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Tech Mecca in Giudecca

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Tech Mecca in Giudecca:
Establishing a Startup Factory

An Interactive Qualifying Project submitted to the faculty of

WORCESTER POLYTECHNIC INSTITUTE

In partial fulfillment of the requirements for the Degree of Bachelor of Science

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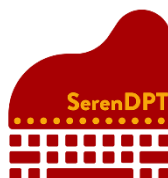**Project Advisors:**
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Sponsor:
SerenDPT

Abstract

In this paper, we introduce the organization SerenDPT and its recent acquisition of the Herion Complex, a former Venetian Convent. The goal of our project is to assist SerenDPT in developing Herion, now known as H3, into a startup factory to bring high paying positions to Venice for young adults. We accomplished this through document organization, event planning, website development, and interior design guideline creation. With the knowledge researched and interviewed from experts in the field, we outline what we completed to guide future projects and to help H3 become a successful startup factory.

Executive Summary

Serenissima Development and Preservation through Technology, commonly known by its shorthand name "SerenDPT", is a Venetian-based organization that aims to create employment in the city of Venice and surrounding islands by developing innovative startups. SerenDPT petitioned to use the former Church of Saints Cosma and Damian as a central facility to house their startup companies and was awarded the lease of the ex-church and the management of the 'deposito' for 9 years, shown in **Figure 1**. SerenDPT nicknamed the complex H3, to mark the third rebirth of the Herion complex, from garment factory to accelerator to its current state as a startup factory. We were tasked with assisting SerenDPT in its relocation from the old center in the San Polo sestiere, to the new H3 headquarters on Giudecca. We accomplished this through a number of deliverables centered around three core ideas: maintenance, management, and revitalization.
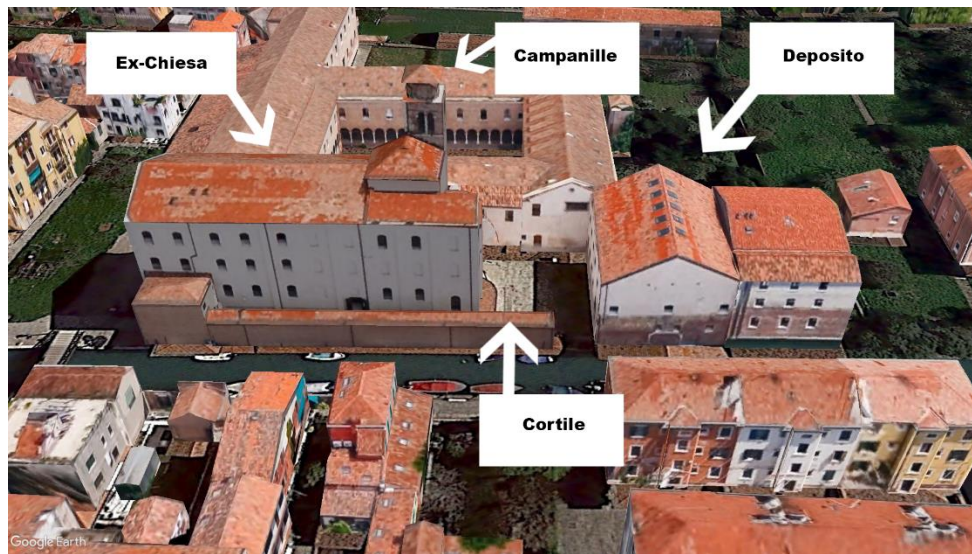
Figure 1: Overview of the H3 Church Complex

To assist SerenDPT with maintenance of the building, we collected and organized all building documentation into a format that was easier to comprehend than the building's previous occupant. The building documents and supporting materials we have collected include manuals, floor plans, balance sheets, and official signatures. We have also created a more complete room coding systems by which we labeled keys and maps, seen in **Figure 2**. Finally, we have inventoried and moved loose items, ranging from chairs to computers, into centralized locations.
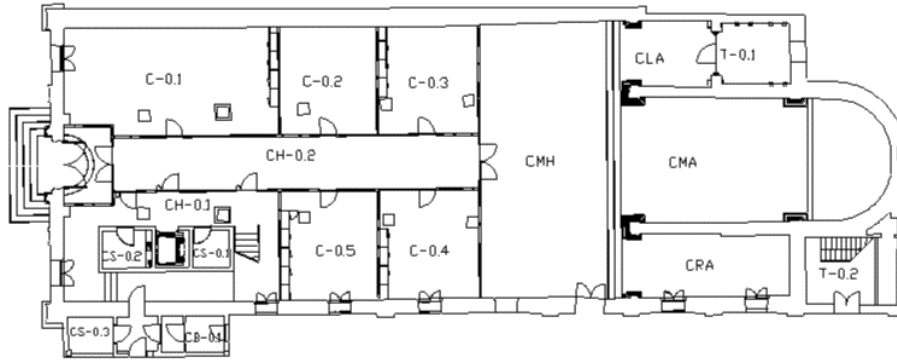
Figure 2: *Example of the Coding Systems Used for the Keys*

To help SerenDPT with the management of the building, we created an event portfolio that helped to establish the basic needs for SerenDPT to use the H3 building to host events. We have also created a website that centralizes all management of the building. As shown in **Figure 3**, the website serves as a repository for several management operations between SerenDPT and functions of the buildings along with hosting a history of the complex.
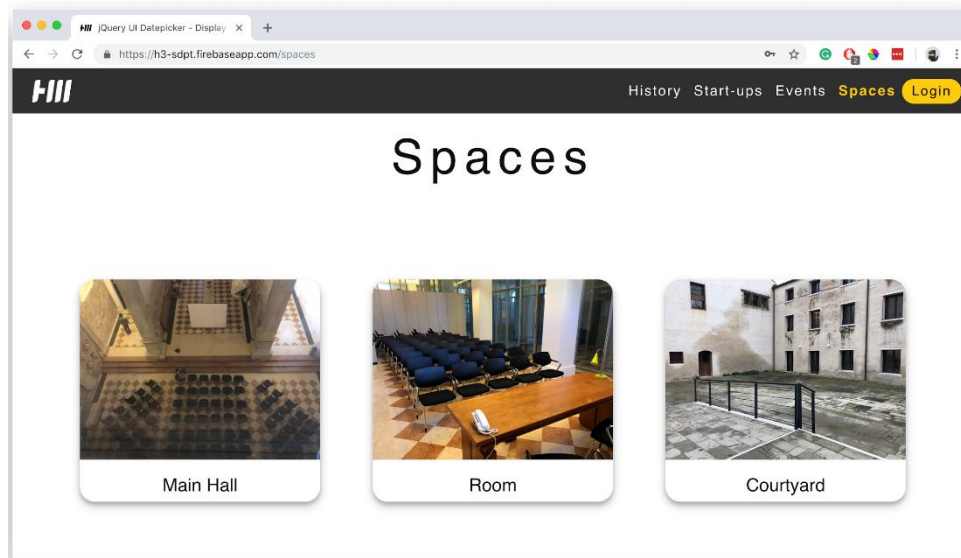
Figure 3: *The Event Spaces Page on the H3 Website*

Finally, to assist SerenDPT with the revitalization of the building, we created two design projects to inspire and guide future teams. The first project is an open design competition in which anyone can create an innovative and inspirational plan for the decor and general atmosphere of the spaces at H3. The latter is a project proposal on the creation of an easily modifiable restaurant lab in the currently unused cafeteria space at H3. This proposal was sent to the Basque Culinary Center, with the intention of senior students completing this project as a part of their graduation requirements.

Through these three actions, we helped to make SerenDPT's use of the H3 building easier, more efficient, and more exciting as it moves into the future with a new space, developing new startup companies to help bring jobs back to Venice.

While we accomplished our deliverables, we still have recommendations for SerenDPT to look into after our departure. Due to the magnitude of work required to create a website, and the lack of resources available, we have created a document that describes recommended tasks to complete in order to move the current website layout into a more official state to properly present H3. We have also created an events materials list that recommends items for SerenDPT to purchase in order to satisfy a majority of event requirements, ranging from sound systems to large tables for dinner events.

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Glossary

BCC: Basque Culinary Center

Deposito: A former storage area attached to the H3 ex-church

H3:   Herion-3 Startup Factory

SerenDPT: Serenissima Development and Preservation through Technology

Startup Accelerator: An organization that hosts pre-existing startup companies and guides them through development

Startup Factory: An organization that creates startup companies

VPC: Venice Project Center

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Bibliography	All	All
Appendices	All	All

Note:

When writing the final report, each team member primarily wrote the sections that they researched and completed. In addition, every team member has extensively edited and reviewed each section of the report in order to create a unified voice throughout.

Acknowledgements

1.0. Introduction

The shift from industrial to post-industrial societies has left many economies around the world with a lack of diversity in job markets. This occurs as the service and tourism industry grow while the number of production, manufacturing, and other high paying jobs requiring skilled work decreases. As countries modernize their economies, a greater percentage of employment goes into the service sector. In 1960, 37% of Japan's employment and 39% of Germany's employment was from the service sector, but in 1987 these numbers had risen to 59% and 55% respectively. In other modernized countries the effect has been even more profound with 73% of US jobs focused in the service sector in 1987 (Miles, 1993).

A rise in tourism produces a similar effect as countries that focus on tourism tend to decrease exports and production of vital staples. This is especially severe for islands with limited resources such as Antigua and Barbuda where 75% of the Gross Domestic Product directly results from tourism. The economy has become dependent on cruise ships bringing in tourists to buy the mass of imports that fuel the tourist economy, but which the residents cannot consume enough of alone (Schubert et. al, 2011). Tourism comes paired with foreign investments that result in income flowing out of the country as the price of land rises (Briguglio, 2008), making costs of living less affordable for residents.

This is also true for the historic city of Venice, where the physical cost of living is increasing as more stores become focused on catering to tourists as opposed to affordable products for residents. This, coupled with a rising land cost and a decrease in higher-paying jobs that require skills or higher education, has contributed to a decline in the population of approximately 73% over the last 70 years (LaRovere et al., 2015).

Many cities around the globe have attempted to combat these changes in the job market by using startup accelerators[1], which develop startup companies into larger businesses. These are seen as inexpensive ways to develop jobs as the U.S. Economic Development Agency estimated that every $10,000 the federal government invests into standalone companies creates 2-5 jobs while every $10,000 invested into startup accelerators creates 46-69 jobs (Commercial Appeal, 2009). As these startup accelerators often focus on tech sector jobs, they would also present a possibility of providing skilled and high-paying jobs. Presently, the company SerenDPT is in the process of creating a startup factory in Venice, termed H3, to create startup companies that will provide Venetians with jobs in innovative sectors. The goal of our project was to aid SerenDPT in the management, maintenance, and revitalization of the Ex-Herion complex. To achieve this goal, we have completed the following objectives:

1. Gather and centralize documentation and administrative information on the H3 Complex.
2. Create an events portfolio to guide future event preparation.
3. Develop and implement a website layout to represent the H3 Complex.
4. Document and present the history of the H3 Complex.
5. Create resources to guide the design of H3's interior and cafeteria spaces.

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[1]While this project focuses on the establishment of a startup factory, much of the research existing on facilities that house startups is for startup accelerators. The main difference between the two is that an accelerator takes pre-existing companies and nurtures them into larger companies, while a startup factory creates new startups from within the company. Since both still assist in the expansion of startup companies, we will use relevant research on accelerators to apply to the startup factory concept.

We started by analyzing, collecting, and organizing what already existed at H3 for documentation, inventory, and floor plans. We then created an events portfolio, a website to represent H3 and a presentation of the complete history of the building. Finally, we formulated a competition to guide the design of the interior of H3 and the development of a restaurant as per SerenDPT's plans.

2.0. Background

Repurposing buildings for other uses are a cheaper alternative than demolishing the building itself, and thus a solution that has been used for the H3 complex. Located on the Venetian Island of Giudecca, the H3 complex is the third 'factory' to exist in the former Convent of Saint Cosmas and Damian, following a fabric factory and tech accelerator (Carabillo et al., 2016).

2.1. Developments in Venetian Economy

Venetian demographics give an overview on the health of the economy. An aging population indicates youth are not remaining in Venice and instead leave to the mainland where there is a more manageable cost of living. By understanding the economy of Venice and the current tourism crisis Venice faces today, we can understand why H3 is important to potentially mitigate negative outcomes like job loss.

2.1.1. History of Shifting Job Market

Modern tourism developed post World War II, yet there is historical precedence as a smaller percentage of the economy in the Middle Ages. Originally a trading city state, agriculture and manufacturing still played a significant role in Venetian economy even as it transitioned towards a service economy (Davis & Marvin, 2004). In the 20th century, especially post World War II, tourism became the undisputed dominant portion of the Venetian economy (Davis & Marvin, Singh et al., 2005).

The nineteenth and twentieth centuries brought industrialization and large-scale production to Venice. Some industries, like glass-blowing and cloth production, still produce products, but now cater towards tourists (Lanaro, 2006). Currently, it is estimated that the economy of Venice is 56.4% service, 25.4% commercial, 16.6% manufacturing, and 4% agricultural based off prior WPI IQPs including the 2016 project Made in Venice and the 2011 Venice census (Carabillo et al., 2016). **Figure 4** demonstrates the large percentage of the Venetian economy focused towards the service and commerce sectors compared to the manufacturing and agriculture sectors.

Venetian Job Market 2011
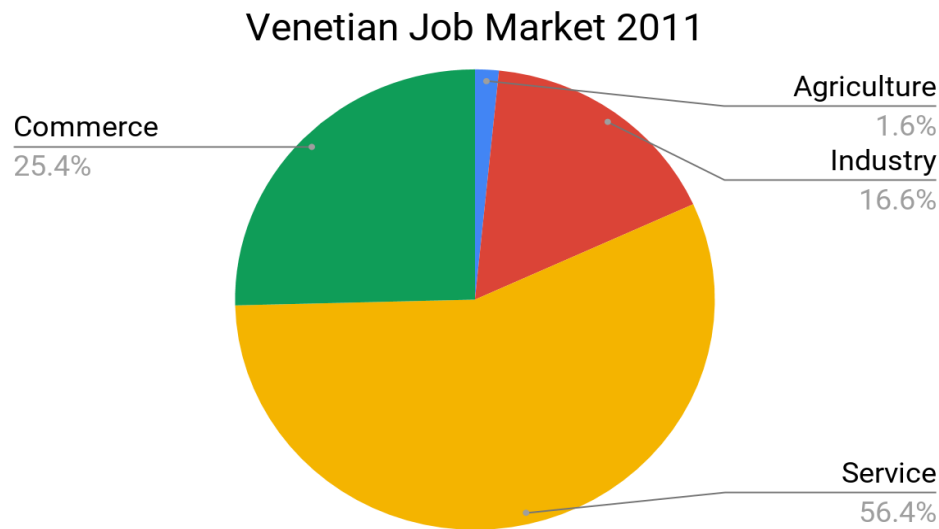
Figure 4: *Pie chart of the Venetian job sector. Almost 57% of stores are service sector, which caters primarily towards tourism (ottomilacensus.istat.it, 2011 Census of Venice).*

2.1.2. Startup Factories as a Solution

Many cities with economic downturns, like those in Venice, have started to look towards startup accelerators as a solution such as the Y Combinator in 2005, which is responsible for stimulating the growth of 1,900 startup companies including Airbnb and Dropbox (Rich, 2013). Startup accelerators actually fall into three categories: incubators, which take people with ideas and assist them to create a viable company; accelerators, which take startup companies and assist them to become larger companies; and factories, which produce many startups under the umbrella of the one larger company. Startup factories actually produce, as their product, startup companies. They all work in a similar fashion in that they take a company that does not exist and make it into a profitable company by mentoring and teaching the employees how to manage a business. These efforts can then employ people, potentially having the power to move markets. Many cities have embraced accelerators as a way to enact change with 25 being founded in 2015 just in Europe alone as seen in **Figure 5** (Say, 2016). At the same time, over 90 million dollars have been invested into American and Canadian startup accelerators and over 40 million dollars invested into European startup accelerators. These form an effective way for jobs to be created at lower investment costs. The U.S. Economic Development Agency reports that $10,000 of federal money invested into startup accelerators created at least 40 more jobs than the same money invested into individual companies (Commercial Appeal, 2009). The concept that drives the popularity (as seen in **Figure 5**) of startup accelerators is the idea that startup accelerators reduce the failure rate of newly founded companies and increase the chances that the startups become large-scale enterprises. However, there is little research to support this and these claims rely largely on anecdotal evidence or individual cases such as with Y Combinator.

EVOLUTION OF THE ACCELERATOR INDUSTRY

US and Canada led the wave for new accelerator program launches and reached a peak in 2012.
While some regions have reached the peak in 2014/2015, others have not yet done so.
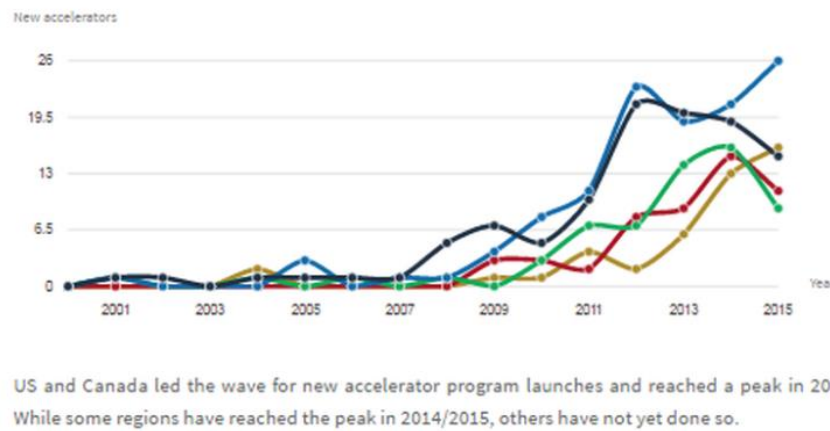
Figure 5: *Chart of the number of new accelerator programs by year. The dark blue line is the US and Canada, the light blue line is Europe, the green line is Latin America, the red line is Asia and Oceania, and the yellow line is the Middle East (Say, 2016).*

2.2. SerenDPT and H3

Serenissima Development and Preservation through Technology, commonly known by its shorthand name "SerenDPT", is a Venetian-based organization that develops innovative and socially responsible business models addressing problems within the city. These range from preserving historic public art with the initiative PreserVenice to optimizing Venetian transportation with the daAaB app. Their mission is to create employment in the city of Venice and surrounding islands through innovative startups that assist in solving these local problems. They aspire to have their solutions exported to other cities facing similar problems around the world.

