

Winter Park Library October 2014

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Considerations for the future of the Library

Opportunities:

- Lifelong education
- Civic engagement
- Community interactivity
- Access to multimodal transportation for all ages
- Robust digital delivery of library services for all ages
- Support for volunteerism
- Support for mentor networks
- Job and skill retraining
- Environmental sustainability through education and demonstration
- Global communications center
- Activated community space to enhance the civic core
- The first place to come to learn about the next best...
- On-going forums through local and regional partnerships
- Digital theater with hi res audio and video viewing in an acoustically balanced room
- Community driven and orchestrated multi-format and multi-channel content creation and distribution
- Minimizing operational expenses through design and cost sharing
- Aggregate, protect and expand WP history collections

Cultural Consideration:

For many years, the Winter Park Sidewalk Art Festival has been rated as one of the top in the country. This year it is rated as #5.

<http://www.wpsaf.org/news/Best200.html>

The Festival's Best of Show is one of the top prize awards in the United States and those pieces are purchased and given to the City by the Art Festival Committee and currently shown at the Library. An important consideration for the new Library is the best way to sequentially showcase the existing collection and have room for the future expansion of the collection. If shown properly with appropriate

history of the show and didactics for each piece, the collection can attract thousands of viewers each year. A video could be created with the history of the show that would include a self-guided walking tour of the collection. The posters from each year are also given to the City each year should be considered as part of the entire collection. It would be worth considering completing the collection and archiving existing pieces in suitable frames for the walls of the new Library. Those costs should be considered in the overall capital campaign and for on going operations to maintain the collection. If there is not room, then a large digital looping video display could showcase the posters.

Winter Park has, historically, been home to many of the top artists in the region. It makes sense to have a state-of-the-art gallery in the new Library that can be changed on a monthly basis as a way to showcase local talent and build a sense of the cultural community. If there is room, the Library could also provide rentable studio space for working artists. These artists could provide workshops as part of their contract. Ten to twelve art studios could fit in 2000 square feet and modest rent could easily cover all associated costs. Ideally, the gallery would be adjacent to a performance stage.

The history of Winter Park and its citizens could also be displayed on the walls and through video displays. Sequential display of the art and the history will help move guests through most of the library and give them the possibility of encountering other people, services, programs and information.

There is a dearth of performance space in Winter Park yet we have over 50 local cultural organizations that could provide hundreds of hours of entertainment for our citizens each year. A performance space that conjoined with a large community room, gallery and opened on an outdoor terrace could be utilized for many different types of activities. It could also be attached to a catering kitchen and have a separate entrance so that it could be opened after library hours. It could also function as a movie/video theater. This type of flexible community space should be relatively future proof and viable for public activates for decades to come. It can be designed for theater and dance and also function as educational, teleconference, and multi-screen interactive facilities no matter what type of interfaces

become the norm for the “connected” library of the future. Rental of the space will offset operational costs.

Cultural tourism is very important to our economy so the Library could work with the City and the Chamber of Commerce Welcome Center to showcase our history, culture, environment, entertainment, and calendar of events, shops, restaurants and attractions.

Virtual Library:

The Library can begin to design an ideal interface for a virtual library that goes well beyond the existing web site. The virtual library should be published before the new Library is finished. These costs need to be built into the capital campaign and accounted for in ongoing operations. Our new Virtual WP Library can be more actively utilized than the physical space while driving visitors to the actual Library. While the new building is being designed and constructed, library patrons can utilize the virtual library. The self-help virtual library can also be accessed via kiosk interactive displays in ideal locations throughout the new facility such as the Welcome Center lobby, City Hall lobby, WP Community Center, Rollins library, WP Hospital, University Club, etc. Sponsors and/or benefactors could cover cost for the relatively inexpensive kiosks. The displays can be installed behind Plexiglas and interface can be through touch or motion so that keyboard and a mouse, which can easily break, can be eliminated.

The virtual library is capable of connecting people, 24 hours a day, throughout Winter Park and all over the world. Over time, we can develop collaboration stations with the ideal interface for each type of communication or group project. Best practices for just about anything you can imagine can be accessed by individuals or by a large group. With help from library staff, it would be easy to assemble a menu of best practices for all sorts of entities such as municipalities, small business, non-profits, etc. Library staff will be instrumental in facilitating the ongoing research and communications that will thrive through this type of interface.

