a software program called KidTrax (<http://www.nfocus.com/orgKids.aspx>) to assist with data collection to get the numbers above.

## Center for Workforce Development

Louisville Urban League’s primary goal of service is to assist those in the community, who are eligible, with professional assistance in finding gainful employment. Some of the program’s attributes include giving the individual guidance where they had not in the past, be it from lack of structured family support, criminal past or the absence of experience or skill needed to obtain a job.

Louisville Urban League also conducts career expos, a skilled trade workshop to help individuals obtain skills for the construction trade through agencies who have partnered with Louisville Urban League. Job search assistance, skills training, career counseling, referrals and placements and the correlating number during each year is how Louisville Urban League gets its funding.

As of 2010 Louisville Urban League assisted 4330 individuals at career expos, 2110 individuals came to the League for services, 725 received skills training, 538 received career counseling and 264 counselor assisted individuals were referred to employment and of those 238 received either full or part-time employment. 96% of the employers who get referred employees report satisfactory results. ([www.lul.org](http://www.lul.org/))

## Miscellaneous Services and Programs

Louisville Urban League also assists eligible individuals who have trouble maintaining energy needs during the winter months through LG&E (assisted 1,046 families and distributed $190, 583.00 in funds), assist individuals with income tax returns (1,050 tax returns filed at an estimated $63,000 in tax preparation fee services saved), assisted 529 individuals in getting uninsured screening to help get government sponsored assistance insurance or other low cost insurance. ([www.lul.org](http://www.lul.org/))

## Management and Employee Structure

Louisville Urban League’s structure of employees is in alignment with the structure of the services. Each of the services, Youth Services, Housing Services or Workforce Development is staffed with instructors and counselors who report to directors to facilitate and distribute services to individuals. Urban League also has an administrative group of people with whom the directors report and ultimately a board of outside volunteers who are active in community business to help guide Louisville Urban League in certain areas of expertise. This is a structure based on function of each person contributing in a full-time, part-time or voluntarily basis to help Louisville Urban League seek and accrue funding for resources to conduct the business of the three sections of service.

# Current IT Environment

In this section, the current state of Louisville Urban League’s IT is analyzed. This assessment is based both on the inventory analysis and interviews with Mr. Artie Robertson, Finance and Operations, along with Mr. Benjamin Richmond, CEO. This section contains an overview of Louisville Urban League’s IT structure to help gain perspective to make a recommendation for change or upgrade needed to help them take the next step to grow the organizations business.

All of the following sections are geared towards building an e-business infrastructure that:

1. Is a balance of structure and flexibility
2. Harnesses, safeguards, manages and permits use of information in ways that are fast, safe and simple.
3. Comprises of technology, utilities (Tools), and services needed to enable an uninterrupted flow of commerce.

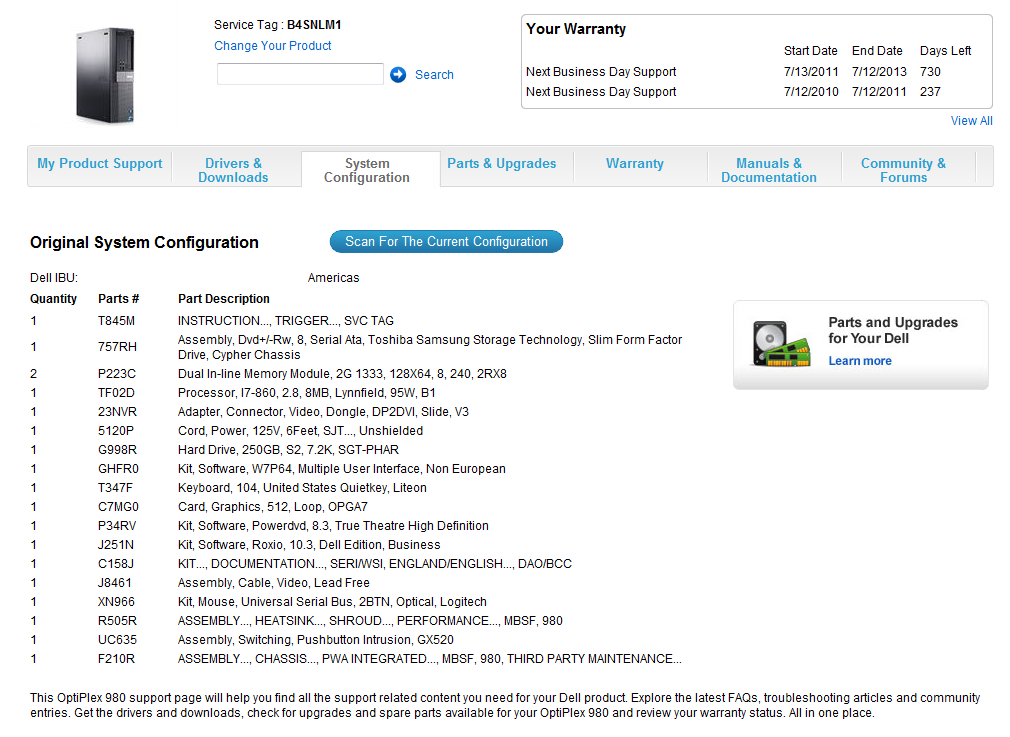
(Kalakota: e-business 2.0, Roadmap for Success)

## Workstation, Server Hardware and Network

Louisville Urban League recently went through a large upgrade that included an $80,000 expenditure on new PCs. Each personal computer is used to help employees either conduct the day-to-day tasks of Louisville Urban League or assist their clients. Those being assisted use the computers for tasks such as resume writing, job hunting through the internet, home mortgage information, credit analysis, homework for youth services…just to name a few.