SerenDPT is an organization that creates startup businesses, and therefore can be considered a startup factory. A startup factory creates startups internally, rather than just hosting external, pre-made startups as a typical accelerator would. In order for SerenDPT to reach their goal of creating at least 100 well-paid jobs for Venetians, they required a central facility that would house their startup companies. They presented a Request for Proposals (RFP) on their desired economic development to the city of Venice, and upon approval, was awarded the use of the previous Herion Accelerator's ex-church space and the management of the 'deposito' for 9 years. They nicknamed this new complex H3, to mark the third rebirth of the Herion complex, from garment factory to accelerator to startup factory. Thus, the former garment factory will be made a factory once again but producing startup companies, rather than textile products.

3.0. Documentation and Organization

The first set of actions we pursued was to perform general maintenance on H3. A major component of this was obtaining building documentation and then organizing these files into a central location. We also created a room coding system and labeled keys to the ex-church and deposito. We then inventoried all loose materials SerenDPT inherited from the previous tenant and moved them to storage. Finally, we organized the Venice Project Center library in new cabinets at H3 after transferring them from the previous VPC location in San Polo.

3.1. Background

An important metric for the success of a company, is the proper maintenance of the building they reside in. To accomplish this, building managers must have access to all the vital records of the facility. Vital records fall into four global categories: operational, legal, emergency, and fiscal records (University of Washington). Operational documents include those relevant to day to day operations, such as HVAC system details or the key labelling system. Legal documents include the building lease and any documentation detailing inspections. Emergency documents include fire suppression and fire safety information. Lastly are fiscal records, which include payroll cards, the building's tax information, and any other documents on the building's monetary matters (Loria, 2015). A table of all of these documents can be seen in **Appendix A**. In addition to documentation, building managers should have an inventory of what is in their domain to prevent unnecessary purchases and further aid in maintaining smooth building operations.

3.2. Deliverables

In this section we will present the process and deliverables through which we organized the documents and library for H3, developed a room coding system to label associated keys, and took an inventory of the building.

3.2.1. Document Management

To organize vital documents for SerenDPT, we first had to obtain documents that SerenDPT inherited from the ex-Herion Accelerator. We then scanned all the physical documents to an online folder organized based on the physical partitions within the folder they arrived in. We also received and organized digital documents shared to us of which SerenDPT had no physical copies of in their archives. Taking both the digital and scanned documents, we created a folder that houses all of them together to allow SerenDPT easy access to documents as needed.

Due to the large volume of documentation, we created an index to assist employees in accessing the desired document (see **Appendix B**). This index was created in a Word document with hyperlinks to each folder and subfolder of the online database. SerenDPT currently has access to the database and this index on a private Google Drive account as well as on a restricted section of the H3 website.

The second part of document management we assisted in was the transfership of the VPC library from the old facility in the San Polo sestiere into the new bookcases at H3. First, our team and the 30th Anniversary team packaged all prior Venice IQPs and the VPC Library at the old

center, to be loaded on a boat to Guidecca. After the packages were delivered to H3, our team arranged all the books and articles from the library into three large cabinets in H3, based on how they were stored at the old facility. To follow the same shelving arrangement as the old facility, the Zotero online database was used. This database was used for organization of the library at the previous VPC, so many of the books were already in the system. Each book was verified in the system, and for any books not in the database, we added identifying information and a location marker of 'XXX' before putting them on a shelf with all of the other non-categorized books. In this process the entire library expanded by 12% with the new books remaining to be categorized by a future group.

3.2.2. Room and Key Coding System

To develop a labeling system for the rooms in H3, we obtained CAD documents detailing the floor plans from SerenDPT. We then rearranged the floor plans to create maps of each floor in the Church and Deposito, using files from AutoCAD 2018 and arranging them on Microsoft Publisher. Using these resources, a room coding system was developed to assign a distinct name to each space in the building using two letters and a number, as seen in **Appendix C**. The first letter signified the general location, R for Ristoranti, C for Chiesa, D for Deposito, E for Esterno, and T for Torre. The second letter specified more particular spaces, with A for Apse, B for Bagno, F for Finestra, H for Hall, S for Sostentamento, and P for Porta. Every space, door, and window that had a lock was then numbered according to floor and iteration, as seen in **Figure 6**.
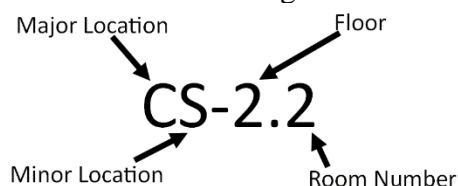
Figure 6: Example of a code designed to identify a room. This code corresponds with the second support room on the second floor of the ex-church.

These room codes were used to label the floor maps, as seen in **Appendix D** and **Appendix E**, so that someone unfamiliar with the system could easily understand the label assigned to each room. Next, as keys were identified to open particular doors, they were tagged, labeled, and added to a master collection for SerenDPT. Tags for the keys were color coded such that green tags represented the ground floor, yellow represented the first floor, and red represented the second floor, with black tags indicating support or 'technical' rooms, blue tags representing closets, and white tags representing bathrooms.

3.2.3. Inventory

To carry out maintenance on the building we had to determine what materials were already present in the building. We started by moving a number of padded black chairs, to be used for events, from a room in the deposito, to a conference room in the church. We then moved all other extra chairs into a second room set aside for storage and supplies. All other materials we could find in closets, seen in the inventory of **Appendix F**, we moved into this room unless it was a technological item, upon which it was moved to a third room set aside as a technical storage room. Finally, we separated items that were property of Venice, recorded the numbers on any blue tags that said 'Comune di Venezia' as seen in **Appendix G**, and then moved all computers, monitors, keyboards, mice, and wiring associated with these tags to a back room in

the deposito so that they can be more easily returned to the City of Venice without occupying extra space in H3.

3.3. Conclusions and Recommendations

Several circumstances prevented us from creating a complete, master set of keys; however, we did establish a framework by which future keys can be catalogued as they are matched to a door. Some limiting factors were that some doors were not unlocked by any key in the possession of SerenDPT and others were unlocked by only one key, which was in use by administration, and thus not available to be stored as a master key. Other doors lacked locks in their entirety. For closets and bathrooms, we were able to identify the majority of the keys but lacked enough blue and white tags to mark the door associated with each key. We thus documented all locations of doors with missing keys, keys that were in possession of employees, and doors that lacked a locking mechanism which will allow SerenDPT to finish organizing the keys. Keys that are not in the master collection can be seen in **Appendix H**. Keys for the bathrooms and rooms in the belltower had a particular type of lock and key that we identified in **Appendix I**, but the ordering was haphazard and complex as a single key went to several doors on this list. Therefore, we marked down which key went to which room rather than setting aside one key per room, which would have resulted in some rooms falsely appearing to have no keys.

We recommended that SerenDPT replace the locks for doors where there is either no key or no lock and create copies of the keys that are currently in employees' possessions. This way a master collection can be maintained that prevents future lock replacements occurring from loss of a key. We also recommend continued maintenance on the labels of each key. The keys are currently attached to a tag which has a sticker created by a label maker identifying the room. We recommend using the paper that is in each tag to write a label that also includes the name of each room for easier identification. The tags themselves will also need maintenance and SerenDPT should buy white tags for the bathroom keys, blue tags to finish tagging closet keys, and more green tags to be able to identify each outside and restaurant door, as the door currently labeled as EP-9 is currently attached to a blue tag. Finally, for easier visualization of the location that each key open, we recommend SerenDPT print out large maps and attach them to a board, then put a nail through each key location on which to keep copies of the keys. This will ensure easier and faster use for all employees that do not need to be able to know the identifying code for every room. A sign for each room indicating the code for that room would also help greatly for room recommendation.

Properly servicing and maintaining a building requires adequate organization of all related documentation and items. We first recommend that SerenDPT add manuals to the document database for any new devices bought. This is to ensure proper maintenance is done when issues arise from SerenDPT's appliances. We then suggest that for the VPC Library, all 'XXX' books be appropriately categorized. 'XXX' simply designates a book that was not in the VPC library prior to us placing the books in H3, and an individual searching for a certain type of book could easily miss a better option that is currently filed under 'XXX'.

4.0. Events

The success of a business can be augmented by an ability to hold events. Events can help the company interact with potential customers and investors, and the space used to host events can be rented out to organizations other than SerenDPT to earn revenue while not in use by the primary business. The ability to hold events is in turn affected by the spatial capabilities of the area that the business controls. This chapter serves as a guide through the process to ensure that the company has the ability to hold events through an analysis of the space that SerenDPT controls, a recommendation of the materials SerenDPT still needs to host a variety of events, and the creation of forms to assist in the renting of space. By combining all of these together, we have successfully created an event portfolio for the building.

4.1. Background

Events are important because they allow startup factories to network with multiple parties of interest that include potential investors, potential employees, and local residents (Pals & Heaton, 2006). Social networking through events for the local community is especially effective in Italy due to its broad cultural support for smaller organizations and businesses like startups (Pace & Pace, 2010). Funding will be especially pertinent for private sector startup factories as they do not have access to university funds and grants compared to startup factories connected to an institution (Colombo & Delmastro, 2010). These networking events may include workshops, parties, banquets, conferences, seminars, lectures, and meetings (Sanders, 2006).

Before a venue can host events or rent out the space for other organizations' events, it must be able to meet the needs of whatever groups use the space. This can generally be satisfied by the venue having the necessary materials to support the events, as seen in **Appendix J**. The venue then has to communicate to potential space-renters what the capabilities of the venue include in terms of items, cost, and space.

One of the most important distinctions of a space is how many people it can host, which varies based off of safety laws from different countries. In Italy up to 100 people are allowed into a building unless there are fire prevention trained personnel present, and then up to 200 people are allowed. This is not a complete guide to space capacities, though, as 100 people clearly cannot fit into a room with only 2 square meters. The United Kingdom thus elaborates this guide by defining space capacity in two ways: how many people are allowed into the room based off of the width of the exit doorways, and how many people can physically fit into a room. The first method defines that a space with an inwards opening door is allowed to hold up to 60 people, a space with a 750 cm wide doorway can hold up to 100 people, and a space with a 1050 cm wide doorway can hold up to 200 people. The second method defines the space each person takes as $0.3m^2$ if standing, $0.5m^2$ if standing with movement (such as dancing) and $1m^2$ if sitting in a chair (United Kingdom Government, 2005). These methods of determining room capacity can thus provide a structure to determine how many people should be allowed into each space.

The capacity for a room to fit its purpose is primarily affected by space, but another quality that affects the ability for the room to hold an event is sound. While many acoustical measures are not significant in small rooms, there can be a significant effect on larger rooms, such as the H3 main hall where sound can echo off the walls, ceilings, and floors and cause an increase in the reverberation time. A reverberation time of 0.5-0.8 seconds is considered

acceptable for a lecture hall (Remes, 2015). Reverberation times above this range will result in echoes that generate noise that makes general speaking inaudible.

4.2. Deliverables

In this section we will present the deliverables that advise SerenDPT how to successfully host events through an events portfolio. The portfolio includes the space capacity of each room, a list of materials necessary for various events, and a form by which interested parties can rent the space at H3 through the H3 website.

4.2.1. Space Capacities

The first step we completed when forming the event portfolio, was to establish and document the space capacities for each room. To determine how many people could fit in each room, we first obtained CAD floor plans of the building and measured the dimensions of each room. Using these dimensions, we followed a space capacity guideline from the UK that measured standing space (with movement) as .5m^2 per person. Next, we measured the chairs that will be used for events and determined that a dimension of 65cm x 80cm allowed sufficient space for a person to sit comfortably in. With this information we calculated the seating capacity for each space in different event formations. All of the room capacities for event-capable rooms are further detailed in **Appendix K**.

4.2.2. Materials List

The next component of the event portfolio to develop was a materials list for each type of event so that SerenDPT could properly host that type of event, finalized in **Appendix L** and **Appendix J**. First, we took the list of services and items necessary for events and eliminated unnecessary items. These were items the sponsor indicated they would not need because they already had the item or were not planning on hosting the types of events for which the items were relevant. In addition, we added materials required for the sponsor to attach anything to walls, including hooks that can be attached to glass such as through suction cups.

The large portion of materials on the list were sound support systems, so we determined the necessity of H3 to have sound support systems available by measuring the reverberation time on the "Reverberation Time" app by Kröben, as can be seen in **Appendix M**. These reverberation times were observed to decrease as rooms were filled with more items and not cause a significant issue to sound quality. However, the main hall had a reverberation time of 2.5 seconds which is high enough to require secondary sound support in order to have audible speaking voices as it did not decrease to the acceptable range of 0.5-0.8s when filled with chairs. However, using the consideration that the main hall and possible courtyard in the scenario of an outdoor concert were the only areas that needed sound support, we were able to conclude that minimal support was needed, and two speakers would likely be enough. We thus modified our list again to reflect what was still needed for a functional and complete sound system.

Once this complete list of items was created, we looked into the cost and pricing of each item online and summed the total to be €8,618.95, with a price breakdown in **Appendix N**. We then identified and categorized higher priority items, based on the fact that the sponsor is planning on conducting events in early December. Generally, sound support elements were deemed more pertinent for short term purchases. The technical items necessary for these events

were thus found online in at least three different locations - amazon.it, Strumentimusicali, and EffeBi Musica - where available and prices were compared with the resulting electronics purchasing matrix (as seen in **Appendix O**) and recommended purchases, highlighted in green, subsequently sent to the sponsor.

4.2.3. Space Renting

The last component of the event portfolio was to create a pricing plan and an application form for groups other than SerenDPT to rent the venue space. To determine the cost of the event space, we first reviewed the Comune di Venezia policies, provided by Facility Manager Sarah Puccio, which lists how much public spaces can be rented for. The policy sets different pricing tiers of 0 to 75 m^2, 75 to 150 m^2, and greater than 150 m^2, which we simplified to represent the H3 building by reinterpreting the tiers into terms more applicable to the space: normal room, courtyard, and main hall. When applying for a specific space online, an applicant would see that space's capacity, size, and cost. Next, we calculated renting cost options which can be broken into hourly, half day or full day slots, where a half day slot represented an event from 9:00 to 13:00 or 13:00 to 17:00 and a full day slot represented an event from 9:00 to 17:00. Due to the ease of the set times, the half day and full day slots were set slightly cheaper than the hourly pricing for a 4 or 8 hour event. We also created guidelines for a price multiplier of 120% for out-of-hours events, 130% for weekends and 80% for repeating events as repeating events would result in returning customers and easier scheduling. The resulting H3 space pricing matrix can be seen in **Appendix P**. In addition to pricing, we took pictures of each room while unoccupied, including pictures of several spaces with chairs and projectors setup, to be used as sample images on the website. Both of these features were ported to the website, where we integrated them with an event application form, as seen in **Appendix Q,** that we created to detail every relevant piece of information necessary for the sponsor to determine what the event would require in terms of time, staff, and materials. This culminated in a total price that an event would cost that allowed the sponsor to earn money from renting out the space. A second form was compiled to guide an applicant to detail all information the sponsor would need pertaining to an exhibit, as seen in **Appendix R**, to reflect the fact that an exhibit would be shown in H3 for a more extended timeframe than an event.

4.3. Conclusions and Recommendations

In summation, we created an event portfolio deliverable that provides information about the capacity of each room to hold events, a materials list for upcoming purchases, and a properly priced form with which the space can be rented for events from outside of SerenDPT. It also includes PDF documents that can serve as an application for other organizations to hold events or exhibits in H3.

To make the process of holding events more streamlined in the future, we start by recommending that SerenDPT create a diagram of the setup for each event. This will aid in the understanding of the space the people interact with. As a more long-term preparation for events, SerenDPT should incorporate elements into their space that inhibit the dispersion of sound so as to reduce reverberation of sound and make voices more audible. SerenDPT should also purchase items suggested in **Appendix N** so as to provide other organizations using the space for events with the items, they need to make their events more complete.

To ease the cost of buying these extra items we recommend that SerenDPT reassess their cost determination guidelines. We attempted to create a pricing guideline that accounted for the cost of each item, but the sponsor declared these to be too complex. Regardless of complexity, we suggest that for an organization holding events at H3 to use an item, such as a microphone, they have to pay an extra price. On our current website and in our documents that SerenDPT has access to, we have pricing estimates with which SerenDPT will regain the money spent on the item after it has been used for 20 hours in events. The pricing guidelines need to be further modified so that they account for the fact that when an event has more than 100 attendees, SerenDPT needs to provide fire safety trained personnel. If the event is not held during normal business hours, SerenDPT personnel need to be present at the H3 building when they normally would not be, thus warranting extra payment.

We finally recommend that SerenDPT purchases more tables. Our research through meetings with the WPI Events Office suggests that a variety of tables are needed as different tables fit different purposes and thus different events, as seen in **Appendix S**, heading 'Events Office Meeting', subheading 'Be Flexible.' Budgetary and storage concerns caused SerenDPT to dismiss the need for different types of tables, but we recommend that SerenDPT considers cocktail tables, round tables, and rectangular banquet tables in the future as they may eventually want to hold an event that requires these types of tables even though they do not currently plan on doing so.

5.0. Website

An organization's presentation to the world can be achieved through an online website, which should be as appealing and representative as possible. The most successful websites are tailored to their specific audience, with ease of use, user experiences, and user interactions at the forefront of the design process. This chapter dives into the creation of a website for the H3 facility that provides information on the facility's history, startup companies inside, upcoming events hosted at H3, and available venue spaces. For parties interested, there is also a registration form that will request the use of a venue space. There is also a section for administrators to view documents on the H3 building. Finally, any sections of the website that have not been implemented yet are designed and listed as a recommendation in **Section 5.3**.