Supporting local journalism:

A serious concern that does not seem to be abating is the demise of journalism. Our Library can support local content creation, research, investigation and publication over multiple channels including print, Internet radio and TV. As newspapers and local media create less local and regional news, the Library could fill the void through mobilizing our citizens and partnerships with local organizations such as Rollins and Valencia. The Library can provide a neutral platform for the creation of locally relevant content and its distribution.

Sharing stations:

If you expand on the sharing stations that now exist in many libraries and follow what the futurists are saying is possible through digital inventory and applications, then sharing stations will become popular in most cities. If you think about the different items such as underutilized tools, furniture, children's' toys, educational materials, art work, electronics, bicycles, and other devices that many folks have that sit and gather dust and imagine how they can be utilized more efficiently, you quickly see the efficacy of sharing networks that are managed by the library. The library is a safe environment to handoff these items. Uber is an example of what is "coming quickly to a city near you." If there is warehouse space, it is likely that many items would be donated to the Library and then lent out as needed. This could greatly expand the existing sharing program. Items could also be rented for enough to cover the operational or maintenance costs. The need, size and durability (cost to maintain) and safety would need to be considered.

<http://www.impactlab.net/2014/06/06/what-the-consumer-will-look-like-in-2030/>

Supporting local business:

It is likely that start ups, sole proprietors, entrepreneurs, and small businesses will step into to fill vacuums created by the rapidly changing business landscape as hundreds of old types of jobs are

eliminated due to outsourcing, robotics, animation, and other factors and efficiencies. Supporting startups with a business center in the Library is certainly worth considering. This could also foster partnerships with Crummer School of Business, Full Sail, UCF, Valencia, SCORE, and both large and small regional businesses.

http://www.bizjournals.com/orlando/morning_call/2014/08/orlando-startups-driving-tech-as-region-s-second.html?ana=e_orl_rdup&s=newsletter&ed=2014-08-01&u=iHaEzPf7LISz25IMNvdTTeUimQG&t=1406903257

The new building and grounds:

The Library should have an adequate Porte-cochère and back-of-house covered area for ingress and egress that is protected from the elements. We can assume that outdoor automobile electrical charging stations will be necessary as well. Ideally, the library is next to multimodal connections that consider weather conditions. Solar panels over walkways are now used to provide shade and shelter from rain.

Active noise cancellation is maturing rapidly so it will be possible and affordable to create “movable” quiet zones and even areas where cell and WiFi devices will not work.

A small catering kitchen could host cooking classes and also support a café in the Library that spills out on to the Library grounds.

The way that we interface with our devices will go through many transformations so we need to be aware of what will emerge over the next decade that includes touch screen projection and customizable interfaces that work with eye movement, gestures, body language, voice, emotion, brain scans, etc. Our devices and public displays will know who we are so we can contemplate how to advantage that in positive ways.

It would be wonderful if the Library could showcase an automated indoor garden that harks back to the interior tree that was the symbol of the 1980 library.

The outside spaces, well conjoined with the inside of the Library's public forum areas and galleries, could provide beautiful new community spaces and event opportunities. If an interior public space adjoining the outdoor area could be locked off from the rest of the library, the outdoor space could increase its functionality farthing the value to the city of its partnership with the Library after the Library hours. Fire doors would probably be necessary by code.

To Do:

Create a complete list of existing Library programs and rank them based on perceived value, use, operational costs, demographic segment engaged and cost (return on investment and return on engagement). We could see if other entities could provide our services more effectively or if they could partner in the services. Once we have a ranked list of potential programs, we could distribute a digital survey that goes out to all cardholders to confirm or modify our list. Such a survey could also prepare citizens for a referendum and let them know the need, value and benefits of a new library. We could then use the final list to evaluate the costs associated with the programs and services we want in the new library. This will help the City Commission in the final analysis of different sites, possible square footage, etc.

A list of all local assets and the primary public services they provide will be helpful to see if there are duplicate programs or services we could augment through partnerships. (University Club, Women's Club, Rollins, Crummer, Full Sail, Valencia, Museums, Chamber of Commerce, parks department, etc.)

A list of potential partners for future endeavors and a list of potential funding sources and their primary areas of interest will be helpful as we begin to build consensus.

