IT Strategic Assessment Report

4/19/2018

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| <dd/mmm/yy> | <x.y> | <details> | <name> |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Table of Contents

1. Executive Summary 3

2. History and Purpose 3

2.1 History of Louisville Makes Games 3

2.2 Purpose of Louisville Makes Games 3

3. Management and Business Processes 3

3.1 Practice 1 3

3.2 Practice 2 3

3.3 Practice 3 3

3.4 Practice 4 3

3.5 Practice 5 3

4. Current IT Environment 3

4.1 Hardware 3

4.2 Software 3

4.3 Staff IT Skills/Training 3

4.4 IT Budgeting and Spending 3

5. Envisioned IT Capabilities 3

5.1 Leadership’s Vision 3

5.2 Top 10 Technology Issues 3

6. Closing the Gap 3

6.1 Recommendation 1 3

6.2 Recommendation 2 3

6.3 Recommendation 3 3

6.4 Recommendation 4 3

6.5 Recommendation 5 3

7. Conclusion 3

8. Appendices 3

8.1 Basis of Analysis 3

8.2 Technology Inventory 3

8.3 Top 10 Technology Issues 3

8.4 Strategic Planning/Visioning Documents 3

8.5 IT Budget/Spending Documents 3

# Executive Summary

-This is what the business is, what it does, summary

# History and Purpose

## History of Louisville Makes Games

Louisville Makes Games started out as a small community based out of LVL1 Hackerspace. LVL1 Hackerspace is a multipurpose development space for hardware projects, 3D printing, and software projects. There isn’t an official recorded time when they started to identify as Louisville Makes Games, however the most official date which can be cited is in 2014. In February of 2016, Louisville Makes Games decided it was time to move for several reasons. The first is that hardware projects tended to dominate at LVL1 Hackerspace, as well as the recent surge of dedicated game development spaces around the world, Louisville Makes Games decided it was time to move out from LVL1 Hackerspace and officially moved into their current location, Warp Zone Louisville. They have a lease on the space until 2020.

## Purpose of Louisville Makes Games

The purpose of Louisville Makes Games as stated on their website is as follows:

*“The goal of Louisville Makes Games! Is to promote game development as a viable career in our city through game development programming classes for kids, industry talks, art gallery showcase and other events. We educate and advocate game development.”*

To summarize and expand on this quote, Louisville Makes Games is attempting to create an entire industry space with career opportunities in Louisville where one does not currently exist. An ambitious goal no doubt, but definitely one worth pursuing for the passionate people who run Louisville Makes Games.

# Management and Business Processes.

## Practice 1 - Education

When asked in an interview regarding their methods of attaining their goal, Eric Lathrop, a board member of Louisville Makes Games and developer in Two Scoop Games commented “We are trying to make the egg, not attract the chicken.” One of Louisville Makes Games’s key means of achieving their goal of making game development a viable career in Louisville is through educational endeavors. There are two ways which Louisville Makes Games reaches out to the community through education: youth education and adult education. In both educational instances, they all happen in their space, Warp Zone Louisville.

Youth education takes place at Warp Zone Louisville over the summer. This educational program is restricted to 10 to 16-year-old teenagers who may be interested in game development. The program lasts 6 weeks in total and is completely free due to a generous grant from The Humana Foundation. The educational classes cover everything in game development from programming, to writing, to art and music, even to the abstract design of the game.

Adult education takes many forms for Louisville Makes Games. The first and foremost occurs in a game development engine called Unity. There are many online resources and tutorials on their website pertaining to introductory level development in Unity. Between the in-person meetups every other Sunday and slack channels there is enough support for their education program to allow even total novices to transform into fully fledged game developers.

They also have a partnership with JSLou, a Louisville JavaScript meetup, to help learn the basics of programming as it applies to video games. (**EXPAND**)

## Practice 2 – Fundraising Events

Louisville Makes Games hosts fundraising events as a dual-purpose activity. Number one: to raise funds to help pay for the Warp Zone Louisville space. Number two, to help spread awareness of Louisville Makes Games’s presence.

This second aspect of raising awareness is a subtle and critical aspect of their fundraisers. Due to the widely popular nature of video games as a medium, online streaming through platforms such as Twitch and YouTube have become a viable option to take donations and spread word of nonprofits outside of the immediate region for organizations like Louisville Makes Games.

## Practice 3 – Community Outreach

Community outreach is the primary channel with which Louisville Makes Games communicates with the local area. The first facet of community outreach is through the city of Louisville’s officially sponsored events like the downtown trolley hop. Louisville Makes Games uses events which bring non- developers to them as an opportunity to show the game development they do to the community. They also utilize this time for playtesting their games, a phase which is critical in game development where the developer gets new feedback on how the game can be improved.