5.1. Background

For a website to provide an ideal user experience, features that visitors frequently interact with should be displayed on the home page in a language and format that is suitable to their level of understanding (McManus, 2014). The website should avoid the usage of sub tabs and hidden information unless necessary, and even then, it should be minimalized into an intuitive and orderly format (ibid). In addition to organization, aspects of appearance, such as colors, fonts, and white space, can influence the success of a website (Plumley, 2011). These aspects must align with the purpose and mood of the website. For example, when considering color theory in choosing a color scheme, one must be aware that blue provides a trustworthy and intelligent emotion, more suited for businesses, while another color like red is powerful and bold and can make the users take impulsive action (Bradley, 2010). Furthermore, A website should have 1 to 2 fonts and 3 to 4 colors (Frisby, 2018). Overall, choices made in the design phase should be directed towards the purpose of the website in order to provide a representative layout, appearance, and flow for the organization hosting the site. By these considerations, a website, that serves as a method of communication between the company and everyone else, can be designed effectively.

5.2. Deliverables

In this section we will present the process and deliverables through which we designed and implemented a representative website for the H3 complex.

5.2.1. Hugo Framework

Since the H3 complex may have to frequently update the content presented on its website, we were advised by SerenDPT designer, Andrea Toffanello, to build the website using the framework, Hugo. Hugo is a static site generator that separates the theme of a website from the content, in a similar fashion to WordPress. Users with little coding experience are able to easily update the content on the website, without having to look into dense code files. With the separation between these sections of the website, we mainly began development on the theme of the website, knowing that the content would later be updated.

5.2.2. Design Theme
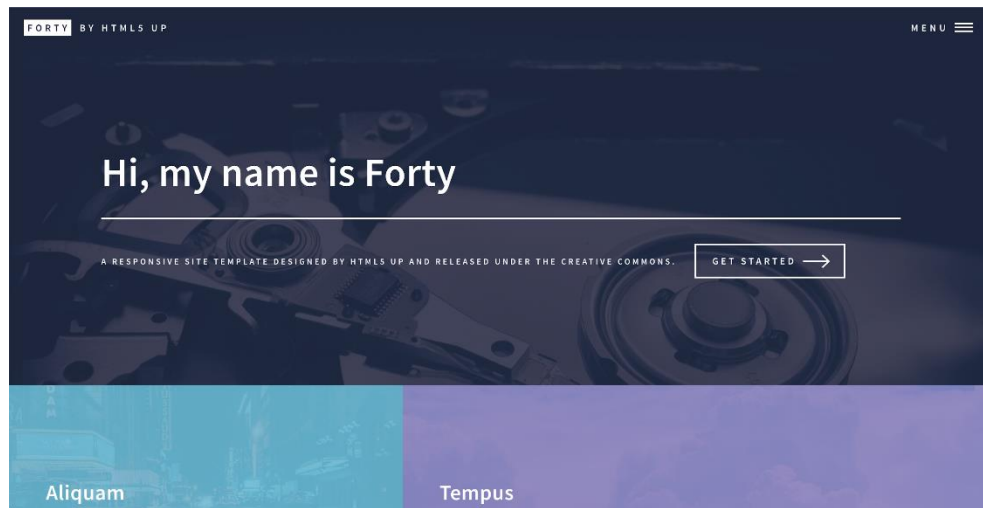
Figure 7: The homepage of the Hugo Theme, Forty.

To start with the design of the website, we initially drew inspiration from the default themes that Hugo has listed, in particular the Forty Theme as seen in **Figure 7**. With this inspiration, we created a template site that reflected the layout of this theme. Later, we reorganized this layout to account for the advice from websitebuilderexpert.com along with design choices from websites of high-tech companies and other startup incubators. A common trend was the usage of the z-axis in web design to try to make the website appear less flat. We have achieved depth through a transparent navbar, that appears "on top" of the rest of the site; the usage of background videos and images, which make the screen appear deeper than it actually is; and drop shadows, which also give the illusion that the item is on top of the webpage. Piecing together these assets completes the layout of the website.

The next aspect we approached to create the theme was font and color. To choose a font, we reached out to another IQP group at our project center focusing on accessibility options to ask what criteria were for the visually impaired. They advised us to avoid the usage of all capital letter text and Serif fonts. The final font we ended up choosing was the Sans-Serif derived font, Source Sans Pro, due to its simple and readable nature, deciding that a simpler option would be cleaner and not unnecessarily complicate things. To complement the font with a color scheme for the website, we looked at color palettes that other designers had created in Adobe Color CC. After discussion with SerenDPT's lead designer, we selected an option that used white as the background color, an off-black as the foreground color, and a yellow as the highlight color. Color theory describes white as a clean, simple, straight to the point option which is why several tech companies, such as Apple and Samsung, use white as their background color (Kliever). We decided to follow suit and present the new H3 facility as a clean and techy place. To improve readability, the foreground and background colors of a website should be as contrasting as possible, we chose a black option. We avoided deep black as it provided too much of a contrast at points and broke the scheme of the website. The yellow highlight color was based off of the Hive startup company in SerenDPT as their color is used frequently in signage around the building.

The next step in the design process was the webpage interactivity. To achieve a better user experience, we have included different effects when an object is hovered over or selected on

the page to emphasize the z-axis on the website. We used card flip animations to make it appear that the card is a 3D object, color shift on button hover to make it appear like the button is on top of the page, and card lift animations to make it seem that the card is moving off the page once hovered. In addition to naturally moving objects, items and page content will fade in as they load to provide a smoother user experience.

5.2.3. Page Content

The website is split into five main sections, represented by the navigation bar in **Figure 8**, which consists of: Home, History, Startups, Events, and Spaces. Each section has a main page which acts as a hub for general information, but also contains access to more detailed information.

Figure 8: The navigation bar on top of the H3 website

The Home page is where one initially lands when visiting the website. This goal of this page is to provide an overview of the H3 complex and the other sections of the website. Since a lot of content being presented, whitespace is required to balance out this page.

The History page denotes the history of the Herion complex from Convent to SerenDPT's presence with H3. There is access to a more detailed page that encompasses all of the artwork that was present when the building was used as a church. In addition, there is a history presentation of the building and documentary of the building in Italian.

The Startups page redirects to SerenDPT's website, where a complete list of each of their companies can be seen with a description for each of them. We chose to redirect to SerenDPT's website to avoid an unnecessary repetition of content, but also to showcase SerenDPT's website.

The Events page displays specially chosen events. There is a general showcase to show a few major events, with a complete list of events as the page scrolls downwards.

The Spaces page includes images of the venue spaces that H3 holds. There are multiple access points to fill out the venue space request form. The request form shows the user a calendar and upon clicking a date, the available venue times for that date will appear. After selecting an available venue, the user inputs more information including event details and contact information. Upon submission of the form, the event is sent to the database.

5.2.4. Functionality

Besides the information displayed, the core functionality of the website comes when logging into an administrative account in order to access building documentation. These documents are presented as they are stored in the Google Drive folder. Account authentication is done through Firebase due to its security and ease of use. Firebase is also used for hosting the url to a public domain at https://h3-sdpt.firebaseapp.com/ for free, as well as storing a database on all events that the building will host. The events database is accessed through an event request form, where the user is able to select a time for an available venue space. The form reads the event information from the database, but does not automatically write a request to it.

To provide a faster functioning user experience, the Barba.js file was added to reduce page loading and delays. This JavaScript file provides functions that will reload only the

necessary parts of the page instead of having to reload the entire page every time. This minimizes browser HTTP requests and provides a smoother user experience.

5.3. Conclusions and Recommendations

With this website, the H3 complex is able to present itself to the general public as well as access important information and functionality for the company. Users are able to view general information of H3, the buildings history, the startups hosted inside, the upcoming events that will be hosted in the space, and the available event spaces, with the ability to register an event space if they choose. Administrators are able to do the same as a regular user, but also have the ability to access confidential building documentation after logging in. While the website is currently functional, and the content can be easily updated, it is not in its final state. We have included design recommendations on what the next iteration of the website could look like.
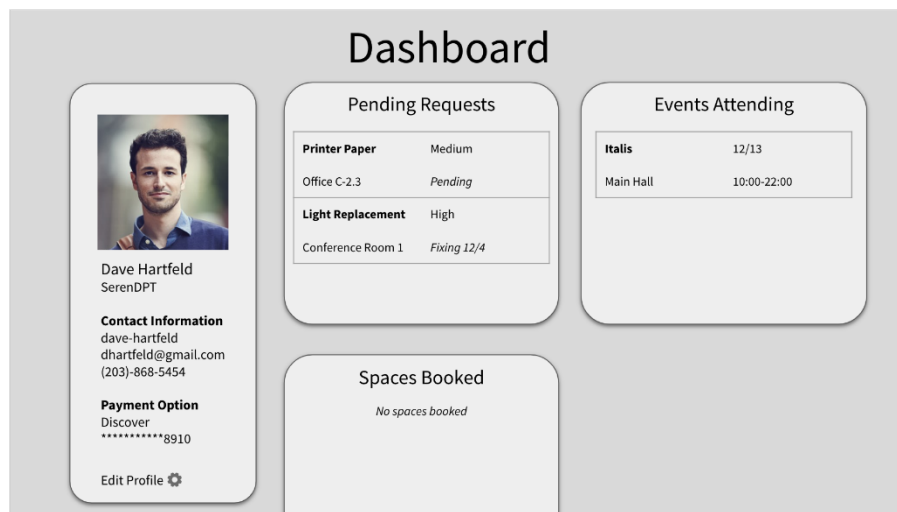
Figure 9: A UI Mockup for an Employee Dashboard

After we finished creating an initial website framework, we created a list of tasks that could be implemented in order to provide the website with further functionality. This list of tasks can be seen in **Appendix T**. Some tasks are ideas on new features that can be added, some are updates to visual aesthetics, and some are bug fixes. Each task has a priority level that is associated with it. Most of the security features have a high priority to assure the safety of the site and its users. Other priorities were assigned based on how valuable the task was and how it would help in SerenDPT's presentation of H3. There are also UI mockups for applicable tasks, to allow for an easier understanding of the idea presented. One of the features that can be implemented in the H3 website is the dashboard page, previewed in **Figure 9**, which appears in the tab bar after logging in. This dashboard will display different card information based on the administrative level of the user logged in. Guest users will see the events they are attending and the spaces they have booked. Employees will see the same as guest users, in addition to pending maintenance requests that they have submitted. Administrative users will see the same as employees, and also a user management card where they are able to modify users, changing their administrative level as needed. A complete list of all our website recommendations can be found in **Appendix T**.

6.0. History

Repurposing buildings for other uses may be a cheaper alternative than demolishing the building itself, and thus is a solution that is used for the H3 complex. Located on the Venetian Island of Giudecca, the H3 complex is the third 'factory' of creators to exist in the former Convent of Saint Cosmas and Damian, after a fabric factory and tech accelerator (Carabillo et al., 2016). Our team extensively researched the history of H3 and documented it in a presentation and written summary on the H3 website for SerenDPT to introduce visitors to the rich past they stand in.

6.1. Background

Founded in 1481 by Doge Lorenzo Celsi's granddaughter and five other nuns, the building that houses H3 was originally constructed as the Benedictine Convent of Saints Cosmas and Damian. It was constructed in two phases over twenty-five years, first as a convent and later as a church. The church became a center of art, commissioning 49 paintings and 7 altars that were funded by the monastery consisting of noble daughters (Venipedia). In 1806, the Napoleonic Wars forced the deconsecration of the Church and eviction of the nuns. During this time, the convent was used as a warehouse, and later a barracks. Most of the artwork was either lost or destroyed in this period, with only a dozen paintings remaining today. The church was abandoned and stripped of fixed furnishings, stone materials, paintings, altars, sculptures, and anything else of value that could be sold or used as a material (Spagnol, 2008). Overall it was violated by looters and desecrated, the exterior damage shown in **Figure 10**. In 1887, the convent temporarily became a hospice for cholera victims and afterwards converted into a textile factory in 1897, remaining as the Herion Garment Factory until the 1970s (Cotton, 2018; Venipedia).

Figure 10: Photo of the former Church. Taken before the Herion Factory existed, mid-19th Century (Spagnol, 2008).

When acquired by the Herion Accelerator in 2008, the factory was refurbished into its current configuration as seen in **Figure 11**, requiring almost 9 million euro in donations, garnered from the European Union and the City of Venice, to fully restore the complex (Spagnol, 2008). During this period, the nave was filled with a glass cube three stories high, containing 12 large offices, meeting rooms and co-working spaces. The apses were left to their full heights, with repair work done to the original frescos. In addition to refurbishment on the church, the deposito was converted into a three-floor workspace containing 23 offices, common spaces for meetings, and a cafeteria on the ground floor with a kitchen area.

Figure 11: Image of the interior of the Ex-Church after renovations in 2005 (Spagnol, 2008)

Originally, 38 startups signed up to work from the accelerator and use resources provided by the organization, later declining to four companies in 2016 before the accelerator left the facility (Carabillo et al., 2016). While not much information is provided about the fledgling startups, the Herion Accelerator faced several issues that led many tenants to leave such as issues with heating, the elevator, and internet service. A lack of general building management caused these unwarranted problems that were a disservice to the startups and created a bad relationship with the accelerator. The idea of creating an accelerator had potential, but the poor management and infrastructure induced its failure and startups leaving. In essence, the owners of the Herion used the space as an area for startup companies to do work, failing not only to provide useful elements like internet, but also to do anything that would make their companies more likely to succeed (Pals & Heaton, 2006).

6.2. Deliverables

As part of understanding H3, we were tasked with compiling the building's extensive history and summarizing the information for SerenDPT. In this section we will present the

various resources that have been compiled in order to adequately describe and present the history of the H3 complex including a history presentation, a documentary of the church, and a gallery of surviving artwork.

6.2.1. Presentation

In order to easily present the history of H3 at events and on the website, an in-depth slide show presentation was created (See **Figure 12** for a slide example). The presentation starts with the initial founding of the convent in 1481 by Marina Celsi and walks through the repurposing of the complex all the way to present day. Information on all the surviving paintings and artwork, including their current locations, are introduced in the presentation. There is also an extensive description of the frescoes in the apse of the church, which are the only original artworks still present in the church after its 1806 closure and subsequent looting.
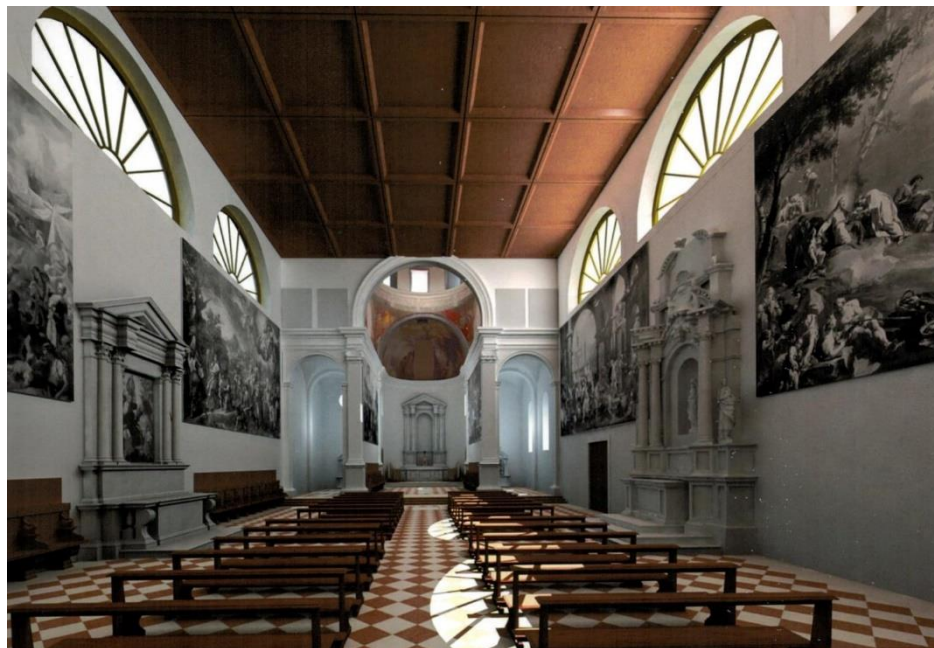
Figure 12: Image from the history presentation. This image depicts a rendering of the church from the 18th century.

6.2.2. Historical Artwork

To augment the history presentation, all twelve surviving paintings and stoneworks were located, the biggest and most important being the fresco in H3 above the apse completed by Gerolamo Pellegrini in the 1600's. All information was compiled into a document that shows the physical location of the particular artwork, which ranges from local parishes in the region of Veneto to the city of Milan, seen in **Figure 13**. Some locations have more than one artwork with the most artwork being held in the Venetian Museum Galleria di Accademia, which houses five pieces. To see a complete list of the artworks, see **Appendix U.**

Figure 13: *Location of surviving artworks. Some locations have multiple works.*

6.3. Conclusions and Recommendations

The researched history of the church will allow SerenDPT to convey to guests the importance of utilizing unused Venetian buildings to retain the population and allow more jobs to open up. We recommend showing guests the history, whether by the presentation, documentary, or text, for maximum effect. We believe this would best be done by purchasing a tablet display in the main hall for visitors to flip through any presentations. If the visitors have questions on the church or SerenDPT, they may simply use the tablet to answer questions or pass time while waiting to interact with SerenDPT.

7.0. Design

To aid SerenDPT in the revitalization of H3, the team had to work to gain an eye for interior design. Through the creation of a catalog featuring researched designs, the framework for a future design competition, and a proposal for a concept restaurant laboratory, the future looks bright for the H3 complex. Through the use of the tools created, and the recommendations given, SerenDPT has the opportunity to make H3 a robust workplace for many years to come.

7.1. Background

Today, more than ever, the physical appearance of a company is becoming important. While branding, product design, and product quality are typical metrics for measuring a company's success, the spaces within which a company houses its employees tells almost just as much by giving insight on working conditions and corporate cultures and attitudes. These spaces typically are not a product of the company alone and involve the employment of an interior designer. Within companies striving to improve on innovation, workspaces that promote a collaborative atmosphere are on the rise. The definition of collaborative and innovative can vary from company to company, but core elements remain that allow designers to create spaces that reflect company values, corporate goals, and allow employees to complete meaningful work.