Toward the middle of the process, we can postulate how many

services can be provided or enhanced in our new Virtual Library. The design and implementation of that aspect of the new Library is of critical importance and I hope that Full Sail with its global expertise in online education and user interface would help with that investigation and design.

What is possible? *The following is an aggregation of ideas from many different sources.*

The Future:

Next 2-5 years:

Augmented Reality: (AR) is a term for a live direct or indirect view of a physical real-world environment whose elements are augmented by virtual computer-generated imagery. As a result, the technology functions by enhancing one's current perception of reality. Google Glass is an example. There soon will be hundreds of devices and applications that will use augmented reality.

Internet of Things: Connecting & linking not just computers, phones and tablets, but all of our devices through the cloud. Refrigerators, HVAC, remote-locking mechanisms, coffee makers, etc. We'll need ways to manage and utilize these networks of smart devices and objects that are in our homes and lives. Non-invasive and invasive medical monitors will be integrated into the Internet of everything. This will get complicated and threaten privacy on many levels but will be an opportunity for the Library to help our citizens and businesses leverage this powerful opportunity.

Updated and new devices: Many, if not most folks use their smart phones every day but do not use all the features that would provide benefit or efficiency. Seamless connectivity will link all of our devices including out TV, house, car, and office. The Library can help them maximize the value of these seamless networks.

Wireless Power and connectivity: We will be able to charge devices without cords or cables. Battery power will increase exponentially in efficiency. Many of the cables and outlets we now use will no longer

be necessary.

Online Media Content Aggregation: Many existing media models and content distribution networks will fail or be forced to change. Customization based in individual needs will emerge quickly; some for pay and some based on advertising. The Library could play a significant role in providing content to its citizens on a customizable basis. The dashboard for how we automate this important service will need to be determined and could be implemented through the virtual library. Such a dashboard, where patrons sign up for only what they want automatically delivered to a specific device or their smart TV This alone could make the Library of critical value to its patrons.

The changing workforce: We are already seeing major changes in the workforce due to changing demographics, different types of communications, the cost of retaining workers, the cost of health care, the cost of entitlement programs, the loss of many different types of jobs and the creation of new types of employment. The library can play a major role in helping small and medium businesses and independent and flex workers, the needs of older workers normally retired, and work mentors. The Library can provide short-term high tech and global multi-channel communication office space accessible for limited times via library card and secure cloud storage.

<http://www.impactlab.net/2014/08/27/top-5-ways-the-workforce-will-change-in-the-next-5-years/>

Next 5-7 years:

A host of new and revolutionary materials such as graphene will become available for 3D printing of electronics and complicated devices.

Voice recognition will become much more effective and be built into all sorts of different things including security devices. The “audio-mining” of data and emotional profiling will become common.

Mobile Payments and Micro Payments will become ubiquitous and we will get used to “user fees” for just about anything related to

distributing digital information. Apple is well into this development.

Collaborative Online Education will be one of the most important potential uses of the new Library for lifelong learning and certification and will be available for all citizens and businesses. Eventually this will challenge many of our existing educational institutions and public education.

Our new Library can provide:

Team learning spaces

Parent student learning spaces

Access to the world's most effective teachers online

Access to mentor programs

Focus on jobs related to each learner's potential and skill set

Procurement station: help locating what you need at the best price and that supports the local community when possible

Local environmental education

3D activated and interactive map of Winter Park (know your community)

Entrepreneurial support station with access to local mentors, business expertise funding, etc.

Behavioral forecasting: Amazon, Google and many advertisers are already getting good at predicting our behavior. Prediction of mass movements and manipulation of trends using surveillance statistics will also emerge. How we protect patron data in the Library system will be of critical importance.

Next 8 to 20 years:

Wireless electricity will become ubiquitous and costs will be micropayment and advertising based.

3D and 4D printing will move into many organizations, homes and offices. This will include medical, chemical, pharmaceutical, and electronic items.

Massive broadband, such as Google fiber will finally expand to challenge many existing broadband providers. This will also further destabilize the major national TV content providers.

Driverless cars and trucks will become more common.

Machine learning will begin to become more effective than humans for many types of jobs and will begin to affect a host of different types of employment. This will also change the way computers are coded which will eventually have the potential to create a gulf between human machine interfaces.