All machines are recently purchase Dell machines with Windows 7, 64 bit. During the capital expenditure reported for the recent upgrade. There are 68 Desktops, 10 laptops on two floors all connected via hardwire connection, no wireless.

Since each machine is relatively the same a universal profile of the Louisville Urban League’s desktop computers is easy to ascertain. Mr. Robertson already has an inventory of each machine with the Dell Service Tag number. An advantage to using Dell is inventory. All the inquiring person needs to know is the service tag number, go to Dell’s website and all the updated information is presented.



From here warranty information, all hardware information, new drivers, manual and product support can be gathered. From a technical point of view this make support very easy and uniform so any technician or outsider who needs this information can pickup from where the last person left off. There are also eleven HP notebooks which are all the same too.

Since every machine at Louisville Urban League deploys software via Microsoft Group Policy then there is a very tightly held standard of software deployment. Users do not have administrative access to the machines therefore independent software installation could be prevented. Based on these facts a “snapshot” software inventory is accompanied with this report. One machine was inventoried and all machines serial numbers are provided. We were able to get a high-level inventory of the machines, servers and software.

There are approximately fourteen servers with supporting hardware that services Louisville Urban League’s functions such as e-mail, file services, security gateway services and backup roles for redundancy. The servers primarily operate in a Windows Server 2008 environment with Distributed Files Services, RAID 5 capability and UPS power backup to each server with redundant power supplies attached to separate UPS backups. The firewall which protects the internal network is ClearOS or Microsoft ISA server for protection of the Exchange Servers.

The Urban league operates with two internet connections. Their primary is Insight Business operating at 2Mbit/s up and 1.5 down and separate DSL connection for visitors who bring in PCs to physically separate them so that they do not have access to the internal network to thwart viruses or general network “snooping.”

The use of internet capable “smart-phones” is also implemented by some IT staff. These devices were not inventoried or counted but are noted because they do impact network activity when used to retrieve e-mail. Microsoft Exchange is fully capable of supporting many smart-phones including iPhones, Blackberries and HTC Droids.

<http://technet.microsoft.com/en-us/library/bb232162(EXCHG.80).aspx>

## Software

All workstation installs are imaged PCs. If PCs become corrupted through virus or hardware failure then they are re-imaged. No questions asked and data must be housed on server or USB key.

Everyone’s software and rights to machines is distributed via Group Policies. No specific customized software is installed on machines. Software is distributed based on what is assigned to the user no matter where they login. If that user is someone being assisted then they are given a specific user-id that only allows the user access to do specific tasks such as browse the internet, write a document in Word or perform home budgets in Excel.

For example, the lab has two logins user-ids and no access to files on hard drive. Users have to carry CD or USB key for personal files. Also have access to one universal “share” that they can store files if there is no access to a USB key or CD. Users, both employees and those who come in to take advantage of services, have no administrative rights to machines, nothing locally is stored. Again, machines are re-imaged if they become corrupted by virus or hardware failure. There is an attempt to fix the machine but if the problem cannot be resolved with troubleshooting methods then the machine will be re-imaged. The culture has been adapted and communicated by IT to represent a very efficient and smooth running environment.

As mentioned before Louisville Urban League is primarily a Microsoft networking and application environment. All machines have Windows 7, 64 bit from their recent upgrade. Servers are mostly Windows Server 2008, Exchange, ISA Server and ClearOS.

The business units use KidTrax for Youth Development to track children’s progress in education to report to entities such as JCPS. The Housing Development section uses CounselorMax, a software pack geared towards client management of those seeking assistance for their home, rental or mortgage needs. It is a module based software package that helps facilitate reporting to outside entities for funding and assessment. The Workforce Development section recently started using SalesForce, through University of Louisville and Dr. Strickland’s center, to help guide those needing assistance in being placed in a job or acquiring job skills to obtain employment.

There are a few users who have the need for Adobe Creative Suite for desktop publishing and photo editing purposes. This was the only custom piece of software on an individual person’s machine that may be needed.

## Security

Louisville Urban League is very security conscious. Establishment of security facilities and security architectures are highly valued. The following will support the preceding statements.

Virus Scan software is Symantec Corporate Edition which allows for securing workstations, servers from malicious software and virus attacks. It has the ability to rollout updates from a centralized server to LAN workstations without touching the internet for updates.

Strong Passwords are in effect at Louisville Urban League and users are required to change their passwords every sixty days. Furthermore, they cannot use the previous five passwords.

When machines are redeployed outside the organization for donation the hard drives are wiped with a Department of Defense wipe or physically destroyed depending on the usability of the drive.

There are edge network servers, ISA Server, for Microsoft Exchange to prevent user and e-mail data from being transparent to the internet. The network is protected with ClearOS which allows for content filters, NAT, logging, access control and intrusion detection to the network. “*ClearOS is a powerful network and gateway server designed for small organizations and distributed environments.  Though ClearOS comes with an extensive list of features  and integrated services the solution is easy to configure thanks to the intuitive web-based interface.”* [*(www.clearos.com)*](http://www.clearfoundation.com/Software/overview.html)The organization also conducts network penetration tests to ensure there are no hidden or open ports that may allow malicious software to exploit.

Louisville Urban League also is implementing Distributed File System technology by Microsoft available in their server systems. The Distributed File System (DFS) technologies in Windows Server 2003 R2 offer wide area network (WAN)-friendly replication as well as simplified, fault-tolerant access to geographically dispersed files. It should be noted that the organization may implement a co-location for backups to another server using DFS. (<http://www.microsoft.com/windowsserversystem/dfs/default.mspx>)

Backup is a large portion of Louisville Urban League strategy of fault tolerance. Tape backup are also performed every week and some sets of tapes are stored offsite. The financial system is also backed up to tape and also backed up to disk on another server where it is also backed up to tape. (Louis Fried, Managing Information Technology in Turbulent Times, Pages 218 – 220)

## Website

The Louisville Urban League’s website is [www.lul.org](http://www.lul.org). It is a menu driven website with information on the organization, staff, chairpersons, history and mission of the organization. The website informative and is designed to create a rich customer experience. They are using e-business design to leverage the use of the internet in order to drive attention and donations in order to achieve higher donations to serve their clients.