7.1.1. Design Process

The process behind these designs is often lengthy and is composed of multiple stages. While the overall process may vary from firm to firm, or even designer to designer, it typically begins with a consultation between the client and designer and ends with the installation of fixtures and decor. The length of the process can be extremely short, lasting only a few weeks, or very long, with estimated times of up to six months depending on the needs of the space and the client.

In assuming the role of an interior designer, it is essential that the common practices of an interior designer be understood. The interactions between the designer and the client indicate the direction in which projects can progress and reveal many things about the intents and potential results of such a project. Professor Robert Haddad of Notre Dame University Lebanon notes that "Every design is a hypothesis but unlike scientific researches the design hypothesis is rarely expressed in projects." Instead, they remain imbedded in the designer's mind." In saying this, Haddad realizes that there is a clear connection between scientific design and experimental methods and interior design. As is such, he points out that there are methods to prove a design hypothesis: design evaluation and design theory or concept development.

The first method, design evaluation, uses a more hands-on approach and is "oriented towards real settings in assessing what works and what does not." The latter method, design theory or concept development, works more in the creative space, and is more "focused on understanding of basic relationships and concepts." These two methods of demonstrating a design hypothesis are also supported by adequate research by designers that is either conducted objectively, with a large emphasis on physical features and characteristics, or subjectively, through the assessment of the feelings, thoughts, and states of mind created by a space (Haddad).
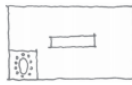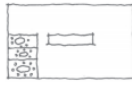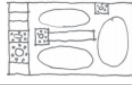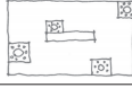
7.1.2. Design Elements

Private and open office environments are two of the most widely used environment types in the industry today. Both environments offer beneficial and detrimental features affecting the necessities of both the employee and the business. The benefits of private workspaces compared to open are increased individual productivity and increased collaboration respectively. (Caramella) The increase in collaboration within open environments typically leads to heightened innovation. Conversely, individual productivity is diminished within open workspaces, but flourishes within private workspaces at the expense of collaboration and overall innovation. (Caramella) Striking a balance between open and private workspaces is essential to catering to individual and group needs with regards to the work being produced. Ultimately, the cost of these spaces also influences the direction in which a company may head with their office design (Duverge). Open environments are considerably cheaper than private spaces. Within an open space, there is often a large table, or set of tables, and chairs for employees to work at. There still often remain private offices for conferences and management, but the number is significantly less than that within offices where employees get dedicated workspace in the form of offices or cubicles.

Effective collaboration is becoming a critical aspect of workplaces set on innovating. Organizational performance and agility are byproducts of this collaboration, and so the shift to more open spaces is leading to the implementation of a collaborative atmosphere within the workplace. A 2010 study aimed to understand the types of collaborative workspaces that exist and examined the perception of these spaces by their occupants. The study focused on teamwork-related spaces, generally classified as meeting areas; service-related spaces, generally classified as "shared print and copy areas", and amenities related spaces, generally defined as shared kitchen and coffee areas. Through the study, seven types of teamwork-related spaces, four types of service-related spaces, and five types of amenity-related spaces were identified within eleven office buildings in eight different cities within the United States. In **Table 1** and **Table 2,** the diagrams for teamwork-related and service-related spaces are shown respectively.
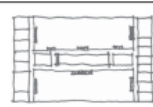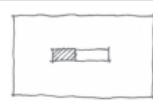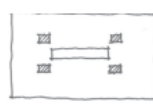
Table 1: Layouts and Descriptions of Teamwork-Related Spaces

	Diagram	Description
M1		No dedicated meeting space on the floor (often cases with meeting space in supervisor's office).
M2		One big meeting room for the whole floor.
M3		Group meeting rooms with various sizes.
M4		Distributed meeting rooms, not reflecting occupant density (often concentrated close to closed offices).
M5		Evenly distributed meeting rooms, reflecting occupant density.
M6		Distributed meeting rooms, located around the core (easy to find).
M7		Distributed meeting rooms, around the core and at the corners (with views to the outside).

Table 1: Displays teamwork space the layouts obtained by the study in the column titled "Diagram", and a brief description of each layout style on the right in the column titled "Description. "Additional resources from this study may be found in **Appendix V.**

Table 2: Layouts and Descriptions of Service-Related Spaces.

	Diagram	Description
C1		Copiers located randomly in vacant workstations.
C2		Copiers located on circulation aisles.
C3		Copiers in dedicated space, centralized (often in the building core, serving the whole floor).
C4		Copiers in dedicated hubs, distributed to serve neighborhoods of workstations.

Table 2: Displays the service space layouts obtained by the study in the column titled "Diagram", and a brief description of each layout style on the right in the column titled "Description." Additional resources from this study may be found in **Appendix V.**

The study as a whole focused on the idea that workers were supported in collaboration within these different environments, both by the people they worked near and the chance for

such action within each space. Participants in the study ranked the spaces based on this idea on a scale of 1 to 5, 1 being the worst and 5 being best. Teamwork space styles M7 was determined to have the highest level of perceived support available, while service space style C4 contributed the same. In-depth, graphical ratings of these and other spaces can be found in **Appendix V.**

7.2. Deliverables

The H3 Design project was created with the goal of aiding SerenDPT in the management, maintenance, and revitalization of the H3 Complex. The concept of revitalization was approached through early-phase design work. In doing so, the team created a set of catalogs that feature inspiring imagery of designs used by technology companies the world over. In addition to this, we created a set of tools that could be used to assist SerenDPT in gaining feedback on the catalogs and any future ideas for the interior design and decoration of H3. In addition to the catalogs and feedback methods, a framework for a future design competition, focusing on the interior spaces and courtyard, was created. To accompany this, a proposal was created and forwarded to the Basque Culinary Center for the installation of an experimental restaurant space within the H3 Complex.

7.2.1. The Catalog of Inspiring Designs

The future SerenDPT team that will focus on improvements to the interior spaces will need a point of reference to what modern, innovation-based companies, are doing with their office spaces. To begin, the team documented local spaces with goals similar to those of SerenDPT, working with startups to create jobs and successful companies. This documentation, during the PQP term, resulted in what we called *The Thematic Catalog*. This catalog, found in **Appendix W**, was highly focused on these spaces and featured images of specific types of spaces within each location, and gave detailed information on items of interest found in each. The catalog was presented at the start of IQP and noted to be too focused and did not necessarily convey the inspiring mindset wanted by the sponsor. From this, two catalogs would be formed: *The Catalog of Local Spaces* and *The Catalog of Inspiring Designs*.

The Catalog of Local Spaces was created from the images taken during the PQP term and used in *The Thematic Catalog*. This catalog features images from each space visited. Created in Adobe InDesign CC 2019, the presentation style of images in this catalog was carried into *The Catalog of Inspiring Designs*. An image of the *Catalog of Local Spaces* in development can be seen in **Figure 14** with the full catalog in **Appendix X**.
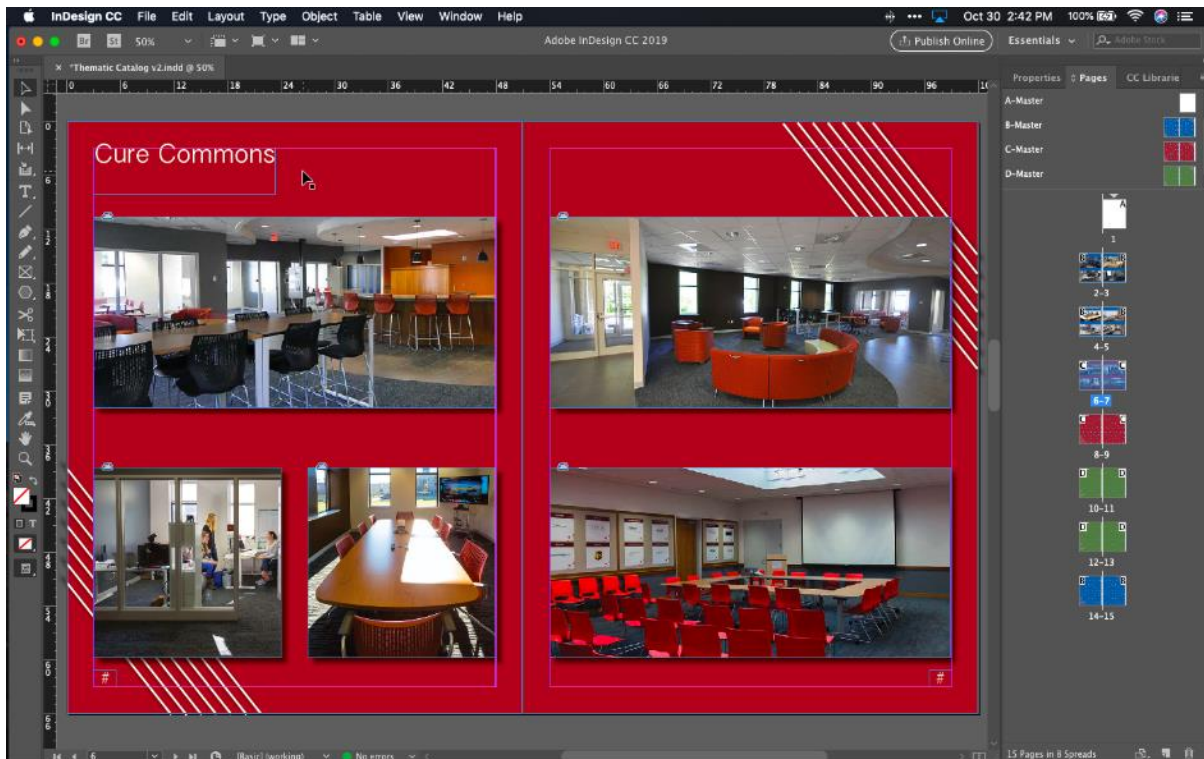
Figure 14: *Screenshot of an early version of The Catalog of Local Spaces being edited in Adobe InDesign CC 2019 on MacOS 10.14. Date: October 30, 2018*

The style of design used here was modified later to be aligned with that used in *The Catalog of Inspiring Designs*, also created in Adobe InDesign CC. This catalog featured other images that the team obtained via online searches. The catalog was created as an interactive PDF, featuring over 250 images of modern designs from companies such as Google, Twitter, Microsoft, and Huawei, totaling over 81 interactive pages. Interactive elements of the catalog include: the table of contents, the title of pages and the subtitle of pages. In addition to this, a numbering system was created for easier image identification and reference during future use.

The title of each page identifies the company that the design was completed for, and acts as a hyperlink to the web source of each design. The subtitle identifies the design firm responsible for each space, with the exception of some that list the source of the image due to the lack of design firm information. Similar to the title, the subtitle functions as a hyperlink to the design firm's homepage. The numbering system operates from left to right, and top to bottom, and resets with each design. An outline of the catalog features can be found in **Figure 15**, with a complete, non-interactive version viewable in **Appendix Y** and the complete, interactive version available for download at:
https://drive.google.com/open?id=1J14rBeEJUr7s172ZprWw4cWs39Kl96YH

25
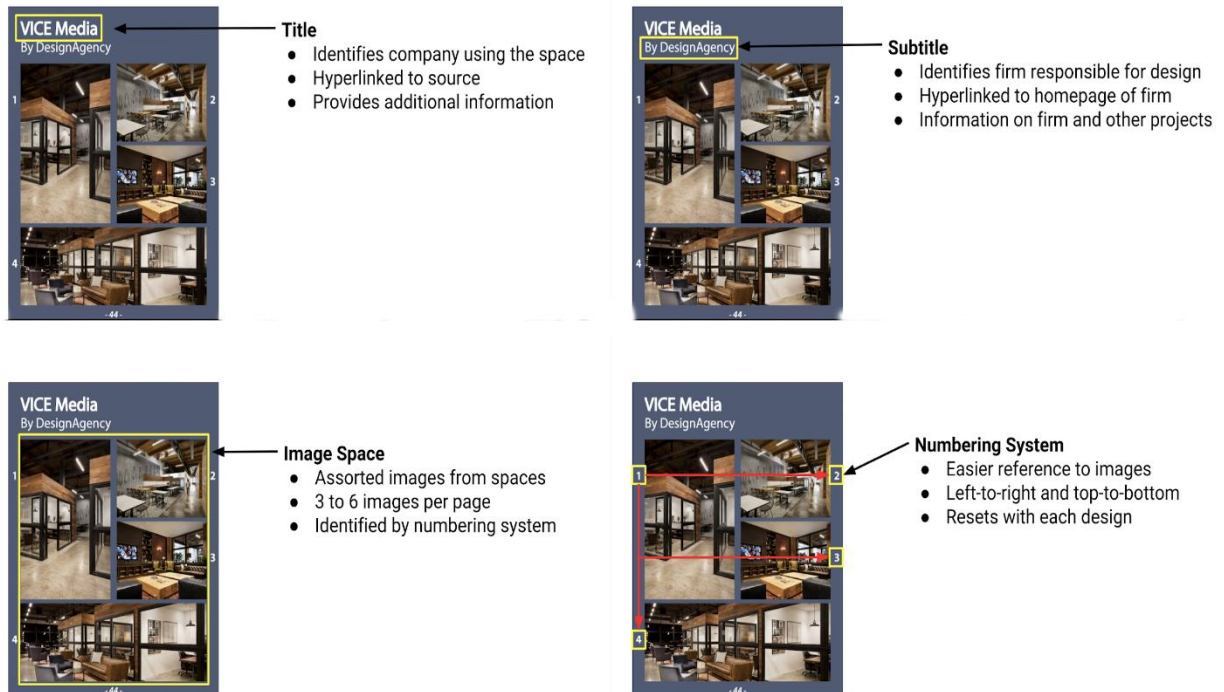
Figure 15: *The above infographic, created in Adobe Photoshop CC 2019, shows the elements of the catalog, highlighting any features of interest.*

7.2.2. Feedback Tools

To help identify what SerenDPT considers to be inspiring, a set of tools was created for gathering feedback, and gauging how inspiring the designs featured in *The Catalog of Inspiring Designs* actually are. These tools, a Google Forms survey and a method for polling with "sticky dots," were created with the intent of deployment during the IQP term. However, due to some delays in translating the survey and acquiring the dot stickers, the methods have been packaged and given to SerenDPT for their own use at a future date.

The first method created, the Google Form Survey, was created after the completion of the catalog, and focused on gathering input on images from each design people liked the most, how inspiring people believed the designs we featured to be, and allowed them to provide individual feedback on each design through the use of a comment section. An example of the survey can be seen in **Figure 16**. The survey can be accessed at (INSERT LINK)

Figure 16: *The two major types of questions in the Google Form survey created for deployment by SerenDPT.*

These types of questions were created as a means of gathering feedback that would allow the team to condense the catalog. To do so, respondents are not allowed to select more than half of the images showcased for each design, but they also have the option to select no images if they dislike an entire design. Due to the length of the survey, the possibilities for false positive feedback, and at the request of the sponsor the "sticky dot" method of polling for the catalog was created.

At request of the sponsor, the team created a polling method and procedure using dot stickers, commonly referred to as "sticky dots." The poll was designed to be a more open and collaborative form of receiving feedback, and would add something dynamic to the walls of the H3 Complex. To do so, the team first needed to settle on an appropriate set of stickers to use for this testing.

The sponsor requested a system that weighted different colors of dots and that incorporated positive and negative feedback. To encompass this idea, a pack of stickers that included twelve colors was recommended for purchase and values were assigned to nine of the twelve colors. To do so, the catalog was printed so it could be attached to the wall, and employees and administrators would use the dots to vote. This method could then be used to reduce the 283 images of the Catalog of Inspiring Designs down to 100, approximately 35% of the original. An overview of the quantity given to each person, and the value of each dot, is given in **Table 3.** The full protocol can be found in **Appendix Z.**

Dot Values and Disbursement

Color	Title	Value	Amount Per Employee	Amount Per Administrator
Gray	Administrative Decline	-4	0	3
Black	Special Dislike	-3	4	4
Hot Pink	Extreme Dislike	-2	6	6
Red	Dislike	-1	10	10
Brown	Neutral	0	5	5
Green	Like	1	10	10
Blue	Extreme Like	2	6	6
White	Special Like	3	4	4
Neon Yellow	Administrative Choice	4	0	3

Table 3: *This table depicts point value awarded to each dot color, with "Administrative" tiled dots being reserved for SerenDPT administration.*

7.2.3. H3 Design Competition

Once SerenDPT has determined the elements of the catalog they consider inspirational and generate an idea of exactly what they would like their interior spaces to look like, a secondary party will need to create and implement this vision. To aid SerenDPT in creating a comprehensive vision, and to ultimately find this other party, the idea of a design competition was born. This competition will allow SerenDPT to gather many ideas on exactly what can be done with the ex-church office spaces and courtyard.

We created the framework and basic rules for a competition of this type. The rules allow for single team entries, and one entry per person, open to any participants. Each team must submit a comprehensive design, including any drawings and renderings, a textual summary of their design choices and a time and cost estimate. The spaces that must be included within each design include: private and open office spaces, bell tower rooms, the main hall and apse area, common spaces (such as lounges) and the courtyard.

Being a design competition, judging can be very objective, and so a list of some criteria to consider was created. Based on company values, and design principles, the following list of values, themes, elements, and concepts that should be included in each design:

- Inspiring and innovative atmosphere
- Collaboration focused
- Thematically Venetian
- Natural lighting and materials
- Sustainability
- Circular economy

While considering these, SerenDPT also plans to focus on doing as much as they can while maintaining as minimal a budget as possible. As such, designs that deliver a lower cost estimate, while satisfying these ideas, will attract much more attention.