They also work through other communities to attract the interdisciplinary talent that is needed to make a game. These are societies like the Louisville Cartoonist Society, an organization which focusses on comic strips and cartoon animation, and societies they indirectly work with like Code Louisville, a web programming boot camp for adults. (**EXPAND**)

## Practice 4 – Partnerships

Louisville Makes Games spreads its influence in many ways, most prominently through partnerships. The strongest partnership that Louisville Makes Games has is through the game studios connected to it. Many games studios in the Louisville area are products of Louisville Makes Games and thusly have close ties with the organization and will freely advocate it as a place to start making games. In fact, at least three game studios are part of the board of directors for Louisville Makes Games.

They also have a partnership with JSLou in order to assist in the more technical aspects of learning to program. This partnership is particularly helpful for non-programmers or entry level programmers who need help understanding the basic syntax of most programming languages. Although JavaScript differs immensely from the language used in Unity, C#, they both share fundamental characteristics which can be translated from one language to the other, such as simple if-else statements and looping. Louisville Makes Games also has access to software developers who can further explain these concepts as they apply to Unity game development.

## Practice 5 – Communication

Intra-organizational communication is critical for Louisville Makes Games as it allows the board to be able to communicate effortlessly on pressing topics as if they were meeting. Louisville Makes Games currently uses Slack in order to communicate electronically. They have their own workspace in Slack which is used to inoculate new members as well as discuss current projects. This channel of communication allows the board to casually talk to its members who can’t always make it to the regular meetups due to extensive personal obligations.

# Current IT Environment

## Hardware

The current hardware owned by Louisville Makes Games is as follows:

* 9x 2013 Lenovo ThinkPads
* 9x ChromeBooks
* 1x Projector
* 8x 23in Dell Monitors
* 5x 96 key learning keyboards
* 5x over ear headphones
* 3x 3rd party PC game controllers
* Various cable adapters for the projector

## Software

* 6x Windows 7
* 3x Ubuntu
* 9x ChromeOS
* 18x Google Chrome

## Staff IT Skills/Training

Currently, there is no ‘staff’ per se, however, the board members can qualify as staff members for Louisville Makes Games. Most of the board members work technical day jobs, such as web programmers. These types of jobs lend themselves to produce people with vast technological expertise, so game development is something that is a natural extension of that profession usually.

There are also artists who regularly attend meetings and would be able to show fellow artists how to start drawing and animating with a game developer’s mindset. These artists are conscious of the tools and skills necessary to properly do the job of a video game artists. Having interviewed several artists at Louisville Makes Games, it seems that there is a worlds difference between drawing and animating for personal projects versus drawing and animating for a video game.

## IT Budgeting and Spending

The budget and spending for technology acquisitions is practically non-existent. Louisville Makes Games does have a budget for regular activities, but a technology incident budget does not exist. Currently, their technology acquisitions are through the generous donations of the board members or interested parties. This is how they acquired all 18 laptops they own.

# Envisioned IT Capabilities

## Leadership’s Vision

The vision from the leadership is to create studios with enough talent and success that they are able to hire more local talent to create an industry here. There are two philosophies which drive the expansion for developers here in Louisville: if you build it, they will come and raising the water level for developers.

The first philosophy is used to describe their long-term goal of having Louisville become a center for game development in the same way Seattle is ‘if you build it, they will come’. If Louisville Makes Games can prove that Louisville is a center of originality in terms of game design and is able to produce enough talent that large studios begin to take notice, they have achieved their mission since studios will be eyeing Louisville as a place for their next studio. Hence the metaphor of the egg and the chicken being important to them and their goal of pursuing the egg.

The second philosophy for Louisville Makes Games is to raise the water level for game developers in Louisville. What is meant by this is that if several developers grow their skill sets enough and an inexperience developer is encountering issues, the more experienced developer can help them in a mentor-mentee relationship. Through this model even inexperienced developers can grow their skill set to be industry ready in a relatively short time. Having everyone one the same plane allows any innovation or improvement to the development process is spread throughout the community, thus ‘raising the water level’

The sentiment of games as art is one that is taken seriously by the board for Louisville Makes Games. This is important for Louisville Makes Games because currently, they attract a lot of software developers, which is fine but is a problem which must be addressed. Louisville Makes Games envisions more traditional artists to be involved in game development and marry interdisciplinary individuals to form more game studios which would result in a higher chance that Louisville becomes a viable place to pursue game development as a career.