Examples that support this are links to:

* Donations
* Getting involved through volunteering
* Latest News
* Financial reports
* Events

All of these examples support e-business designs that can make your client’s service experiences unique and memorable. It creates a rich customer experience and is structured for efficiency.

One area not available on the website is the ability to submit for volunteering online. However, information is clear on how to contact Louisville Urban League to volunteer for a program. This area may be of strategic importance to draw more volunteers or signup for help in the future.

Funds received through the website are entered manually into accounting systems once statements are received from the banking entity performing the transaction.

(Kalakota: e-business 2.0, Roadmap for Success)

## Staff IT Skills/Training

Artie Robertson is the primary source for IT resources at Louisville Urban League. He is knowledgeable and highly versed on all the aspects of how information flows in and out of Louisville Urban League. Upon interview Artie could easily identify, describe and support any functions related to the IT structure within the organization.

Mr. Robertson is supported by an outside IT consultant, Paul Frederick a Louisville Speed School student, who serves as a technical contact when Mr. Robertson needs help. Since Mr. Robertson relies on Mr. Frederick and trusts his judgment. Mr. Frederick’s qualifications were not reviewed for this analysis but he was made available if there were questions.

Inside employees are only trained on the specific products needed for their jobs. Any IT expertise needed is referred to Artie or Paul. Staffers usually already have basic PC skills when entering the organization. The organization, a functional organization, users have clear roles defined by the organization and very little specialized training seemed to be an issue.

(Louis Fried, Managing Information Technology in Turbulent Times, Contractors and Training)

## IT Budgeting and Spending

Louisville Urban League’s budget is approximately $30,000 - $40,000 per year depending on the needs of the organization. Louisville Urban League recently purchased 69 desktop machines and 11 notebooks to update all of their machines to a standard machine type and newer platform, at a cost of about $80,000. These replaced older machines that had become too expensive to support due to hardware failure, outdated software/hardware through obsolescence. This expenditure was not a difficult choice because the clients at Louisville Urban League use the technology to as part of the training for job placement, tracking of student progress for school work, mortgage and budget research or planning for Home Assistance programs. Justification was not an issue according to Mr. Robertson.

Steps that have been taking to reduce spending at Louisville Urban League are as follows: Fifty percent of support that is done by outside contractors can be done remotely which is a significant savings for the company. All printing is tracked to source for costing to individual departments. Every computer has Adobe Acrobat to facilitate creating and storing of documents without the need of printing. This is done by utilizing multi-function printer/copiers which have the ability to scan and e-mail document to users.

Licensing of software is done through **TechSoup.org** which allows The Urban League to take advantage of its 501C3 status for pricing of software. This allows them to acquire software for “pennies on the dollar” of what a normal “for profit” organization would pay. This allows Louisville Urban League extend its reach with more software to conduct assistance for less expenditure.

With this in mind, Louisville Urban League has maintained its gross receipts in 2007 from $2,303,918 to $2,374,781 in 2008 and finally to $2,329,156 in 2009 from IRS 990 forms which shows stable numbers. Only three years of 990 form activity were readily available for this report.

Also, 2003 – 2009 annual reports were available from Louisville Urban League’s website which showed annual total revenue of:

2004: $3,582,416

2005: $2,837,726

2006: $1,734,366

2007: $1,955,616

2008: $2,233,350

2009: $2,280,625

Although the numbers fell between 2004 - 2006 it must be noted this may be a result of the overall economic environment. Based on this very-short term of revenue records this assessment is not assuming poor performance of Louisville Urban League. In fact, stability and resilience in the current economic environment indicates strength. However, using a five year future plan Urban League can help build a “buffer” and secure growth through new donors and volunteers for the future. (Gareth Morgan, Images of Organization, Dealing with Uncertainties, page 178)

No formal budget was documented during analysis. Numbers were provided by Mr. Robertson through interview. However, using last year’s Annual Report (2009) under the section Management and General, which 8.20% of total spending, if Mr. Robertson uses about $35,000 per year, as illustrated earlier in this section, then this figures to be about 20% of Management and General’s Expenses and 1.6% of total expenses. From here, if these percentages are used in the future then a long-term budget can be created. (Page 11, LUL Annual Report)



# Envisioned IT Capabilities

Louisville Urban League should take great pride in the IT investment they have made so far. Organizations of its similar size, non-profit and for-profit, would be considered in good shape strategically, infrastructure and budgetary. However, any organization can benefit from self-evaluation to best determine if improvement is needed. The best times, those of stability and prosperity, allows for reflection and evaluation to see if any processes can be re-defined, streamlined or completely re-engineered. (Michael Hammer, The Reengineering Revolution, James I. Cash, page 401 Building the Information Age Organization)

## Leadership’s Vision

Through interviews it was learned from Mr. Robertson that Louisville Urban League wanted to review their IT infrastructures and technologies since the last strategic assessment. It was evident that workstation, server and networking items were not the focus of the strategic assessment. Mr. Robertson was very clear that they seemed to be getting along well with the “technology” only parts of Louisville Urban League. Through his tacit knowledge of the entire system it was ascertained that perhaps a different approach may be needed.