To provide motivation for applicants to actually join the competition, SerenDPT plans to offer the winner of the competition a monetary award, no greater than €1000, and the chance for the winning team to work with SerenDPT. This chance allows the winner to see their design come to life actively and provides SerenDPT the chance to work directly with the design's creator. To view full details on the design competition, view **Appendix AA.**

7.2.4. R-Lab

While SerenDPT thus has a competition by which they can generate a new design for H3, they also have more specific plans for the revitalization of the cafeteria space. Known as the R-Lab, this project proposal was created outlining the requirements for the incoming BCC Team to properly implement a restaurant in the cafeteria, located in the Deposito. The BCC is a culinary university near Barcelona that was extended an invitation by SerenDPT to set up a food laboratory in Venice. The project will create a test kitchen that will experiment with new potential dishes, layout designs, and other components that can be changed to affect customer's interaction with the restaurant. We maintained specific limitations, such as no gas, in the description which will allow SerenDPT to better understand what will be completed in the project. If the restaurant concepts generated through R-Lab are deemed marketable to the city of Venice, a pop-up style restaurant may open to serve a wider audience. More permanent locations may be opened if the test restaurant is popular, and adjustments will be made if not successful.

To create the project, we first interviewed the bar manager Manuel Castone of Campania Italy about general Italian kitchen guidelines and requirements. He emphasized ensuring the BCC follows HACCP (Hazard Analysis & Critical Control Point), the kitchen sanitary code used in Italy, when implementing their kitchen design. Next, we measured the space of the Kitchen, Cafeteria, and storage rooms in the deposito. The BCC team will also need to configure seating in the available space once the restaurant and kitchen are constructed and will include the outside courtyard between the deposito and H3.

7.3. Conclusions and Recommendations

To summarize, the interior spaces of the H3 Complex are expected to undergo a redesign as funding and resources are made available. To bring to SerenDPT a sense of inspiration, the catalog of inspiring design was created. This catalog was designed to provoke thoughts about interior design and what the company would like to see in their future office spaces. In thinking this way, the Interior Design Competition was created so that SerenDPT and their associates could choose designs that they would like to use and award a winner as they see fit.

The team would like to first recommend that SerenDPT invest additional time in researching exactly what they are looking for within a design. While the ability to think openly was helpful, and left room for the team to be as creative as possible, when considering the thought process that interior designers follow it became increasingly difficult to narrow down the direction in which things should head. In addition to this, it is highly recommended that future teams investigate the interior design process at an increased level. A solid understanding of this process, including the nuances of research and presentation, could assist and produce meaningful

dialogue between a discovery team, deployed by the sponsor, and the eventually hired interior designer.

Additionally, when polling the employees and associates of SerenDPT about The Catalog of Inspiring Designs, we recommend that the "sticky dot" method be used in conjunction with the Google Form survey. This stems from the idea that a "mob mentality" may form during open polling, such as is done with dot sticker methods. While there are also some discrepancies that may arise with the Google Form, using both methods provide ample opportunity for any issues to be documented and accounted for.

8.0. Overall Conclusions and Recommendations

With the work we have presented in the previous chapters, we have provided SerenDPT with a more complete understanding of the building they operate in. We have developed documents detailing the size of each room and its space capacities and sound characteristics, however, future development of the rooms will require an increase in sound diffusing surface characteristics like chairs, cloths, or any other non-shiny surface for speaking to be made more audible. We have developed maps of each floor and organized keys to follow a consistent coding system, but several room will require new locks on the doors, several keys will need to be copied and several keys for bathrooms and closets yet remain to be tagged. We have created presentations detailing the history of the building that SerenDPT can show to visitors, though SerenDPT will have to find a mode by which they wish to present the presentations to visitors.

We have also developed a number of documents that increase SerenDPT's ability to use the building it has. Components of the event portfolio should be added to the H3 website. We recommend that when added to the website, the application form should add cost to the total estimation in real time by taking into account the cost for renting amenities. This added cost would help to recuperate the expense SerenDPT will incur to be able to provide these materials. We similarly recommend that SerenDPT invests in a wider range of items including different types of tables so that it can host a larger variety of events, and even mortar anchors so that items can be hung from the brick walls in the main hall. Lastly, we recommend that SerenDPT assign certain purposes to each room. This would allow for a clearer definition of what rooms were allowed to be used for events than the sponsor is currently willing to establish, and would make the application process for events much easier by associating each room with a particular activity or event.

We have furthermore developed a set of resources that will guide other groups through the development of designs of the space of H3. To facilitate better results from these designs we recommend SerenDPT use Google Forms to define, from the Catalog of inspiring ideas, what kind of designs they are looking for. We also recommend they set deadlines for the contest and advertise more fervently to get people to actually participate in the contest.

Lastly, we have developed a website to represent the H3 building and centralize the location with which individuals interact with the building. We have presented to SerenDPT a design with which this website can be further developed, and we recommend that the website be made more complete. While it is functional in its layout, it still has many more complexities that can be added.

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Appendices

Appendix A: Examples of Vital Records, Their Level of Privacy, and Potential Locations

Floor Plans	Public	Generate in CAD documents
System Manuals	Private	Previous Owner
City Licenses	Private	Town/SerenDPT
Evacuation Routes	Public	Generate in CAD documents
HVAC	Private	Previous Owner
Plumbing - Hot/Cold Water Valves	Private	Previous Owner
Electricity - Circuit Breaker Locations	Private	Previous Owner
Internet	Public information, password protected	SerenDPT
Payroll cards	Private	SerenDPT
Stairway demarcation	Public	From the H3 Building
Gas lines	N/A	N/A
Waterproofing	Public	Multiple possible locations

Appendix A Continued

Elevators	Public	Previous Owner
Room Occupancies	Both	Calculate using doorways
Phone	Public	SerenDPT
Elevator emergency plans	Public	Previous Owner/City/SerenDPT
Building Lease	Private	SerenDPT/Town
Energy efficiency	Private	Collect over time
Inspections	Private	Previous Owner and City of Venice
Sprinklers	Public	Generate in CAD documents
Fire alarms	Public	Generate in CAD documents
Emergency Lighting	Public	Generate in CAD documents
Tax records	Private	SerenDPT
Alcohol Permit	Private	City of Venice

Appendix B: A Table of Contents for Documentation of H3

- H3 Building Files
  - Balance Sheets
  - Documentation
    - Declarations of Conformity
    - Fire detector floor plans
  - Energy Rating and Feasibility Documents
  - Floor Plans
    - Plans
  - Digital Manuals
  - Physical Documents
    - Alarb Project
    - AS build
    - Elevator
    - Electric
    - Fire Protection
    - Heating/AC
    - Impianti Speciali Manuali
    - Mail Boxes
    - Maintenance Plans
    - Ventifichi e ruotomagglo impianto condizionato
  - Ramp

Appendix C: Room Coding System

H2		SerenDPT				
Lotto	Ufficio	Prefix	Number	Secondary	Total	Common Name
		C		LA	CLA	Left Apse
		C		MA	CMA	Main Apse
		C		RA	CRA	Right Apse
		C		MH	CMH	Main Hall
		C	0.1	H	CH-0.1	Staircase Room
		C	0.2	H	CH-0.2	Floor 0 Hall
A	1.1	C	0.1		C-0.1	Conference Room 0
A	Sala Riunioni	C	0.2		C-0.2	Technical Room
A	Zona Servizi/Ristoro	C	0.3		C-0.3	Fablab (Hydroponics Office)
A	1.3	C	0.4		C-0.4	Administration
A	1.2	C	0.5		C-0.5	Storage Room
		C	0.1	S	CS-0.1	
		C	0.2	S	CS-0.2	
		C	0.3	S	CS-0.3	
		C	0.1	B	CB-0.1	
		T	0.1		T-0.1	
		T	0.2		T-0.2	
		C	0.1	P	CP-0.1	Church Front Door
		C	0.2	P	CP-0.2	Staircase Door 1
		C	0.3	P	CP-0.3	Staircase Door 2
		C	0.4	P	CP-0.4	Staircase Door 3
		C	0.5	P	CP-0.5	Staircase Side Door
		C	0.6	P	CP-0.6	Main Hall Entrance
	Porta a vetri principale	C	0.7	P_a	CP-0.7a	Church Front Glass Door
		C	0.7	P_b	CP-0.7b	
	Porta a vetri entrata chiesa	C	0.8	P_a	CP-0.8a	Main Hall glass door
		C	0.8	P_b	CP-0.8b	
	Porta entrata laterale a vet	C	0.9	P	CP-0.9	Side Entrance Glass Door

Appendix C Continued

		C	1.1	B	CB-1.1	
		C	1.2	B	CB-1.2	
		C	1.3	B	CB-1.3	**Men's Bathroom**
		C	1.4	B	CB-1.4	
		C	1.5	B	CB-1.5	
		C	1.6	B	CB-1.6	
		C	1.7	B	CB-1.7	**Women's Bathroom**
		C	1.8	B	CB-1.8	
		C	1.1		CH-1.1	**Bathroom Entrance Area**
		C	2.1	H	CH-2.1	**Staircase Area**
		C	2.2	H	CH-2.2	**Floor 2 Hall**
A	1.4	C	2.1		C-2.1	**VPC Library**
A	1.5	C	2.2		C-2.2	**Guest Room**
A	1.7	C	2.3		C-2.3	**DaAaB Room**
A	1.6	C	2.4		C-2.4	**VPC**
		C	2.1	S	CS-2.1	
		C	2.2	S	CS-2.2	
		C	3.1	H	CH-3.1	**Staircase area**
		C	3.2	H	CH-3.2	**Floor 3 Hall**
A	1.8	C	3.1		C-3.1	**CTO Office**
A	1.9	C	3.2		C-3.2	**CEO Office**
A	1.10	C	3.3		C-3.3	**CFO Office**
A	1.11	C	3.4		C-3.4	**Conference Room 3**
A	1.12	C	3.5		C-3.5	**Michalson's Office**
		T	3.1		T-3.1	**Bell tower window room**
		T	3.1	F	TF-3.1	
		T	3.2		T-3.2	**Right staircase window room**
		T	3.2	F	TF-3.2	
		C	3.1	S	CS-3.1	
		C	3.2	S	CS-3.2	

Appendix C Continued

		C	3.1	P	CP-3.1	
		C	3.1	P	CP-3.2	
A	soppalco di 1.08	C	4.1		C-4.1	
A	soppalco di 1.09	C	4.2		C-4.2	
A	soppalco di 1.10	C	4.3		C-4.3	
A	soppalco di 1.11	C	4.4		C-4.4	
		T	4.5		T-4.1	Bell tower top room
		D	0.1	H	DH-0.1	
		D	0.2	H	DH-0.2	
		D	0.1	P	DP-0.1	Deposito Door
B	2.1	R	0.1		R-0.1	
		R	0.2	a	R-0.2a	Cafeteria 1
		R	0.2	b	R-0.2b	Cafeteria 2
		R	0.2	c	R-0.2c	Outside door 1
		R	0.2	d	R-0.2d	Outside door 2
	Disimpegno	R	0.3		R-0.3	
		R	0.4		R-0.4	
		R	0.5		R-0.5	
	2.2	D	0.1		D-0.1	
	2.3	D	0.2		D-0.2	
	2.4	D	0.3		D-0.3	
	2.5	D	0.4		D-0.4	
	2.6	D	0.5		D-0.5	
	2.7	D	0.6		D-0.6	
	2.B Locale Tecnico	D	0.1	S	DS-0.1	
	2.C Vano Tecnico	D	0.2	S	DS-0.2	
		D	0.3	S	DS-0.3	Stairs
	Autoclave	D	0.4	S	DS-0.4	Below Stairs
		D	0.5	S	DS-0.5	AutoClave
		D	0.1	B	DB-0.1	Handicap Bathroom
		D	0.2	B	DB-0.2	Men's Bathroom

Appendix C Continued

		D	0.3	B	DB-0.3	
		D	0.4	B	DB-0.4	
		D	0.5	B	DB-0.5	
		D	0.6	B	DB-0.6	Women's Bathroom
		D	0.7	B	DB-0.7	
		D	0.8	B	DB-0.8	
		D	0.9	B	DB-0.9	
		D	1.1	H	DH-1.1	
2.8	D	1.1		D-1.1	
2.9	D	1.2		D-1.2	
2.10	D	1.3		D-1.3	
2.11	D	1.4		D-1.4	
2.12	D	1.5		D-1.5	
2.13	D	1.6		D-1.6	
2.14	D	1.7		D-1.7	
2.15	D	1.8		D-1.8	
2.D Vanotecnico	D	1.1	S	DS-1.1	
2.E Riposticilia	D	1.2	S	DS-1.2	
2.F Vano Technico	D	1.3	S	DS-1.3	
	D	1.4	S	DS-1.4	Stairs/Elevator
	D	1.1	B	DB-1.1	Handicap Bathroom
	D	1.2	B	DB-1.2	Men's Bathroom
	D	1.3	B	DB-1.3	
	D	1.4	B	DB-1.4	
	D	1.5	B	DB-1.5	
	D	1.6	B	DB-1.6	Women's Bathroom
	D	1.7	B	DB-1.7	
	D	1.8	B	DB-1.8	
	D	1.9	B	DB-1.9	
	D	2.1	H	DH-2.1	
2.16	D			D-2.1	

Appendix C Continued

2.17	**D**	**2.2**		**D-2.2**	
2.18	**D**	**2.3**		**D-2.3**	
2.19	**D**	**2.4**		**D-2.4**	
2.20	**D**	**2.5**		**D-2.5**	
2.21	**D**	**2.6**		**D-2.6**	
2.22	**D**	**2.7**		**D-2.7**	
2.23	**D**	**2.8**		**D-2.8**	
2.G Vanotecnico	**D**	**2.1**	**S**	**DS-2.1**	
2.H vanotecnico	**D**	**2.2**	**S**	**DS-2.2**	
	D	**2.3**	**S**	**DS-2.3**	**Stairs/Elevator**
	D	**2.1**	**B**	**DB-2.1**	**Handicap Bathroom**
	D	**2.2**	**B**	**DB-2.2**	**Men's Bathroom**
	D	**2.3**	**B**	**DB-2.3**	
	D	2.4	B	DB-2.4	
	D	2.5	B	DB-2.5	
	D	2.6	B	DB-2.6	Women's Bathroom
	D	2.7	B	DB-2.7	
	D	2.8	B	DB-2.8	
	D	2.9	B	DB-2.9	
	E	0.1	H	EH-0.1	Walkway
	E	0.2	H	EH-0.2	Courtyard
	E	1	P	EP-1	Main Side Entrance
	E	2	P	EP-2	Church Door By Side Entrance
	C	0.6	P	CP-0.6	Church Side Door
	T	0.2		T-0.2	Tower 2 storage area

Appendix D: Church Floor Plans

Floor 0
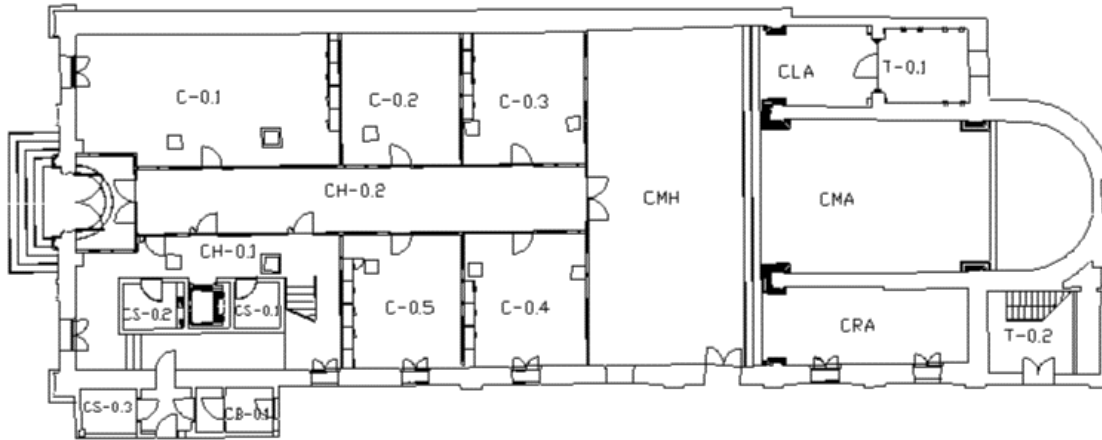
C-0.1	Conference Room		CRA	Right Apse
C-0.2	Technical Room		CS-0.1	Support Room 1
C-0.3	FabLab		CS-0.2	Support Room 2
C-0.4	Administration		CS-0.3	Support Room 3
C-0.5	Supplies Room		T-0.2	Tower Storage Room
CMH	Main Hall		T-0.1	Bell Tower Entrance
CLA	Left Apse		CB-0.1	Bathroom 1, Ground Floor
CMA	Main Apse	CH-0.1	Staircase and Elevator Room	CH-0.1	Floor 1 Hallway