Writing and typing as we have known it will face similar challenges that cursive writing has endured and will begin to atrophy for certain demographics. Keyboards will be eliminated for many different types of devices and interfaces.

Artificial Intelligence with self-learning systems will become ubiquitous and be embedded in almost all of our devices. AI will know our behavior better than we know ourselves. AI can also help us know ourselves more accurately and enhance our lives.

Smart houses and offices will become common: The Library can play a large role in helping the community set up these spaces: How to setup your smart house or office connected to the internet of things with access to secretarial services, research, collaboration portals, access to aggregated data, AI machine-driven learning, energy-saving applications, etc.

Aggregated maker temples that directly relate to the needs of Winter Park citizens, businesses and students. Realize that this will undermine some local retail.

Smart City Center: Our cities will begin to access and share best practices. The Library can be a partner in this network.

Smart Power: Many experts are predicting that Solar and batteries will quickly mature and be able to provide almost unlimited power in 14 years. Winter Park Power could plan for this so that our bonds are paid off and our citizens have the most efficient systems for our environment with a local grid that can function unilaterally.

Business model forecasting for disruptive technologies will lead to serious debates and challenge many local governments and businesses sustainability as well as tax base. Protecting Winter Park's ambiance, culture and livability will protect our tax base.

Other forecasts for the next 10 to 30 years:

Quantum computing, 3D and 4D printing of almost everything, month long batteries that auto charge, universal memory and applications, second generation machine learning, bio-robotics, utilization of dark silicon and macro networks, personalized massively online open courses, open intellectual property, natural bio-interfaces, global Internet of things, big medical data "privacy" issues, teaching computers, drone delivery, drone's monitor infrastructure, traffic, police, etc., local banks vs. smart commerce, peer to peer commerce cutting tax base, continuous and seamless non-invasive accurate medical monitoring...

AI becomes progressively smarter... forever?

Seamless connectivity expands to rural locations.

We become reliant on our personalized smart agents notifying us of anticipated tasks, activities, threats, opportunities and events. Ubiquitous Cloud Services and legal signatures become the standard so we rely less and less on personal storage such as written documents, CD, hard drive, jump drive, etc.

Continuous and seamless micro and macro payments for everything. User fees for everything: the meter is constantly running. Monitoring this meter will drastically modify our behavior and our politics.

Massive data of everything will use continuous artificial intelligence pattern analysis that will lead to ever more effective predictions as well as providing a growing machine-based "understanding" of emotion sentiment, and context. (This is already happening and will only become more accurate and effective.)

Boundaries between applications and devices and displays will become blurred and approach seamlessness.

The Internet of Everything will begin to use standardization that will allow inexpensive sensors placed in many different types of devices to compute in the device and send processed and aggregated data to a central processor in home, office, store, cloud, etc. This will increase effectiveness and could either protect or potentially eliminate privacy but will diminish the amount of data traveling through the cloud. This will be a huge political issue as government agencies seek ways to peer into the deep recesses of our homes and offices and minds.

Surveillance will become ubiquitous and learn where gaps are so they can be filled on the fly. AI will use continuous identity recognition verified through many different non-invasive sensors that include recognition via face, breath, gait, context, fingerprint, posture, clothing, hair, galvanic, heat, brain wave, friend, etc. The aggregation of this data will forecast probabilities that draw conclusions in real time and alert authorities, employers, parents, etc. These will be self-learning systems that will improve over time. How this data will be shared will create many different legal and business opportunities and challenges.

Business intelligence and massive data analysis will become a primary field and will become the foundation of business education. Consumer behavior will be predictive in the micro and the macro thus influencing manufacturing, inventories, logistics, fulfillment and financing. Global financial predictive algorithms will vie for supremacy and logistics and delivery of goods will become an ever more accurate science.

Deep personal data profiles will be used to pre qualify and predict. This will apply to anything that is legal and will push the moral, ethical, social, business, and legal gestalt. Businesses will know who is coming to them and predict their behavior and purchasing power. Schools will be able to predict the outcome for each student's educational path. Governments could use this information to predict which type of education will be effective for students at an early age

and what types of jobs will be needed when students are ready for employment.