The next step was to interview the President of Louisville Urban League, Benjamin Richmond. After interviewing Mr. Richmond a strategic goal could be derived as to the direction Louisville Urban League might want to take over the next few years. Mr. Richmond illustrated that it might be helpful if all three of their software systems were able to “talk to each other” so that that data potentially wasn’t entered in three or more different places. This need highlighted may help Louisville Urban League better report for financial, budgeting and resource allocation if these systems were able to interface, or share, the data in a uniform manner. Right now, these systems have to be manually evaluated.

It is understood that these three business units have separate allocations of funds and specific needs developed and catered to the type of clientele being helped.

(Louis Fried, Managing Information in Turbulent Times, Taking Managements View, page 262)

## Top 10 Technology Issues

Following is a list of the technology issues as interpreted through interviews conducted and data gathered over the last six weeks. These are suggestions that were either discovered during interviewing Mr. Robertson, Mr. Richmond or through evaluation of Louisville Urban League as experienced from the interviewer. There order of the list somewhat indicates the “weight” of importance of the issue.

1. No concrete strategic plan to enable all three business areas to store, retrieve and talk to each other to streamline processes and reduce data entry redundancy. This is the strategic problem, not the technical part of the problem, addressed by leadership.
2. No centralized system or consolidated data. Possibly, extend the previous ***SalesForce*** implementation to include other business areas. Three systems for three business units. Counselor Max, KidTrax, Sales Force, etc. The technical portion of the data centralization process.
3. No way of cross-function data aggregation: This ability enables Louisville Urban League to see if clients eligible for more than one service. Also, Louisville Urban League extends their reach to clients outside their network? Using web technologies, like SalesForce they could reach clients (who already have computer access through schools, libraries, etc) outside their “brick-and-mortar” environment. Enabling Louisville Urban League to serve more clients, even through the web, could aid in financial funding.
4. Alternate Backup Sources: Evaluate if backup methods is cost effective. Mr. Robertson suggested the company may use USB hard drives to help reduce cost to tape of backups. Suggested co-location.
5. Alternate to full backups: Incremental instead of full backups. Tape backups could use fewer tapes and less time.
6. Review hardware purchasing of used server hardware. Since redundancy and backup is a high priority to the organization perhaps shifting some expenses from backup to newer servers with a longer warranty. Example: Used server: 2-4 years lifespan versus New Server: 4 – 5 year lifespan. The costs of building and switchover (labor and downtime) from one server to another more frequently probably negates the savings of used servers. Furthermore, improvement in power saving features of servers possibly could help offset these costs.
7. Utilize a “DMZ” networking for “visiting” users who need internet access instead of having two network data connections to reduce costs. ClearOS has DMZ capabilities which allows for physical and logical isolation of network nodes. Instead of purchasing two data lines entertain the thought of getting higher bandwidth, speed and uptime guarantees and build DMZ into the network. Also adds layer of security and Web Facing servers can be “housed” in this DMZ environment so not to expose the internal network.
8. Client virtualization for thin client instead of independent running machines. Reduces utility and resources costs.
9. Mr. Robertson alluded at possibly, in the future, bringing redundant servers into a virtual server environment.
10. Outside users/auditors should sign confidentiality agreements binding them, legally, to Louisville Urban League standards. This creates accountability while allowing objectivity and an open environment to users and outside contractors alike.

# Closing the Gap

The following section provides recommendations as to how Louisville Urban League might accomplish the leadership’s vision. This section concentrates on targeting the most outstanding Information Systems issues mentioned in the previous sections of this report. Louisville Urban League leadership and IT are in very good shape but in order to expand on the vision a system may need to be put in place that would enable the organization to save time, resources and increase throughput of clients. Increasing the number of clients served should proportionately have positive increases in funding for Louisville Urban League. Section 6.1 is a long term strategic recommendation whereas 6.2 and 6.3 are short terms recommendations that are building blocks to re-enforce the long term recommendation.

(Louis Fried, Managing Information Technology in Turbulent Times, pages 83 – 97, aligning technology strategy with business needs)

## Develop a plan to consolidate data resources for all three business areas.

Mr. Richmond’s insight helped expose a need to develop an IT plan for Louisville Urban League should be formulated for the next five years which may involve consolidation of the three business systems data in a central database. An ERP or CRM type of solution may present itself as a viable option but coordination between the three business units is essential. ERP Definition: Enterprise Resource Planning, Integration of all departments and functions across a company onto a single computer system that can serve all those different departments’ particular needs.) <http://www.cio.com/article/40323/ERP_Definition_and_Solutions>

Representation that all three areas of Louisville Urban League (Housing, Workforce Development and Youth Services) is very important so that everyone’s data needs are being addressed from each department of the organization. From this a technology plan can be organized in which department managers should list their requirements in priority of importance so that all pertinent data is included in the plan. The plan must be prepared, blueprinted, piloted and finally implemented with a follow-up assessment.

(Kalakota: e-business 2.0, Roadmap for Success, page 262)

Since Workforce Development has already gone through this development then Louisville Urban League could perhaps use their technology transformation as a “template” of execution. A precaution should be noted that since each area services different needs. A simple “overlay” of the applied template will not guarantee success. Housing and Youth Services will need to still address its own processes and document them fully in order to fully expose the data needs.

(Louis Fried, Managing Information Technology in Turbulent Times, page 104, Staff Work Habits Will Change)

Once departments have agreed on documentation of processes, those developed and documented in cooperation with IT and others involved, then Louisville Urban League’s Leadership would be in a position to review those documented business processes to make sure that IT is being properly leveraged. This point of “leverage” could be increasing the number of people being served, streamlining data so it is easier to enter data in one place and then in turn quicker to report from that data on all services provided by Louisville Urban League. Not just reporting from the three separate services and then “rolling up” the data into a separate system for summary reports. From here leadership much manage the strategic thinking, process re-engineering, implementation complexity and transition.