Floor 1

CB-1.1	Men's Bathroom Toilet 1
CB-1.2	Men's Bathroom
CB-1.3	Men's Bathroom Toilet 2
CB-1.4	Men's Bathroom Toilet 3
CB-1.5	Women's Bathroom Toilet 1
CB-1.6	Women's Bathroom Toilet 2
CB-1.7	Women's Bathrrom
CB-1.8	Women's Bathroom Toilet 3
CH-1.1	Bathroom Entrance
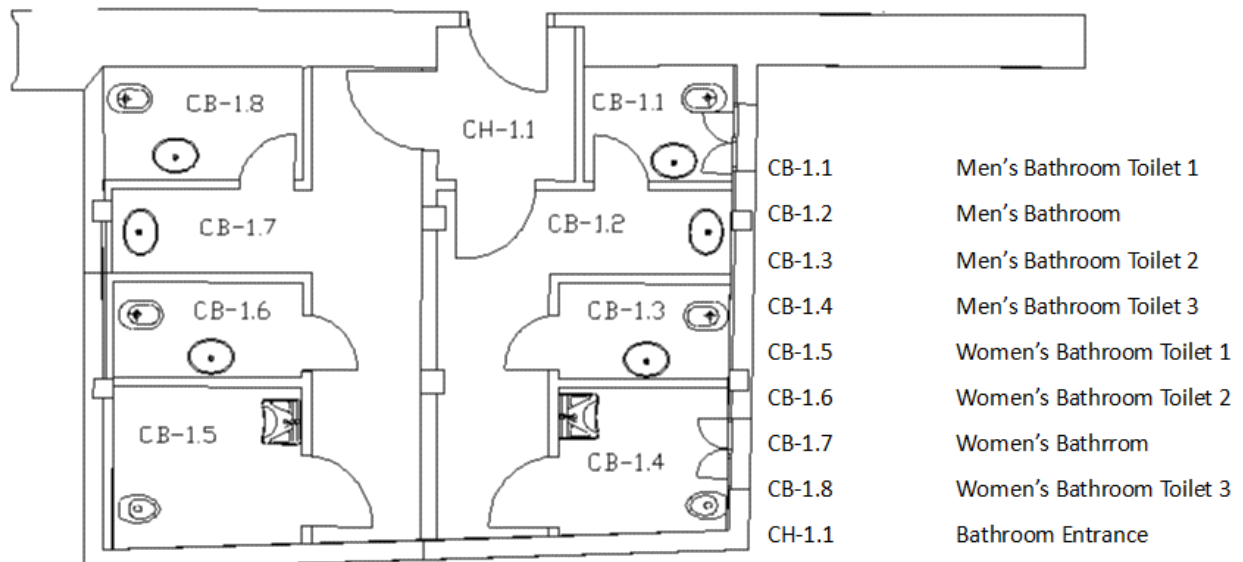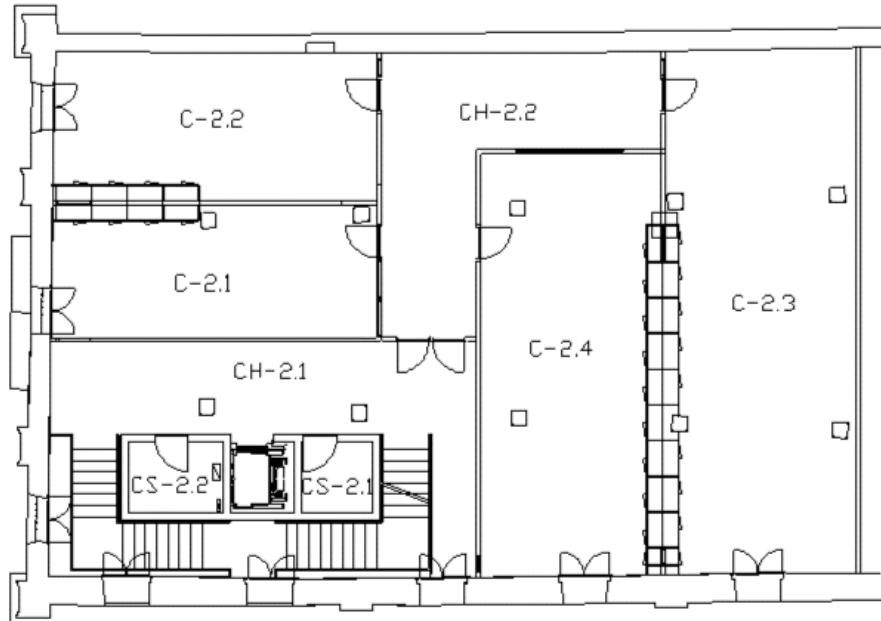
Floor 2

C-2.1	Guest Room
C-2.2	Guest Room
C-2.3	DaAaB Room
C-2.4	Venice Project Center
CS-2.1	Support Room 1
CS-2.2	Support Room 2
CH-2.1	Stair/Elevator Room
CH-2.2	Floor 2 Hallway

Floor 3
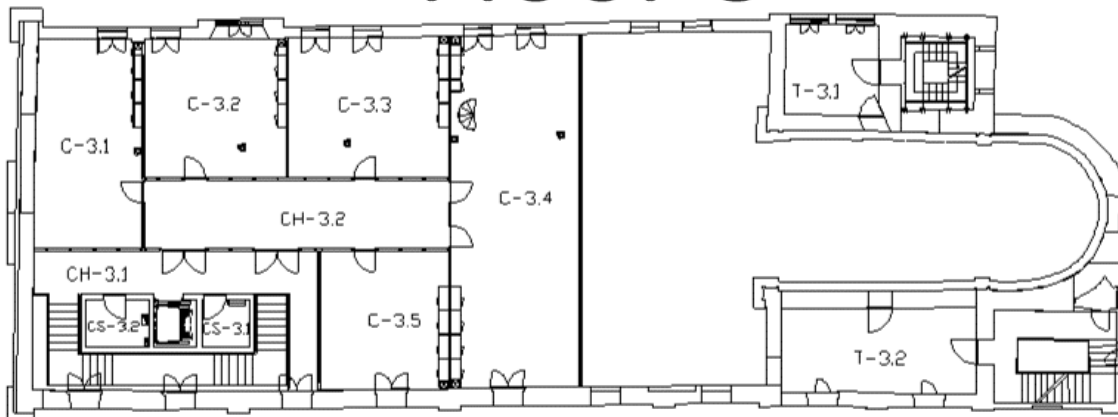
C-3.1	CTO Office		CS-3.1	Support Room 1
C-3.2	CEO Office		CS-3.2	Support Room 2
C-3.3	CFO Office		T-3.1	Bell Tower Room 1
C-3.4	Conference Room		T-3.2	Tower 2 Room
C-3.5	Guest Room		CH-3.1	Stair/Elevator Room
CH-3.2	Floor 3 Elevator			

Floor 4
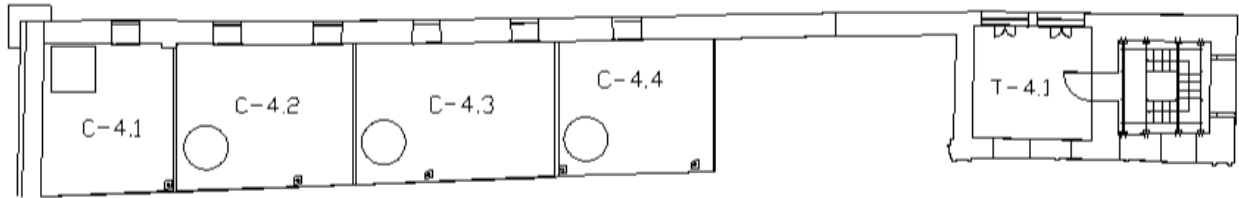
C-3.1	Above CTO Office	T-4.1	Bell Tower Room 2
C-3.2	Above CEO Office		
C-3.3	Above CFO Office		
C-3.4	Above Conference Room		

Appendix E: Deposito and Outside Floor Plans

Floor 0
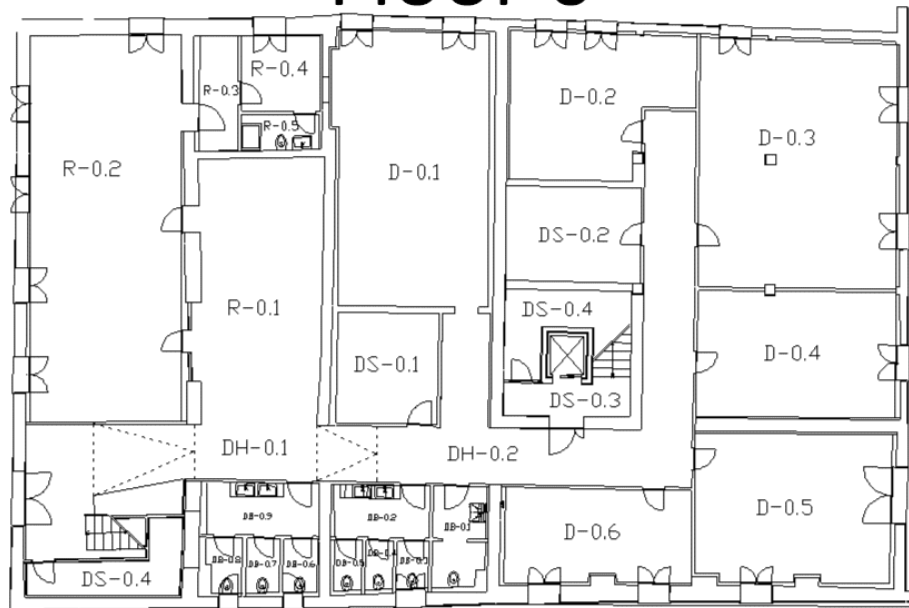
Floor 1
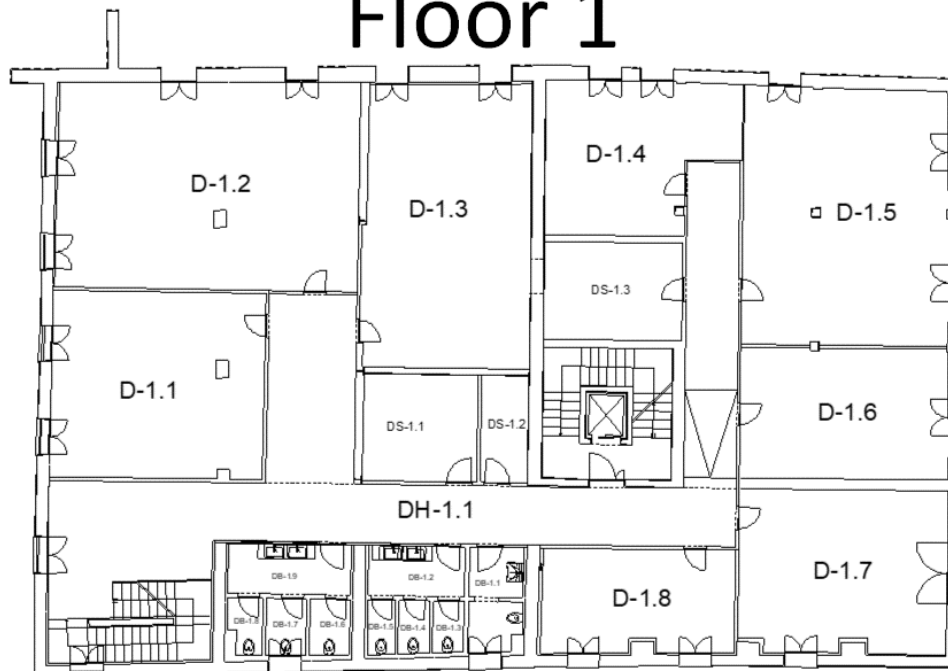
Floor 2
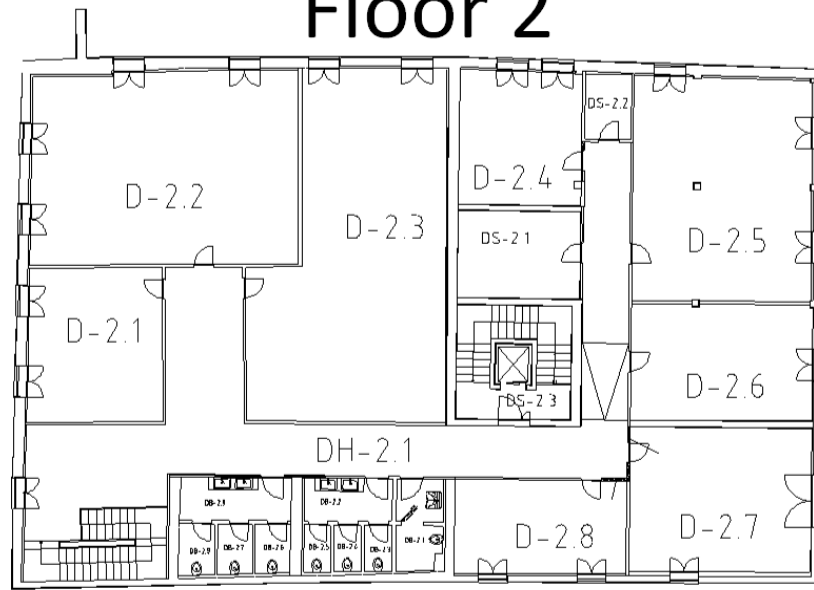
Outdoor Key Map
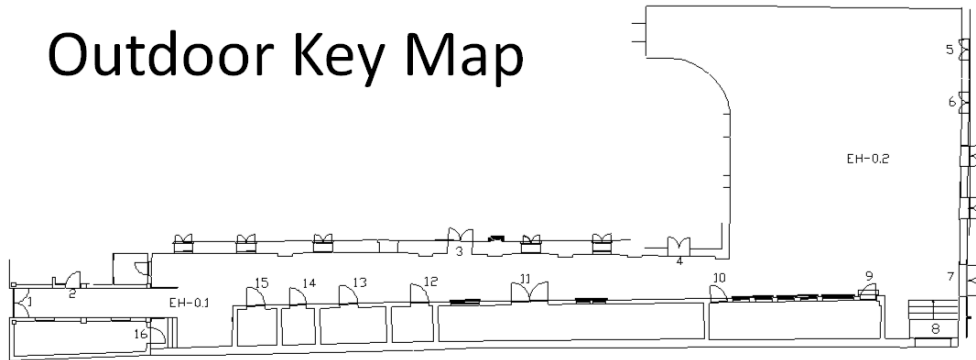
1	EP-1	2	EP-2
3	CP-0.6	4	T-0.2
5	R-0.2D	6	R-0.2c
7	DP-0.1	8	EP-3
9	EP-4a	10	EP-4b
11	EP-5	12	EP-6
13	EP-7	14	EP-8
15	EP-9	16	EP-10

Appendix F: H3 Inventory

Item	Number
Photography Lights	1
Photography Backdrop Curtain	1
Projector	3
Projector screens	3
Sound PA system Boxes	2
Thermos Pitchers	5
Glass cups	
Sign Posts	6
Old Computers	9
Table Microphones	5
Bose Panaray Speaker	1
4 channel Mixer	1
Speakon Cord	1
LCD monitors	2
Ethernet cables	
Old Keyboards	12
Mouse	7
Bubble padding box/sheet	1
Old Flat Monitors	8
Black Monitors Flat	6
Printer	1
Insulating Tape	7.5
IKON sign holders	1
Space Heater Large	1
Space heater small	1
Loud speakers	2
Magnetic paint cans	2
Plexiglass Sheets	20
Smoke detectors/alarms	10

Appendix F Continued

Construction Paper	1 pad plus a few sheets
City of Venice yellow envelopes	6 large, 5 medium, 23 small
Large corbin locks	2
Small door lock	1
Table feet	1 bag
Medium refrigerator	1
Small filing cabinet	1
Handcart	1
Wooden chair	1
Ethernet cable docking port box	1
30 yrs IQP documents	
VPC Library	
Desk lamp	1 (room 0.1)
Mouse pads	4
Garbage bags	2 rolls
Mirror	1 small
Bottle disinfectant	1
Tape roll	1/3
Key organizers	2
Key-board	1
Blue Rolling Chairs	19
Green Chairs	5
Red Chairs	19
Black Plastic Chairs	73
Black Padded Chairs	56
White Plastic Chairs	12

Appendix G: Comune Di Venezia Identification Numbers

Black Plastic Chairs	Black Padded Chairs	Red Padded Chairs	Monitors		Computers		Printer		Drawer	HP scanjet
Blue Label	Blue Label		Blue Label	Black Label	Blue Label	Black Label	Blue Label	Black Label		
231318	231398	209116	199025	018745	199028	018743	199020	018745	195600	021815
231319	231399	140239	199036	018742	199029	018737	Num: 1		Num: 1	Num: 1
231320	*unmarked*	Num: 2	199037	018740	199030	018735				
231321	231401		199040	018734	199032	018731				
231322	231402		199041	018738	199033	018729				
231323	231403		199042	018736	199034	018733				
231324	231404		199044	018730	199035	018741				
231325	231405		199045	018728	199037	018739				
231326	231406		199046	018732	199050	018721				
231327	231407		199047	018724	199052	018723				
231328	231408		199048	018722	199053	018725				
231329	231409		199049	018744		018727				
231330	231410			025643		26048				
231331	231411			020208	Num:13					
231332	231412		Num: 14							
231333	231413									
231334	231414									
231335	231415									
231336	231416									
231339	231417									
231340	231418									
231341	231419									
231342	231420									
231343	231421									
231344	231422									
231345	231423									
231346	231424									
231348	231425									

Appendix G Continued

231349	231426											
231350	231427											
231351	231428											
231352	231429											
231354	231430											
231355	231431											
231356	231432											
231357	231433											
231358	231434											
231359	231435											
231360	231436											
231361	231437											
231362	231438											
231363	231439											
231364	231440											
231365	231441											
231366	231442											
231367	231443											
231368	231444											
231369	231445											
231370	231446											
231371	231447											
231372	231448											
231374	231449											
231375	231450											
231376	231451											
231377	231452											
231378	231453											
231379	Num: 55											
231380												
231381												

Appendix G Continued												
231382												
231383												
231384												
231385												
231387												
231388												
231389												
231390												
231391												
231392												
231393												
231394												
231396												
231397												
Num: 73												

Appendix H: Keys that are not Currently in Master Collection

No Key could be found for Lock	The Key exists but is not in the Master Collection	Door has no Lock
C-2.4	C-0.5	C-2.1
R-0.2a	C-3.1	C-2.2
R-0.2b	C-3.2	C-2.3
R-0.2c	D-1.2	C-0.1
R-0.2d	D-1.5	
R-0.3	D-1.7	
R-0.4	D-2.2	
R-0.5	D-2.6	
D-0.1	C-3.3	
D-0.2	C-0.2	
D-0.3		
D-0.4		
D-0.5		
D-0.6		
D-1.1		
D-1.3		
D-1.4		
D-1.6		
D-1.8		
D-2.1		
D-2.3		
D-2.4		
D-2.8		
EP-4a		
EP-4b		
EP-5		
EP-6		
EP-7		

Appendix H Continued		
EP-8		
EP-9		
TF-3.1		
CP-0.1		
CS 3.2		

Appendix I: Keys For Tower and Bathrooms

Room		Key
	Church Bathrooms	1
Handicap	DB-1.1	11 , 9
	DB-1.1 (door 2)	11 , 9
Men's	DB-1.2	9
	DB-1.3	11
	DB-1.4	11
	DB-1.5	11
Women's	DB-1.6	11
	DB-1.7	3
	DB-1.8	3
	DB-1.9	11
Handicap	DB-2.1	5
	DB-2.1 (door 2)	9
Men's	DB-2.2	7
	DB-2.3	5
	DB-2.4	5
	DB-2.5	5
Women's	DB-2.6	5
	DB-2.7	7
	DB-2.8	5
	DB-2.9	11
Handicap	DB-3.1	1
	DB-3.1 Door 2	1

Appendix I Continued		
Men's	DB-3.2	11
	DB-3.3	7
	DB-3.4	1
	DB-3.5	1
Women's	DB-3.6	1
	DB-3.7	1
	DB-3.8	1
	DB-3.9	7
Other Room		Key
	T-3.1	3
	T-4.1	5

Appendix J: Supporting Materials for Events

- Laptop
- Amplified Sound
- Handheld Microphones
- Recording Services
- Supplementary Power
- Flip charts & Markers
- Projector with screen
- Podium
- Standing microphones
- Guest Wifi access
- Easelse
- Sandwich Sign Boards
- Conference Phone
- Staging
- Lavalier microphones
- Supplementary lighting
- Corkboards
- Pedestal Sign Holder

Source: WPI Event Planning Checklist

Appendix K: Space Capacities

Room	Width (m)	Length (m)	Area (m^2)	Seating Capacity	Adjusted Seating Capacity*	Standing Capacity
T-0.1	3.07	3.53	10.8	8		21
C-LA	2.7	4.6	12.4	12		24
C-MA	5.6	9.5	53.2	64	50	106
C-RA	2.7	8.6	23.2	28	26	46
C-MH	6.5	12.5	81.3	110	90	162
C-0.1	5.5	10.52	57.9	64	42	60
C-0.2	4.51	5.5	24.8	24	14	60
C-0.3	5.1	5.48	27.9	28	13	60
C-0.4	5.34	5.67	30.3	32	14	60
C-0.5	4.51	5.57	25.1	24	12	60
C-2.1	3.1	8.66	26.8	28	25	60
C-2.2	3.56	8.56	30.5	35	30	60
C-2.3	4.71	14.01	66.0	104	87	60
C-2.4	4.43	11.28	50.0	60	50	60
C-3.1	3.8	8.2	31.2	35	30	60
C-3.2	5.54	5.6	31.0	32	17	60
C-3.3	5.61	6.36	35.7	40	25	60
C-3.4	4.68	14	65.5	91	78	60
C-3.5	4.71	5.5	25.9	28	17	83
T-3.1	3.75	3.59	13.5	10		26
T-4.1	3.75	3.59	13.5	10		26

*The Adjusted Seating Capacity shows the number of seats that can fit into an area if a table is setup at one end of the room.