Another goal which the board of Louisville Makes Games has is to not only attract new members, but to convert them into committed members of their inner group. This process is referred to as the ‘activation’ of new members. The advantage this has is it allows more consecutive projects to be pursued which better the status of Louisville Makes Games both financially and the effectiveness with which they spread their message and cause. The activation of regular members is something which Louisville Makes Games board members are all keenly aware of and actively pursue.

## Top 10 Technology Issues

After speaking with Alex Bezuska, board member at Louisville Makes Games about the technological difficulties present at Louisville Makes Games, he responded that usually technology problems do not exist due to the tech savvy backgrounds of the profession, and that the problems which usually exist are the business and organizational problems which exist within every organization.

# Closing the Gap

## Recommendation 1

Standardize laptop software

Currently, Louisville Makes Games hosts a myriad of different operating systems between its inventory of 18 laptops. This is a problem which should be amended for the sake of consistency. As it stands, these personal laptop computers are used for the educational programs which Louisville Makes Games hosts. On their website, they say that their educational program is exclusively for 10 to 16-year-old children. This could prove to be problematic if a 10-year-old is forced to use a Linux distro such as Ubuntu and is challenged in a way that the user is not meant to be challenged. This can be amended if a single familiar operating system is chosen to be the base for all classes.

## Recommendation 2

Inventory management system.

Louisville Makes Games, in order to sustain laptops or any new technology acquisitions, would need an inventory management system of sorts. This inventory management system would track checkouts and returns similar to how a library does. The system would need the ability to be used from any computer in the world. This system would need to as a supplement to the previous requirement need the ability to authorize administrators to the system.

The advantage for Louisville Makes Games that this has is that they are able to attract potential game developers who may not have access to a computer which can run game development software with the secure knowledge that the computer will return. This security seems less effective now, but when Louisville Makes Games becomes a large community, this type of system will be necessary to ensure that this organization does not loose precious gifts from interested parties.

## Recommendation 3

Conversation with large studios

Another course of action which Louisville Makes Games could pursue is by communicate with larger studios, abandoning their “if you build it they will come” philosophy. This departure from their current method still achieves the same result of making video game development a viable career in Louisville, only faster. Most software developers, and most of the population in general, are fans of video games, thus it would not be difficult to fill these positions. Compound this with the fact that Eastern Kentucky University has an impressive video game development curriculum, and more video game development jobs are filled in Louisville.

The problem with this is that it is unlikely for a large game studio to just make a new headquarters unless the party requesting it can prove it is profitable to create one. For example, Louisville Makes Games would have to provide a cost benefit analysis, as well as a local report which overwhelmingly declares the viability of opening a regional studio here, which would be difficult without several recognizable studios with extensive and impressive portfolios proving there is creativity and commitment in the city.

## Recommendation 4

Online marketing

A way which Louisville Makes Games can spread their influence to let the world know Louisville is a development town is through growing an online presence. There are multiple ways which Louisville Makes Games can achieve this. The first is through consistent Twitch.com streaming. The second is through consistent YouTube streaming and uploads.

Twitch.com is a web service owned by Amazon.com which allows the live broadcasting of activities known as live streaming. Twitch.com is most popular as a service used to live stream people playing video games. This service to Louisville Makes Games allows them to reach an audience using a medium which is almost a natural extension of their mission, allowing them to demo games and see the general reaction to playing it. They could message popular live streamers, or even live stream their games in an attempt to show the work which gets published in Louisville. This could eventually attract large game studios to start looking to Louisville as a viable spot to put a headquarters.

YouTube is an extremely popular video streaming service with an equally large gaming community. Gigantic channels such as Extra Credits and Mark Brown offer spaces for small indie game development studios a place to advertise their works as art and of mechanical ingenuity as opposed to simple toys to play with.

Another course of action which can be taken with YouTube is starting a Louisville Makes Games channel. Successful YouTubers – people who make a living off of YouTube – often credit their success with a consistent video uploading schedule. For an organization as serious and committed to their cause as Louisville Makes Games, adhering to a consistent video uploading schedule would be easy, the more difficult part would be figuring out a consistent ethos which Louisville Makes Games could use in its videos.