(Kalakota: e-business 2.0, Roadmap for Success, page 263)

Since Louisville Urban League is technologically “ahead of the curve” then if a successful implementation of an ERP type of solution were to become a reality, this leveraging of IT may enable Louisville Urban League to look outwardly to service its clients. These leverages could take shape as helping other Urban League branches or giving clients easier access to services through virtual environments without having to always having to visit urban league. It is understood that most Urban League clients probably don’t have easy access to computers but most, particularly kids, do have access at school. Partnering with JCPS to port applications to school computers might be a suggested benefit, thereby reaching more clients.

(Kalakota: e-business 2.0, Roadmap for Success, Benefits of ERP, page 251, multi-site, integrating a broad range of disparate technologies)

Louisville Urban League may want to also consider expanding their successful implementation of the Workforce Development through utilization of Salesforce into Youth Services and Housing. This may a logical and natural step since they are already familiar with SalesForce and its capabilities. However, other solutions should at least be considered as well.

## ERP Alternative: MiddleWare

What is MiddleWare:

*“Middleware solutions can help ensure your IT is aligned with the needs of your business and generating value. Middleware helps bring together all parts of your distributed IT environment-people, processes and information-to create insight and control across the enterprise. However, middleware solutions are complex. Unless implemented and managed efficiently, middleware can strain your IT budget while increasing the risk for business disruptions.”*

[**http://www-935.ibm.com/services/us/index.wss/itservice/igs/a1025998?ca=agus\_aosgtsgts-20090225&me=psearch&met=google&re=middleware\_mkwid\_sDAF072409L2457\_4940918940\_432gs4gdoqaw01426&s\_tact=usgtk001&cm\_mmc=agus\_aosgtsgts-20090225-usgtk001-\_-k-\_-google-\_-middleware\_mkwid\_sDAF072409L2457\_4940918940\_432gs4gdoqaw01426**](http://www-935.ibm.com/services/us/index.wss/itservice/igs/a1025998?ca=agus_aosgtsgts-20090225&me=psearch&met=google&re=middleware_mkwid_sDAF072409L2457_4940918940_432gs4gdoqaw01426&s_tact=usgtk001&cm_mmc=agus_aosgtsgts-20090225-usgtk001-_-k-_-google-_-middleware_mkwid_sDAF072409L2457_4940918940_432gs4gdoqaw01426)

If ERP is seen as a too radical of a strategy shift for Louisville Urban League there may be alternatives utilizing middleware as a plausible solution. If the cost, complexity and risk of moving the organization into an ERP solution type of shift is too high then often middleware makes sense. KidTrax, CounselorMax and SalesForce are integral parts of the business and finding a way connecting the three systems could be a compromise between shift in IT architecture and strategy.

A compatible middleware solution could offer a robust connectivity solution between existing legacy systems with seamless interoperability. Often middleware will either connect the disparate systems with a central database or use one of three as the central, or main, repository.

(Kalakota: e-business 2.0, Roadmap for Success, Support the Integration Mandate, pages 57., multi-site, integrating a broad range of disparate technologies)

## Continue Reviewing Backup Plans

For short term goals some other, less strategic but nonetheless important, technology issues could be addressed. Louisville Urban League places a high value in uptime and redundancy. Upon interview it would discovered that full backups of the system each week were still being used on tape. Mr. Robertson is aware of the cost involved with this type of backup and is looking at using USB hard drives as supplements to tape.

To offset costs incurred with large data backups to cloud servers perhaps only doing a full backup once a month or only backing up mission critical or financial data. In between full backups perhaps use differential instead of full backups. This saves time to perform the backup and also fewer tapes. This leaves only doing a full backup once a month instead of every week.

Mr. Robertson also mentioned using a co-location to store backups off-site since backing up to cloud is costly.

Based on these loose criteria Mr. Robertson determined that continuity of the business is about 80 man hours to recover if there were a failure or disaster type recovery situation. Therefore, downtime would be expensive for Louisville Urban League. This was the closest thing to an information unavailability cost model that could be derived from Louisville Urban League. It would be recommended that using a cost model and benchmarking this cost of downtime against what is being spent for backups could help give direction as whether too much or too little is being spent towards disaster recovery which, in turn, could justify backup to the internet or co-location costing.

(Louis Fried, Managing Information Technology in Turbulent Times, page 243)

<http://support.microsoft.com/kb/136621>

## Review Purchase Used Server Hardware.

Since backups are so important, placing a high value in data, it may be worth looking into new servers rather than used servers especially if a virtualized environment is being explored at Louisville Urban League. New servers have full warranties and usually will have a longer life, use less power, less space and fewer hours of labor to research, find and implement the used hardware costs could be justified for new hardware. Couple this with the fact that shorter lifespan of used hardware means more costs of labor towards installations and configurations of replacement hardware cost justification of new hardware may become feasible. This is not to say a new server will not fail any sooner than a used server but the risk, mean time between failures for hardware would be longer since it is new, are less likely to occur.

Used server prices are attractive but since hardware is the “cheapest” resource, when factoring all the costs, this may be a “false” savings. If Louisville Urban League is wishing to move towards virtualized servers and thin clients, thus placing a larger role of energy, uptime and cost savings are built in features of newer servers that are optimized for these environments. Since virtualization reduces the number of machines, and ultimately the costs of ownership, then purchasing new hardware may make new server hardware purchases much more feasible.

Mr. Robertson is fully aware of used server positives and negatives and doesn’t mind working with this hardware. This is a strategic decision for Louisville Urban League and many small businesses make purchases of used hardware. However, as Louisville Urban League grows new hardware may become more cost effective.