Appendix L: Important Event Services/Processes

Aspects of events that need to be considered
Setup
Image (getting it out there)
Registration
Entertainment
Activities
Catering
Clean up
Evaluation process
Security

Source: (The Complete Event Planning Guide) and Bill Battelle

Appendix M: Room Reverberation Times

Room	Reverberation Time (s)
CMA	2.5
C-0.1	1.19
C-0.2	1.05
C-0.3	1.62
C-0.4	1.18
C-0.5	0.67
T-0.1	0.93
C-2.1	1.24
C-2.2	1.49
C-2.4	1.14
C-3.3	0.77
C-3.4	0.72
C-3.5	0.61
T-3.1	0.88
T-3.2	0.66
T-4.5	0.66
Courtyard	0.65

Appendix N: Event Items List

Material Costs	Cost per item	Items	Total Cost
Wireless Microphone	€371	1	€371
Wired Microphone	€125	1	€125
Softcase	€35	1	€35
Microphone Stand	€15	2	€30
Bose Speaker	€725	1	€725
Bose Speaker Stand	€170	2	€340
Lavalier Microphones	€55	1	€55
Event Speakers	€329.99	1	€329.99
Sound Console	€163	1	€163
Extension Cables	€8.34	6	€50.02
Whiteboard	€13.44	4	€53.76
Laptop	€1000	1	€1000
Projector w/ screen	€680.98	1	€680.98
Conference Phone	€212.89	2	€425.78
Easels	€23.59	4	€94.36
Flip charts & Markers	€77.13	4	€308.52
Sandwich Sign Boards	€16.59	4	€66.36
Podium	€121.63	1	€121.63
Gaff Tape	€8.75	10	€87.5
Corkboards	€14.6	2	€29.2
Square Tables	€58.9	20	€1178
Short Round Tables	€153.75	6	€922.5
Tall Round Tables	€64.76	20	€1295.2
Suction hooks	€3.82	10	€38.2
Command Hooks	€9.87	1	€9.87
Whiteboard markers	€7.02	4	€28.08
6m XLR cable x2	€9.81	2	€19.62
3m XLR cable x2	€8.7	2	€17.4
1m XLR cable x2	€8.99	2	€17.98
		Total:	€8,618.95

Appendix O: Electrical Purchasing Matrix

	Strumentimusicali	amazon.it	amazon.com	Random	EffeBi musica
1 shure wired	€109	€124.99			€115
1 shure wireless	€315	€371			€349
Lavaliere Microphone	X	€66			€55
Bose Panaray Speaker Series IV	X	X	X	€725	X
Bose speaker stand	X	X	X	$169	X
2 mic stands	X	€14.99			€26
2 - 6m XLR cables	X	€9.81			X
2 - 3m XLR cables	X	€8.70			X
1 - 1m XLR cable	€6.50	€8.99			€9
JBL system	X	JBL Speakers	JBL Speaker Stands		X
Microphone bag	€105				€35

Appendix P: Space Renting Guidelines

Category	Simple Room	Courtyard	Main Hall
Hourly Rate	25	35	50
Half day	90	125	180
Full day	180	250	360
Multipliers			
Repeating Event	0.8		
After Hours Cost	1.2		
Weekend Cost	1.3		

Appendix Q: Event Application Form

Event Title: [_____]

Dates:

Requested Date(s): [_____]

Alternate date(s) requested: [_____]

Time of event

Start: [_____]   End: [_____]

Time needed for room setup: [_____]   Time room setup starts: [_____]

Time needed for room cleanup: [_____]   Time room cleanup is finished: [_____]

Description of events:

[_____]

Is event an occurrence within a series?   Will non-SerenDPT guests attend?

Yes: [_____]   No: ⬤

No: ⬤   If yes, what portion of the guests will be
                                                 external
                                                 < 50% ⬤   > 50% ⬤

Will any VIP's be attending?   Will any external speakers, performers or artists
                                                 attend the event?
No: ⬤   No: ⬤
If Yes, list any special needs of the VIP: Yes: [_____]

[_____]

Contact Info:

Name: [_____]

Email: [_____]

Phone number: [_____]

Location:

Preferred Primary Location: [_____]

Alternate location if primary is unavailable: [_____]

Alternate location if weather is non-permitting

Indoors: [_____]   tent: ⬤   alternate date: [_____]

Do you need additional spaces?
No: ⬤
If yes please describe:

Will food or beverage be served: No: ⬤
    If yes where do you prefer the food comes from?
    Food made in house   caterer already lined up   caterer still needed:
    Preferences: Preferences:
    Currently Unavailable

    Will alcohol be served at this event?
    No: ⬤
    If yes: what percentage of attendees will be over 18?   < 50% ⬤
                                                      > 50% ⬤
                                                      100% ⬤
Are any additional materials requested?
Tables:
Chairs:
Laptop
Amplified sound
Handheld microphones
Recording services
Supplementary power
Flip charts/markers
Projector w/screen
Podium
Standing microphone
Guest Wi-Fi access
Easels
Sandwich sign boards
Conference phone
Staging
Lavaliere microphones
Supplementary lighting
Corkboards
Pedestal sign board
Other

Services:
Police/EMS
Accessibility considerations
City permits/waivers
Signs/banners/room décor

Appendix R: Exhibit Application Form

Exhibit Title:

Dates:
Start Date:
End Date:

Alternate date(s) requested:

Time exhibit is open:
    Weekdays:
    Start: End:
    Weekends:
    Start: End:
        *Note: extra costs will be incurred if exhibit will be open after business hours

Description of exhibit:

Space Requirements:
    Wall space:
    Floor space:

Please Describe any sound involved in the exhibit:
    Please specify volume, length, source, and any manual necessary controls of the sound by
    SerenDPT staff.

Please describe necessary lighting specifications for the exhibit:
    Make sure to specify any directions or movement of the lighting along with the timing that any
    lighting will turn on and off.

Contact Info:

Name: _____

Email: _____

Phone number: _____

Location:
Preferred Primary Location: _____
Alternate location if primary is unavailable: _____

Do you need additional spaces?
No: ⬤
If yes please describe:

_____

Is any security or other safety measures required for this exhibit?
No:
If yes please describe degree of safety measures and hours during which these measures should take affect (note: any measures requiring after-hours personnel will incur increased cost):

_____

Are any additional materials requested?
Tables: _____
Chairs: _____
Laptop
Amplified sound
Handheld microphones
Recording services
Supplementary power
Flip charts/markers
Projector w/screen
Podium
Standing microphone
Guest Wi-Fi access
Easels
Sandwich sign boards
Conference phone
Staging
Lavaliere microphones

Supplementary lighting
Corkboards
Pedestal sign board
Other _____

Services:
Police/EMS
Accessibility considerations
City permits/waivers
Signs/banners/room décor

Appendix S: Interviews with Experts

Guidelines for Local Interviews (United States)

The following guidelines were established by the H3 Design team to outline how local interviews should be arranged and conducted. These guidelines were used exclusively for interviews, meetings, and tours exclusively within the United States of America. Through the use of these guidelines and general professional practices, it is expected that useful data will be generated for the sake of the H3 Design project. The guidelines are as follow:

Establish Contact

Begin by contacting the agency or person of interest by email or telephone. Both forms of contact should be done as professionally as possible and with respect for the work of the individual or agency being contacted.

If no response is obtained within a reasonable amount of time, typically 48-72 hours, send a follow-up email or conduct a follow-up phone call. If on campus, a visit to the appropriate office, department, or building may also be appropriate in addition to the previously mentioned forms of contact.

State Purpose

During the initial email or phone call it is important that you state the purpose of your call. This purpose should disclose the type of meeting you expect to take place (interview, tour, etc.) and information regarding the project and its purpose. An example statement of purpose may look like:

"At the moment, we are seeking information regarding three major topics: the impact of innovation spaces on the local community, how innovation spaces are managed, and how innovation spaces are organized, with regards to working space. If time allows, we would also be interested in arranging a tour to get a feel for what the space is actually like."

Determine Meeting Information

After contact has been established, determining the information for the meeting, such as time and location, will be important for moving forward. Try to include as much of the group as possible for the most relevant tours, but understand that time constraints and scheduling will likely result in individuals or duos conducting interviews and going on tours. Record this information on the group calendar is possible.

If a face-to-face meeting is not possible, record the information of scheduled calls or video conferences you have planned in the group calendar if possible

Conduct Interview/Meeting

During the tour, the following questions should be used as reference. The type of question will vary from interview to interview, but these questions can, and should be used as a reference. More specific questions should be generated by the interviewer prior to the interview if the topic yields it. Questions to consider include:

- May we take pictures?
- What inspired the decor choices?
- Who was responsible for organizing the space?
- What resources are required for the implementation of a space like this?
- How is the space managed?
- How is the space maintained?
- Is there a selection process for companies?
- What impacts does the space have on the community?
- How are utilities factored into costs?
- Is there a membership cost?
- What caused you to arrange the space this way?
- Do you host any events?
- Is there any sort of networking that occurs within the company?

Thank Contact/Follow Up

Following the conclusion of your meeting, tour, or interview, thank the person you spoke or interacted with. If this person is not the person you initially contacted, be sure to contact this person either by telephone, email, or standard mail to thank them for arranging whatever it was that was done.

Meeting With Kevin Harrington

Location:
Foisie Innovation Studio   Interviewer: Peter Maida
Room 103a   Interviewee: Kevin Harrington
Worcester Polytechnic Institute

A meeting with Kevin Harrington of Worcester Polytechnic Institute was arranged and conducted by Peter Maida. The meeting discussed Kevin's experience with makerspaces and startups and his involvement with the Foisie Innovation Studio at Worcester Polytechnic Institute.

Major findings from the interview and some of the questions asked are noted below:

Foisie Involvement
- He created the makerspace for Foisie
- A previous IQP group did all the research on the audience and requirements for the campus
- The campus only had expensive, high-end printers and was lacking mid-grade tools, so he bought cheap 3D printers
- ERP software is really important for startup companies, it provides equipment, tools, membership signups, and parts from different areas.
    - Foisie (and the robotics lab) use ODOO

Makerspace Experience
- Will start as one person and a group of friends pooling money to rent for the smallest space they can find. We should look for a small space because the building overhead needs to be managed at all times

The makerspace he created in 2013 is Technocopia:
- http://technocopia.org/join/
- Technocopia avoided transforming into an incubator by using local incubators for business startups. Worcester Cleantech Incubator is where companies transfer to, and the incubator pays for membership.

What are aspects of successful startups?
- Critical to find your audience, the makerspace is defined by the needs of the community. The community should self organize and build the space, we shouldn't be the ones to do it or else it would not sustain.
    - Interview the exact people that would be using it and ask what they need. Look for overlaps in their demands, have at least 20% of userbase's interest in a specific tool before you lay out the infrastructure for that tool.
    - What do people want to make, but they can't because they don't have the right tool (could be space for operation or using certain tools)

- Don't plan for a profit! A community makerspace operates at a loss for the benefit of the community.
  - Success makerspaces are those that stress for ethical creation and making for the purpose of creation. Once a business mentality is introduced, the makerspaces is drained and eventually fails.
  - Talk to Jess Muise, search on LinkedIn. Introduce as "Hey, I've been talking to folks on technocopia." and she will give the rundown on what happened on Artisan Asylum. They started as a community atmosphere but took on corporate companies and it broke the makerspace.
  - The Techshop failed for business reasons. You can't try to charge a profit for makerspaces as it will become an anti-community space. Business and Communities are separate entities, you are unable to have them both.
  - Makerspaces are skeptical of the "incubator" word as makerspace because makerspaces absorb externalities where as a business model would not.
- Generally incubators are too expensive and unnecessary. Meeting spaces, business services, and most other resources are available for free
  - A startup business should move out of a makerspace into a small individual space

How did you advertise the facility?
- Posted onto hackerspaces.org
- Had a meetup for an open house night. Did a show and tell night that prompts people to bring stuff and present, attracting more users to the potential of the space

What sorts of events should we host?
- Interview the audience for potential events
- "Bring your own funding", no one pays for ideas in this day and age. Everything is open source and ideas are ethereal.

Startup Experience
What are crucial business aspects for a company?
- Can you produce it and how much are you paying to do it? How are you reducing the cost of low volume production? From an incubators standpoint, what are the resources that the business needs to pay and how can it lessen the cost of these resources?
  - Can't compete with the mass production of China, but can if you make custom parts to a smaller audience for a certain need.
  - Make a small market and meet your local demand. Ask if a decision will increase or decrease global supply chain.

Other Remarks
Look into Singapore vertical greenhouse for vertical agriculture
- A-frame with chain
- Dips into water at bottom.
- Can increase by factor of 20 instead of putting it in the ground

WPI has a working relationship with mass robotics. May have to settle for an email conversation since they are busy people and may not be able to meet face to face.

TriMark Interview

The following e-mail transcript is from an email conversation between Ryan Lee and senior level employee at TriMark United East, a foodservice equipment, supply, and design company. The employee discussed the services offered by TriMark and put them into perspective with the process involved when designing a kitchen space, and the timeframe in which the phases of the process are often completed. In addition to this, we consulted Professor William Michalson, PQP advisor, to discuss the feasibility of certain aspects of the project. The transcript is listed below:

*** The name and personal information of the employee have been redacted to protect the privacy of the individual involved. Additionally, personal information of group members and advisors has been redacted for privacy.***

The following conversation was initiated by Ryan T. Lee on 9/10/2018 and the members of the H3 Design team and Professor Michalson were involved via Carbon copy (Cc).

9/10/2018 7:39 AM

Hello ▮▮▮▮,

we are the H3 group where part of our objective is to attempt to design and implement a restaurant in seven weeks in Venice. What we would like to know if it is even possible to design, purchase, and move in all equipment while following safety procedures on the country in this time constraint. If not, we would like to ask more about how the design process works (as in, what are basic setups of kitchens that would be useful for us to know)? If we cannot physically complete the restaurant, we can at least attempt to make the design for it so that future groups may finish what we started.

For setting up a meeting, what is the best time for you this week?

Thank you

Ryan T. Lee
Worcester Polytechnic Institute
Electrical and Computer Engineering B.Sc 2020
Founder of WPI Greenhouse Club and Coffee Club

9/10/2018 1:36 PM

Hi Ryan –

I would be happy to steer you in the right direction. Perhaps we can start with a phone call so I can understand the scope of this project, and how we can help you? My office number is █████ ██████.

At TriMark, we design, supply, and furnish commercial kitchens that include function, flow, and profitability to our customers. Proper design process starts with an Architects shell of the space in CAD, then several discussions with the owner and chef reviewing the menu so we know what equipment is required. The initial design can take up to two weeks through design engineering, with up to several months of revisions before we all agree on a final design. After our work has been completed, the architect completes their part and provides to the owner, a "permit set" for the city or town to approve. Once approved and a contract has been awarded to us, there is a 8-10 week process or procurement, staging, and project management before we get to the install date. This time line is of course for the USA, and adds several weeks if not more for International kitchen installations. All of this of course is starting at ground zero, and if you have most of this work completed, the time line is much shorter.

Looking forward to hearing from you.

Thanks - ████

TriMark
Foodservice Equipment, Supplies and Design
UNITED EAST

████████
Senior Director ██████████████████
TriMark United East, 505 Collins Street, S. Attleboro, MA 02703
█████████ | ██████████ | ███████████ |
████████████████████
trimarkusa.com

9/12/2018 8:09 AM

While I agree that setting up a kitchen in the available time (and budget) is just a dream, you have a problem you need to address.

Specifically, one of your bosses thinks it's doable.

So, there's a pretty serious inconsistency that you need to resolve (welcome to the real world).