Who will own and have access to data? The entrenchment of power through management of government through control of the cost of campaigning, courts and the press along with the growing gap between the super wealthy and the poor will drive tension and conflict and legal litigation. At the same time, enhancements in robotics, AI and globalization of labor will put many folks out of work or diminish their pay. The efficiencies of robotics will rise exponentially. The laws of diminishing returns will destabilize some business models and municipal tax bases that are not prepared or that have too much liability from non-diverse revenue sources, aging infrastructure and entitlements.

Hundreds of types of jobs can and will be replaced either partially or entirely by smart machines and robots. This includes professions such as doctors, lawyers and accountants. Synthetic biology, nano technology and artificial intelligence will begin to reach their potentials with deep and lasting implications for jobs in medicine, construction, design, education, software development, analysis, pharmacist, law, sales, production, management, etc. What effect will this have on the tax base? Smart machines could replace many types of government jobs. Government decisions that change on a short-term political basis will be challenged by those with more sustainable five, 20 and hundred year plans.

Collaborative technologies, proven best practices, real time efficacy, and global sourcing will change the nature and hierarchy of work. Data expertise will become mandatory and business models and business financing will undergo unprecedented levels of scrutiny that includes understanding real time profiles of decision makers and how they relate to each other within a business structure. Management will have access to massive data and challenge privacy from many different angles. Predictive analytics powered by AI engines will play a fundamental role in many areas including content creation and the stock and money markets.

Marketing will target individuals at the ideal time, place context and with customized messaging that is fine tuned in everyway for each

person's circumstance. Political campaigns will be able to tell everyone a slightly different story based on what resonates and causes emotional identity with the candidate or the issue. Brands will do the same. Jobs in cyber security will grow but will require new levels of ongoing certification. Open source will battle with closed networks in the marketplace, the political arena and in court.

Low to zero marginal cost economies will emerge through communities of scale. There are many positive aspects to these initiatives in terms of wisdom sharing and cost sharing over vast communities.

Financing will find many new ways to connect the borrower with the lender.

Companies such as Airbnb will connect existing real estate and products and services with those who need them cutting out existing middle men and brokers. This will begin to have a profound affect on real estate and lead to new models of ownership and leasing.

Privacy Rights

Libraries may be the last bastions of privacy: Although controversial, the Library may play its greatest role in protecting its citizens' privacy. Our computers, tablets and smart phones are constantly telling those who want to know what we are doing, feeling, buying, with whom we are communicating, our search history, our medical state, etc. Soon our living room and bedroom smart TVs and cars will do the same. It could be that the Library may be the last place to interface with the Internet without giving your privacy away to the highest bidder, the government and, in some cases, the lowest common denominator.

The Internet, Google, Facebook and most of the rest of the search and social media are powered by data aggregation and advertising that places literally thousands of cookies in our personal devices. These small applications continuously mine our personal data and send that information back to their creators. "Worms" have taken over hundreds of thousands of computers that are used, without the knowledge of the owners, for all sorts of nefarious activity. Using

library search would be one way to keep our devices from peering eyes of and free of potentially damaging worms, cookies and other bugs designed to compromise our networks, data and privacy. A local library online search system could be used to protect our privacy and our devices. Libraries can help overcome the dangers of predictive search results while supporting privacy. Library as service provider in Winter Park: A robust system at the library and throughout the city on city-owned fiber could allow us to log on from our devices through the Library safely. It could also be highly profitable and could be possible when current ownership of content and distribution models fail. This system could deliver broadband Internet and even many of the channels currently available on cable and satellite TV providers. Library kiosks could expand the privacy terminals to other physical locations. The Library could even set up a secure access so we could log on to and search through it with impunity. We can use the existing Library Bill of Rights to better protect our selves and our community.

<http://www.ala.org/Template.cfm?Section=interpretations&Template=/ContentManagement/ContentDisplay.cfm&ContentID=132904>

We live in a time of great change and public libraries are in a position to guide their patrons through the astounding changes that are yet to come as artificial intelligence and the confluence of maturing technologies and social applications bring ever more potential and challenge to our daily lives. Our local libraries have both the opportunity and the obligation to become the forum for helping citizens and communities deal with the opportunities and challenges of the next decades.

Other references:

The top six library issues—from the Amazon threat to the need for a national digital library endowment

<http://librarycity.org/?p=11172>

Younger Americans' Relationships with Public Libraries

<http://libraries.pewinternet.org>