<http://www.itmanagement.com/faq/server-virtualization/>

<http://www.computerhope.com/btips/server.htm#01>

# Conclusion

Louisville Urban League’s ability to take the next “evolutionary” IT step seems well within reach if the financial resources become available and justified. Financial justification could be gained through increasing clients served by reducing the redundancy of data which is being entered into three systems. Example: Reducing the time it takes to gather and evaluate data from three systems could be justified by reductions of data entry time, data analysis from the three systems to generate weekly, monthly and annual reports. Also, trends across the three business sections could possibly locate individuals being served in Housing but not being served in Workforce Development. Thus, increasing the number of times the client is being served.

As illustrated earlier, through this analysis it has been revealed that there are opportunities to expand on the successful implementation of Louisville Urban League’s infrastructure. ***SalesForce*** was an earlier project which was used for WorkForce Development to increase the ability to serve more clients, as inidicated by Mr. Richmond, into a single source for all data. A strategic decision to help simplify business processes.

Although this recommendation creates a lofty goal with terms such as “ERP” and centralized data it should be mentioned that these solutions should not over-complicate the process already in place. Involvement of everyone in every facet of Louisville Urban League, not just leadership, with one goal in mind and that is to serve its clients while adding value to their experience. Regardless of adoption of this IT strategy, in one form or another, Louisville Urban League could encounter cultural difficulties if goals aren’t clearly defined from leadership.

The recommendations in the previous sections, particularly sections 6.1 and 6.2, will give Louisville Urban League strategic insight into a five year plan. Insight they already seem to have envisioned but will help be reinforced through this assessment. A specific product comparison chart and ERP analysis selection documents are included with this report as separate documents.\* However, the comparisons are simply a guide to create strategy and direction for Louisville Urban League. Should they choose to include a recommended solution path from this report in their future, ERP or middleware, then sourcing and funding for specific products should then begin. This helps keep sight fixed on the business goal and not the technology itself.

The remaining sections, 6.3 and 6.4, are those that will help fulfill short term goals while fulfilling the five year plan. Mr. Robertson hit upon these goals as ideas already in place but not implemented yet. These goals were evaluated and included in this report and also extended with other recommendations.

This assessment is one of three given for Louisville Urban League. Together with the other two assessments included during our evaluation perhaps a reasonably accurate strategic course might be ascertained to steer the organization in the direction that will enable IT to enhance its goals of community service. (Gareth Morgan, Images of Organization, processes of information exchange, chapter 4, pages 82-83)

\*Reference Documents included on CD but separate from this part of the report:

Top\_20\_ERP.pdf

ERP\_Comparison.xls

# Appendices

This section provides supplemental materials to the reader, so that there may be better understanding of the analysis presented up to this point. Appendix 8.1, the Basis of Analysis, provides theories and business models used in determining some of the IT suggestions made in prior sections. Section 8.2 and Section 4 provides the technology inventory and analysis, respectively, of Louisville Urban League.

## Basis of Analysis (Appendix A)

### **Environment**

Louisville Urban League’s environment is a non-profit business which is similar to most small businesses. They are an organization affiliate of the National Urban League but is independent to make its own decisions as to the outcome of the business, somewhat similar to a franchise. They have been successful in providing community support for its services and rely on funding from donors and volunteers in place of direct revenue streams. It is an environment of skilled workers trained to their job functions related to those they help through the use of IT systems to document the numbers of those being helped.

As illustrated earlier, if a technology change is in order and a decision is made by leadership to implement a new system (such as ERP or similar technologies such as middleware to link the three systems) this shift in strategy will most likely impact the job functions of the organization. Shifting this strategy will undoubtedly also change the way individuals in the organization perform their jobs. If IT architecture changes are in-line with the culture and organizational structure of Louisville Urban League then impact on jobs and people will most likely not dramatically change. This is of course unless the organization feels that in order to better leverage their IT there must be a large strategy change then there could be a radical shift in the way people’s jobs are structured.

Some of the ways to bring those who are impacted by this change “on board” is through constant communication of the organizations commitment to serving the client and through training of those impacted by the change. Whether a change involves the revising screen layout of forms filled out online, training of individuals on the new product or learning how to interact with clients who will also indirectly be impacted by the new system commitment to training is one of the best ways gain technology change acceptance.

### **Control Systems**

Louisville Urban League’s IT control structure is tight. Examples of this would be IT’s decision to not allow administrative rights to PCs so users can’t install or corrupt hard drive data with malicious software or viruses. Another example is users are required to not store personal data, such as music, on computers because if the machine has problems it will be wiped, no questions asked. Physical Security at the organization is tight and IT security follows suit with this strategy which is a leadership decision. Group Policies dictate what software each person is allowed to use and those policies are built into the security of the Microsoft Network which implements the policy.

The information systems which are used by each part of the organization are tightly held as well. Based on this organization control system, although data resides in three different systems, there should be no major inconsistencies of individual decisions to make database policy changes, store data in multiple places such as Excel, Access AND CounselorMax. Therefore, data probably is consistent and somewhat clean within each distinct business unit.

This makes not only the data but the outcomes predictable which is desirable based on the organizational structure of Louisville Urban League. One drawback to tightly held IT control systems is the system often a mirror image of the machine which services the needs of the organization. Decisions are mechanistic. This sometimes stifles creativity and individuality. However, since Louisville Urban League needs clear, concise reporting of number that are directly tied to donations and funding in a not-for-profit organization this mechanistic structure is probably desirable. (Gareth Morgan, Images of Organizations, Chapter 2)

### **Organizational Structure**

Louisville Urban League’s organizational structure, as alluded to in the previous section, is one of function. Each person at the organization is committed to serving the client based on their area of expertise. If a client is seeking help with budgeting for home mortgage they would be seen by a Housing Counselor. Or, if the client is a school age child they would be seen by an Education Instructor or Youth Development Specialist.