## Recommendation 5

Partnering with educational institutions

Teaming up with high schools, universities as well as Code Louisville to get people thinking about game development during these influential periods of their lives would be an incredibly effective strategy for Louisville Makes Games. This would form people to believe in building games as a viable career after producing a finished, interactive product which they would be able to be put on any resume of any sorts. The main advantage of getting into the school system as Louisville Makes Games sponsored events is they get their name into a system which can propagate their name and cause

Hosting game jams and after school clubs at high schools using primarily non-programming tools such as GameMaker Studio is an effective way to engage the youth in video game development. There is an interview with the developers of the wildly popular independent game Spelunky, where the designer and programmer both explain their roots using tools which did not require programming or artistic ability to make games at a young age (**FIND INTERVIEW AND CITE**).

Game jams at local universities like the University of Louisville or Bellarmine University to marry the intra disciplinary talent fostered at these institutions into a single product that everyone can put on their resumes. Another advantage of this for the students competing in these game jams is meeting fellow interested students in their universities who they are able to connect with and possibly form studios with. This helps Louisville Makes Games because it spreads their name and their cause which would grow their community.

Teaming up with Code Louisville grant access to a plethora of newcomers specifically looking for a career change. This team up would be most profitable for Louisville Makes Games because it is an untapped diverse supply of software developers looking to expand their future as well as their portfolios. Working with Code Louisville would be an intimate process, or perhaps its own track in the Code Louisville curriculum. If these were financial terms, this is an investment with high payout, but a high buy in as well.

## Recommendation 6

Requesting grant money from additional sources

Searching for grants in unexpected places would be a reasonable course of action for Louisville Makes Games. Today, video games have garnered enough attention that they are widely and positively noticed in today’s society. As such, there are several invested parties who would not normally be invested in the health of video games as a medium and are potential benefactors to Louisville Makes Games.

One such entity that could potentially lead Louisville Makes Games towards its strategic goals is the National Endowment for the Arts. The National Endowment for the Arts officially began video games as art and eligible to receive a grant from them in 2011. In 2016, the National Endowment for the Arts revitalized the discussions about video games, specifically speaking to the naysayers of video games as art, bringing up games such as *This War of Mine* and *Papers Please*. (EXPAND <https://www.arts.gov/partnerships/creativity-connects/report/why-arts-funders-and-indie-video-game-makers-dont-click>)

More funding could come from established video game publishers. Should Louisville Makes Games venture forth into the sphere of larger game development studios and talk there for funding, they might find that there is some generosity to be had. This is especially true if Louisville Makes Games runs the pitch from an educational angle and focus on how the studio would be benefitted from investing in Louisville games. This would not only potentially attract funding for Louisville Makes Games, but also might even attract a studio to set up a headquarters here in Louisville, which fulfills the mission of Louisville Makes Games.

Kickstarter like the Louisville Cartoonist Society.

Another means to acquire funding would be through a Kickstarter campaign. Kickstarter is a crowdfunding platform with an impressive success rate, according to their website nearly 80% of projects succeed that reach 20% of their funding goal (Kickstarter). In 2012, the Louisville Cartoonist Society successfully acquired $2,175 from Kickstarter to continue growing their operations (cite the KS campaign). The feasibility of this endeavor as a means to acquire a large sum of one-time funds is incredibly profitable.

## Recommendation 7

Integrate with the global game development community

When making an assessment of Louisville Makes Games, we can draw parallels to other similar organizations. The first organization which comes to mind is the area specific coding boot camp, Coode Louisville. Code Louisville’s strategy of integrating with the software development community in order to provide new graduates with jobs has proven effective, with a majority of its graduates pursuing relevant careers post-curricula. Partnerships with companies such as El Toro and KiZan among others have proven critical to the success of this program.

Louisville Makes Games on the other hand contends it is more effective to prove without help that the developers in Louisville are capable enough with their own merits to find success and that these individuals are merely the front for a hugely creative and supportive game development network underneath. This approach of individual merit and ignoring the industry at large slows the growth of their vision of making Louisville a viable place to start you career when compared to the success of Code Louisville and their approach of making friends in the industry.

To amend this, Louisville Makes Games should begin talks with studios for numerous reasons. The first reason would be to strengthen ties within the industry. This has perks in of itself, such as getting more impressive and noteworthy speakers for a new program of bi-weekly industry talks. This also grants Louisville Makes Games friends in high places which gives them clout. Other benefits to Louisville Makes Games of talking to insiders in large studios would be to have Louisville be in the quick recall set for new studio locations.

# Conclusions

* This where you are
* What I recommend

# Appendices

## Basis of Analysis

[In this section, explain findings in light of the theories and models used in the course, as outlined in Dr. Barker’s class meetings.]

## Technology Inventory

[Include details from Section 4.]

## Strategic Planning/Visioning Documents

[If Available.]

# Sources

Kickstater. Stats. https://www.kickstarter.com/help/stats?ref=about\_subnav.