This type of structure lends itself to simplicity to allow the specialist to concentrate on the clients needs while not being distracted by multiple job functions. This coincides with Louisville Urban League’s commitment to the community to serve disadvantaged people while achieving the most efficient and effective way of serving the client while maximizing it value to the organization. In turn, this allows the organization to serve as many clients as possible in order to secure funding to continue its service into the future.

Although a functional organization may be somewhat mechanistic a non-for-profit usually is under added pressure to maximize its throughput in order to secure the funding of the organization. However, being mechanistic does not mean the organization treats the client coldly or without care. It just means that in order for it to survive to help other clients in the future it must keep its eye on the strategy and goal of the organization.

(Eliyahu GoldRatt, **The Goal**, Throughput and the goal of organizations: making money to survive)

### **Bargaining Power of Customers**

Louisville Urban League’s customer bargaining power is perceived to be low. Although there are agencies who help individuals with credit, home mortgages counseling, community service, workplace placement and youth development the Urban League is a not-for-profit organization. As indicated in their mission statement it is their commitment to disadvantaged individuals as the client it serves. Therefore, most individual seeking help at Louisville Urban League, even if they are aware of other counseling agencies, most likely are willing to take any help rendered to their aid. Furthermore, Louisville Urban League has bundled many types of services into its organization. Although this is a service to the community it also allows the organization to leverage its strategy with greater ease by offering the client as many services as possible in one place.

### **Bargaining Power of Suppliers**

The main suppliers for Louisville Urban League would be its donors, volunteers and employees. However, since donors and volunteering are the main goals of securing funding then these two sources are the defined sources of suppliers.

Some of the suppliers are large organizations such as Humana, Wells Fargo Mortgage, Kelly Services, U.S. Marines and Jefferson Community & Technical College. Others are individuals who have made financial contributions. This wide range of contributors and volunteers give based on Louisville Urban Leagues level of service and visibility in the community.

If Louisville Urban League wasn’t a responsible community contributor it would be very easy for donors and volunteers to withdraw their services and use them elsewhere. Louisville Urban League has utilized technology such as its website to extend its visibility to increase donors and volunteers contributions through using a medium which creates large benefits for marginal gains. (Vladimir Zwass, E-Commerce: Structures and Issues, Subsection: Enabler of Interpersonal Communication and Commerce, page 7)

### **Threat of New Entrants**

Since the community of Louisville, like any other metropolitan community, seems to have limitless wants for community assistance the threat of new entrants would initially be perceived to be high. However, since a non-profit organization relies on the very same community that is in need for its resources there are limits to how many organizations can be supported by donors and sponsors. Also, government regulation and laws require non-profits to have open accounting for transparency to make sure services are distributed equally, fairly and lawfully to those who have real needs.

Beyond the few organizations that have optimized themselves to operate on limited funding and the “competition” of existing similar organizations, unless there are none to begin with, the threat of new entrants would be low.

### **Threat of Substitute Products**

Similar to threats of new entrants the community of Louisville has other agencies to assist with youth development, housing services and work placement. Organizations like the Metro United Way, Habitat for Humanity and Wayside Christian Mission offer similar services to Louisville Urban League which also depends on community support via donors, volunteers and corporate sponsorship.

Since Louisville Urban League is a non-profit organization it helps their cause but what really differentiates Louisville Urban League is they offer three distinct services within one organization. Based on this differentiation they can offer a “one-stop” place for those clients which Urban League was founded. Louisville Urban League also focuses their strategy on *“assisting African Americans, other minority groups and the disadvantaged”* clients which brings focus to their organization. (<http://www.lul.org/about-lul/mission>)

Therefore, threat of new entrants for Louisville Urban League would be relatively low compared to other businesses, even amongst non-profits.

### **Intra- Industry Competition**

To advance and remain competitive, in this case, Louisville Urban League should continue to adapt to the new technologies being made available. Louisville Urban League is an organization of “developers and users that have already made information technology an essential element of their value-based planning.”

As illustrated in the sections within “Closing the Gap” Louisville Urban League seems well-aware of aligning its strategies with technology. Furthermore, they think ahead of the curve by planning to adapt to new technologies.

This will allow the organization to remain competitive and leverage their IT to obtain as much funding as possible. Again, since they are a non-profit organization competition is not sharply defined as being competitive on a product, its being able to obtain funding to provide services to the community. As mentioned earlier substitutes such as Metro United Way, Habitat for Humanity and others usually are competing for the same type of funding dollars. As illustrated throughout this assessment Louisville Urban League seems to be adapting and staying ahead of the technology curve well. They also appear to be aligning their culture, strategy IT architecture to leverage their technology to acquire as much funding as possible. Through exploration of new ideas such as ERP and middleware perhaps they may be able to continue to stay ahead of the curve.

(Louis Fried, Managing Information Technology in Turbulent Times, page 65, technology adapters)

## Technology Inventory (Appendix B)

This section includes each computer’s inventory provided by Louisville Urban League. For a complete inventory list please see the attached files within the included CD-R. Since every desktop computer is physically the same and Dell provides detailed hardware inventories the Dell Service Tags are only included. There is also an inventory of notebooks, again all the same, and servers. Please see section 4.1 for a screenshot of the desktop machine specifications. Furthermore, all software is deployed with the same initial image. Individuals receive specific packages, such as Microsoft Office, via group policy. Therefore, software inventory is based on user, not machine and is licensed as such. Also included on the CD is Louisville Urban Leagues IRS 990 forms from the past three years.

## IT Budget and Spending Documents (Appendix C)

Included on the CD is Louisville Urban Leagues IRS 990 forms from the past three years and current and past annual reports. Budget was discussed in section 4.6. but no formal budget was documented, numbers were provided by Mr. Robertson through interview. However, using last year’s Annual Report (2009) under Management and General, which 8.20% of total spending, if Mr. Robertson uses about $35,000 per year, as illustrated in 4.6 then this figures to be about 20% of Management and General’s Expenses and 1.6% of total expenses. From here, if these percentages are used in the future then a long-term budget can be created. (Page 11, LUL Annual Report)



Please also refer to the annual reports on the CD, attached in the accompanied zip file or [www.lul.org](http://www.lul.org). Most numbers were derived from these documents.

## Vision Document (Appendix D)

### **Introduction**

The purpose of this document is to outline the specific issues faced by Louisville Urban League and to propose appropriate solutions. The new system will enable Louisville Urban League to better utilize additional funding sources. It should be noted that Louisville Urban League’s IT infrastructure is already in good shape. They are seeking advice on strategy for the next “evolutionary” step to their business.

### **Positioning**

#### ***Problem Statement***

|  |  |
| --- | --- |
| The problem of | * Collection, storage and aggregation of data. |
| affects | * The entire organization. |
| the impact of which is | * Loss of potential revenue. |
| a successful solution would be | * A system that consolidates Louisville Urban Leagues three business unit systems for aggregation of data so that the organization can make better use of it for the purpose of increased revenue. |

#### ***Product Position Statement***

|  |  |
| --- | --- |
| For | * Louisville Urban League |
| Who | * Have the opportunity to increase their funding. |
| The proposed system | * ERP, CRM, MiddleWare solution or extend Salesforce from Workforce Development into Youth Services and Housing. |
| That | * Will increase potential revenue. |
| Unlike | * Continuing the status quo. |
| Our product | * Will simplify and make more efficient the collection of data and the usage of that data. |

# 

### **Stakeholder and User Descriptions**

#### ***Stakeholder Summary***

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Responsibilities** |
| Board of Directors | Organizational Decision Makers | * Ensure that organization continues to exist. * Monitors the project’s progress * Approves funding * Reporting |
| Clients | Benefit from Organization |  |

### **User Summary**

* Assessor is unable to provide user list at this time. This section will be updated pending future communications with the organization. This is a high level strategic valuation.

### **User Environment**

## User environment is one of function orientation. Each employee of the organization uses the computer related to the function of their duties to carry out workforce development, housing advice or youth development activities.

In conjunction there are labs and classrooms where clients can work on computers to perform functions such as resume’ building, job hunting, household budgeting and homework for school.

### **Summary of Key Stakeholder or User Needs**

Louisville Urban League has stated that they would like a system that would:

* Reduce data redundancy.
* Integrate system data between three business units
* Use integrated data to create cross referenced reporting between business units

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Need** | **Priority** | **Concerns** | **Current Solution** | **Proposed Solutions** |
| Integrated Date Solution | 1 | * Integrate data with other business units | CounselorMax,  KidTrax, SalesForce | ERP, CRM, Middleware or extend SalesForce Solution |
| Backups | 2 | * Change Backup Solution and co-location | Tape Only with offsite copies of tape | Co-Location, USB Hard Drives, Few full backups with differential in between full backups |
| New Server Hardware | 3 | * Propose cost benefit of new Server Hardware | User Servers | Re-Evaluate the cost benefit of new vs. used. |

### **Alternatives and Competition**

* Louisville Urban League could continue on as they have been. They could choose not integrate data. They could also choose to use a middleware solution, extend SalesForce from Workforce Development only to other business units (Youth Development and Housing Service).

### **Product Overview**

#### ***Product Perspective***

* This information system may or may not be self-contained.

#### ***Assumptions and Dependencies***

* The first major assumption is that Louisville Urban Leagues current network is already current and running well. They have done a very good job in managing their IT infrastructure. The second assumption is Louisville Urban League is they, strategically, want to continue exploring of integrating the three business units.

### **Product Features**

* A system that would simplify data collection.
* An ERP, middleware or extension of Salesforce already in place.
* Capability to generate reports based on cross-business unit information.
  + Financial reports
  + Demographic reports.
  + Materials reports.
* A streamlined system for reporting on client activities no matter what service they seek. Example: A youth service client graduates from high school then continues on by utilizing workforce development.

### **Other Product Requirements**

More analysis is required before specific product requirements can be determined.

## SWOT Analysis and Top Ten Technology issues (Appendix E)

The Top Ten Technology Issues are incorporated into a SWOT analysis to give an overall outlook of Louisville Urban League. The Weaknesses and Opportunities contain the ten issues. This is to create perspective that Louisville Urban Leagues ten issues are part of a bigger picture which, overall, is in good shape.

### **Strengths**:

* New Workstations
* Good Server Infrastructure
* Good User Policies
* Strong Security
* Budgeted yearly IT
* Good Backups
* Leadership already recognizes need for future strategic vision

### **Weaknesses:**

* No concrete five year strategic plan (1)
* No centralized system or consolidated data from three business units (2)
* No way of cross-function data aggregation from one source (3)

### **Opportunities:**

* Alternate Backup Sources – Co-location vs. offsite tapes (4)
* Alternate to full backups – Differential vs. Full (5)
* Review hardware purchasing of used server hardware (6)
* Utilize a “DMZ” network instead of two distinct networks (7)
* Client virtualization (8)
* Server Virtualization (9)
* Outside users/auditors (10)

### **Threats:**

* Threat only exists if Staff/Leadership cannot be trained, unwilling to change or lack of funding for changes.