The best strategy here is to understand what's actually required to set up a kitchen and get an idea of the type of equipment, space, power, permits, etc. that's required. Tom can help with that part by giving you some US based facts.

Based on those facts, you need to educate Professor Carrera and myself as to why a real commercial kitchen isn't a good idea.

Now that we're fact based a couple of things might happen:

The idea is scrapped
The idea is refined to something that is possible
The requirements are verified relative to Italian standards and documented for future work/proposals.

The important part is that decisions are made based on facts.

Make sense?

Regards,

WRM

Events Office Meeting

Location:
WPI Events Office   Attended By:
Worcester Polytechnic Institute   Colin Hiscox, Ryan Lee

A meeting with the WPI Events Office Director, Bill Batelle, was organized by Peter Maida and attended by Colin Hiscox and Ryan Lee. The meeting was between the two attendees previously mentioned and an employee of the Events Office. Topics discussed are centered around the needed materials and considerations when planning public and private events in a fixed space.

Major findings from the meeting are noted below:

Identify the Mission
- Put things into a "mission-centric" point of view.
- What do you want to associate yourself with and what for?

Be Flexible
- Be as flexible as possible when planning what will be put into the event venue and what needs to be added where and why.
    - Example: Tables
        - Tall cocktail tables for networking purposes
        - 8 foot rectangle tables for buffets
        - Round tables for teamwork centered activities
        - Podiums with laptop spaces for lectures

Considerations
- Any materials that may need procurement from outside vendors or contractors
- Be considerate of space and availability
    - How much can you actually fit?
- Are there any other conferences/events that may pull your target audience away?
- Will the event disrupt the workflow around it?
    - Example: Tent for graduation at WPI takes 2 weeks to setup and so events on the quad must be moved elsewhere.
- Suitability
    - Does your design language and decor suit the event being held?
- How long will the event last?
    - Example: If on an open field will the time you are there kill the grass?

Good Practices
- Make diagrams of locations and each part of the event
    - Example: Where is electricity coming from, and where will cords go?
- Review local laws and regulations
    - Example: Alcohol licensing, food licensing, event permits

- Determine needs of guests
    - Example: Do any guests have special needs or require special accommodations?

Some major event types and examples to consider when planning:

Example: WPI focuses STEM so a lot of events are directed towards STEM. However, you also need to do things for the community and consider those around you, such as WPI's red cross blood drives.

For workshops should consider break out rooms, so there is a main event, and then a section of time where people break off and can consider multiple options before all coming back together.

For reasons such as weather you should prepare alternate dates so that if it has to be postponed everything is all set.

Lens and Lights Meeting

Location
TechSuite 112a   Attended By:
George C. Gordon Library   Peter Maida, Alexander McMahon
Worcester Polytechnic Institute

A meeting with Lens and Lights President David Vollum was organized by Peter Maida and attended by Peter Maida and Alexander McMahon. The meeting discussed what types of events Lens and Lights organizes and works with, the types of equipment they use and general information regarding equipment types and the types of events they are most appropriate for.

Major findings from this meeting are noted below:

What kind of events do you support?
- Lighting and sound events (mainly temporary work, goes back into storage afterwards)
- Lighting (stage related)
    - They do every big dinner event for international clubs
- Conferences in Alden

What do you provide for these events?
- Conferences in Alden get:
    - Full range speakers
    - External subs (if an event requires a lot of subs, have subs to supplement. Most speaking events don't require it)

Have a large variety of microphones
- SM58 minimum for mic
- Schure website for specing out equipment
- Be wary of local regulations (with wireless microphones) only allowed to operate at certain ranges.
- Some mics are good at vocals some are good for instruments
    - Schure SM57 is good all round mic

The more expensive the better (can get quite expensive)
- Some things matter more than others depending on end goal
- Can really hear the difference between good quality microphone and $5 one

If buying a lot of stuff distributors give discount
- Full compass (will give deal if spending $500)

Speakers
- Powered
    - EAW
    - JBL
    - QSC
- Powered speaker has amp built in, vs separate amp
    - The bigger the cabinet the better it is to have an offboard AMP
- Powered speaker would be better because they offer less of a hassle and are better in small spaces

Guitar can be plugged into DI, converts unbalanced signal to balanced signal
- For solo guitar performance, can be valuable

Sound console, left and right outputs
- Mackie for 12 inputs (little mackie aren't cheap but sound good and not expensive)
- Prices will start to go up higher when moving getting higher input numbers

Lighting
- Lighting for artistic effect vs stage lighting for performers
- Lighting is like sound, more money the better (but expensive)
- Advise against American DJ company, really cheap but horrible quality
    - Doesn't stand up well in a touring environment

Power
- Look into what the building has for power
    - CAM 3 phase -> capable of providing 4 amps
    - A couple wall outlets are not enough for tour group!
    - 2 outlets doesn't mean two circuits
        - Power can be a big problem in older buildings
    - Touring groups bring generator

Cost effective
- Courtyard and inside
    - Have speakers and stand for them not permanent installations
    - QSC ones for that
    - Buy decently quality cable, bad cable will make everything sound bad
        - Full Compass can help with this. They have a good selection
            - If we are about to order and can't contact, lnl talks to owner regularly, can help with that. They order thousands of stuff per year

Event production
- Gaff tape
    - Like duct tape but doesn't leave residue
    - $15 a roll, only flaw, otherwise amazing

Their projection is like permanent installation, for movies, not like event projecting
- Steve Hemming in ATC for stuff like that

Programming:
- Small single performer with guitar doing well will draw more people than a band with all the equipment

Small space:
- Probably don't need to mic the amps. The mic the amps in Alden, and drum kit. For small space just need mic for vocalist and maybe acoustic guitar.

Mic stands
- Straight stand are just up and then circle base.
- Get a boom stand, it needs to be able to reach out so they don't hit the stand while playing

Keep equipment in industrial road cases
- Have a soft case to put things when moving around (don't put mic rattling around in bottom of a crate)

Do nice cabling
- Makes the event a lot nicer (put cabling around the wall)

Audio mixing
- Front of house has sound console (back of hall), have speaker and performer.
- A snake is essentially ~8 XLRs in one cable. Plug into one end and then plug into the other end
    - Whirlwind good manufacture of snakes
- Buy a snake with sends and returns (I/O on both sides, send for speaker and receiver for controls)
    - Gender benders, will flip gender but are annoying and no need
- Debug
    - Walk along signal path to find problem with audio
- Costs
    - Depends on what is already installed and how much
    - Unsure of generator usage in Venice, prolly not needed for inside, small venue
    - Look at Full Compass for costs
        - Little mackie twelve channel console (couple hundred)
        - Speaker couple hundred each prolly need 2 of each
        - Mics 80-100 a piece
        - Cable varies depending on length ($1 per foot, variable though)
            - Can sauture ourselves, just do it well!

Learn audio mixing before we leave, they can teach us it.
- Can come to any events to see how it works (prolly unnecessary but idk)
    - Distorted 5 (will be setting up all day Sunday, thing starts at 3, 30 channels of input with full band and big speaker system)

Permanent installing talk to ATC
- They maintain all classroom systems more related to our needs?
- Steve Hemming is director of ATC

Additional Notes
- Upon viewing event space, based on current floor plans, it may be difficult or impossible to hold any large events in the current designated event space.
- Courtyard space by Deposito may be better suited but power delivery will be the main concern.

Worcester CleanTech Incubator Visit

Location:

Worcester CleanTech Incubator   Attended By:

44 Portland St. FL 4   Alexander McMahon, Peter Maida

Worcester, MA 01608

A meeting with an employee at Worcester CleanTech Incubator (WCTI) was arranged by Alexander via email. The meeting was attended by Alexander McMahon and Peter Maida. The meeting included a brief interview with the staff member, where we were given information and allowed to ask any question we had. After the interview, a tour of WCTI was conducted and photographs were taken. In addition to WCTI, Technocopia and the WPI Worcester Project Center were also visited and toured. Pictures were only taken in the latter on this occasion.

The major findings from the tour and interview are noted below:

Basics of Worcester CleanTech Incubator (WCTI)
- Multiple startups are hosted within WCTI.
- The incubator hosts competitors and winners from the "Startup Worcester" competition held annually by the Worcester Chamber of Commerce.

WCTI Business Specifics
- **WCTI charges fees to its occupants**
    - Members are charged $275/month per desk.
    - Members are charged $900/month for an office with 3 person access.
- **WCTI Membership Benefits**
    - Technocopia membership.
    - $5000 Amazon Web Services (AWS) credit.
    - Venture Forum membership.
    - HubSpot discount.
    - Access to incubator facilities and resources.
        - Prototyping lab (at a fee)
            - 3D printing
            - Bench space
        - SolidWorks License
        - Conference and event rooms
    - Other discounts and benefits are available through additional partnerships formed by WCTI.
- **WCTI Funding**
    - Funded primarily by grants.
    - Funding is also sought from partnered universities and coalitions whenever available.

Event Space and Space Rentals
- Event space available for internal use and public rental.
- Internal use, by members, is free of charge.
- The public may use spaces within WCTI for a fee:
    - $100/hr on weekdays
    - $150/hr on weekends and nights
    - Conference rooms may also be rented at a fee
- Spaces are offered for use with all furnishings including:
    - Tables
    - Chairs
    - Speakers
    - Projectors
    - TVs
    - Podium
    - Microphone
    - Whiteboards

Special Events
- WCTI has hosted special events/celebrations at its facility such as:
    - 2017 WPI Energy Symposium
    - New England Water Week

Form this interview and tour, it became clear that generating and maintaining a sense of community within the space is essential. In this case, the space includes both the WCTI office and the building the WCTI is officed. Also, the idea of partnerships was discussed, and detailed in the idea that through these partnerships services and discounts can be offered to the occupants and members of the company.

Technocopia Visit

Location:

Technocopia

44 Portland St. FL 6

Worcester MA, 01608

Attended By:

Peter Maida, Colin Hiscox, Ryan Lee

A tour and interview with an employee at Technocopia was arranged by Alexander McMahon and attended by Peter Maida, Colin Hiscox and Ryan Lee. At the meeting took place during an "Open Hack and Crafts" session held on Thursday nights at Technocopia. Photographs were taken during the tour of the space and an interview where questions were answered was also held.

Major findings from the tour and interview are noted below:

Business
- Opened in 2013
- Created by Kevin Harrington
- No money being lost in the space
- 6 member board, with small salary, working toward at least one minimum wage
    - 2 to 4 directors required for operation
- Currently functioning with a lot of volunteer involvement
    - Not maintainable or sustainable but works at the moment
- Currently seeking sponsors
    - No seed money currently
- Funding currently consists of:
    - $18,000 in donations
    - $200,000 in grants
- CleanTech (WCTI) is a soft space (more business oriented)
- Spaces need almost constant management to be kept running smoothly
- Makerspaces often run out time before becoming successful

The Space
- Wood and metal shop are co-operative
    - 7 carpenters
- 3-D printing
- Several small kilns within the location

Wall Setup
- Provide space for different areas of expertise
- Can be quieter when partitioned
- Wall design was intended to not be flat
    - Different flow

- Not rigid
- Wanted natural light
- Wanted people to be able to see what people are doing
- Creates open feeling

Additional Information
- The company is the result of several groups merging together over 3 years
- There are currently 100 members
    - Members interested in tech studio when expanding (textiles)
    - Members said they would use the space which dictated what they do
    - Retention is equally important as gaining new members
- WPI alumni involvement

Meeting With James H. McLaughlin

Attended by Colin Hiscox, Ryan Lee

Background:
- Director of WPI Campus Center
- Assistant Dean for Student Programs

What is your main job here?
- Developing policies: ordering furnishings

What can you tell us about Foisie?
- Unlike any other building
- Unique: multidisciplinary
- Need for academic space but not classrooms or labs: how can facility support WPI strategic plan/ project based learning
- no one area owns the space: everyone gets to change space
- Active learning classrooms: talk to Chris Wobe

What did you do to choose furniture?
- A committee was responsible for that, and it included an MQP team.
- Students had input on furniture
    - All tables/chairs on wheels
    - All kinds of experiments and activities: standing, walking, not sitting.
    - Openness to keep everyone interconnected
    - Committee talked to architects, who amalgamated information from students and teachers and administrators

People incharge of departments:
- Makerspace: prototype for a business
    - Small tool makerspace: Erica Stults
- Global lab: leslie Dodson: steve mccolley
- Innovation: donna Levin
- Design: Keller Roughton
- Facilities: Bill Spratt

Building supports strategic plan:
- How will we determine if the building has met its goals?
- What metrics will you look at to identify improvement?
- Building is meant to help students over 4 years
    - GPS: all taught in active learning classrooms
        - Classrooms are ideal for GPS
    - White boards and tech suites were integral design

Variety of committees develop policies
- There are about 9 committees

Amphitheater and screens to communicate WPI experience
- Last few weeks on Friday night
    - Standing room only to watch battlebots in amphitheater

There is a space for visiting lecturers

Appendix T: Website Recommendations

Website Recommendations

This document contains a list of all the tasks that can be completed to improve upon the website. Some of these tasks are ideas on new features that can be added, some are updates to visual aesthetics, and some are bug fixes. Each task has a priority level that is associated with it. Most of the security features have a high priority in order to assure the safety of the site and its users. Other priorities were assigned based on how valuable the task was and how it would help in SerenDPT's presentation of H3. At the bottom of each section, figures representing upcoming designs can be seen; these UI Mockups are also in the Website UI Mockups presentation.

Administrative Access

Priority	Task
High	Every page checks if the user is properly logged in before display. The user can currently navigate to a restricted area if they input the correct url.
Medium	There can be multiple levels of administrative access. Accounts can also have true/false access to certain functions and pages as listed in the dashboard (only lists what you have and not what you don't have): - Guest (not logged in): shows the website as it currently is before logging in - User: users/organizations that have a profile saved. Would also display what events they have signed up for and what spaces they are currently renting. - H3 Employees: workers can request services to buildings and have no price on using spaces for meetings, and discounted price on hosting events. - Administrators have full access to the website, including approving new users, events, and modifying requests

Home Page

Priority	Task
High	The home page can include a more in-depth description of what SerenDPT is doing in an interesting format that also includes interactive links to different tabs of SerenDPT's new website.
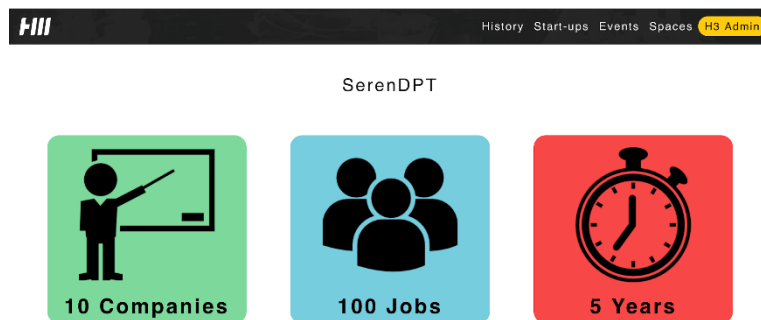
Figure 1: *The current SerenDPT section of the homepage. Their mission is unclear and this section does not spark an inspiration and creative emotion in the user.*

History Section

Priority	Task
Low	Can be more interactive. For example, have a timeline as seen in **Figure 1**.
Low	Can show previews of the presentation/documentary/gallery sections to encourage the user to click those links
Low	Faster load times on the artwork gallery page. Javascript could be used to have these objects appear as they load in, or have the page load before appearing.
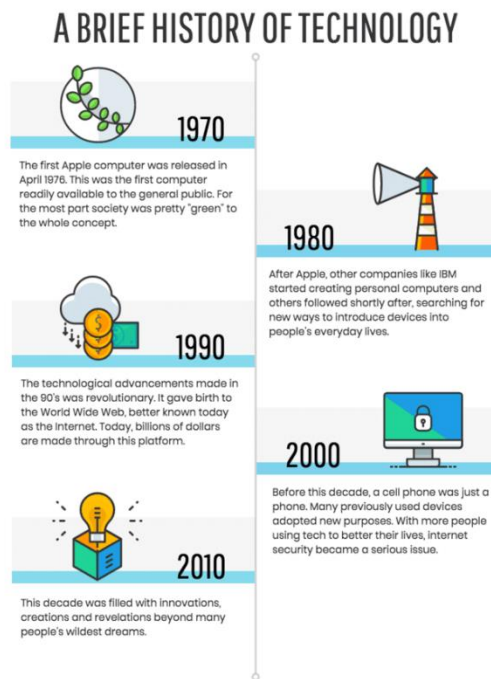
Figure 1: A timeline example that could be used to not overload the reader with paragraphs of history content. This timeline could be interactive and enlarge sections on hover.

Angelo Trevisani

Christ Throws out the Merchants from the Temple

Parrocchia Di Somaglia, Provincia di Lodi, Lombardia

Giambattista Pittoni

The Multiplication of the Bread and the Fish

Galleria dell'Accademia, Venezia

Startups Tab

Priority	Task
Medium	Currently redirects to the new SerenDPT website, as this includes all of the companies that are currently in the building. If any companies get added that are not a part of SerenDPT, then this page should be replicated to include these new companies as seen in **Figure 1**. For example, if SerenDPT gains control over the deposito and some of those companies do not belong on SerenDPT's startup website.

Figure 1: *The new SerenDPT Startups company page that would be replicated if more companies not affiliated with SerenDPT joined H3*

Events Section

Priority	Task
Medium	Include a list of all events that are both approved and public on this page. This could load only a set number at a time to not overwhelm the page. For instance, there can be a sliding div of 5 new events listed. There could also be navigation by date.
High	This page becomes a list page in Hugo of all events that can be listed. Upon clicking one, it will take you to a single page, similar to **Figure 1**, with more details on that event including: - Itinerary - Features - Host - Image of Event

	- Date - Ability for a user to register to join an event (if public)
Low	Administrators can select what events they want to choose to show on the carousel at the top.
Low	Behind the "Apply Here" button, include a sliding image reel of what the space has been used for in the past, as seen in **Figure 2**. Assure that these load fast.

Figure 1: An example of a single page with the Italis event. Includes title, date, time, image, description, and the ability to register through the H3 system.

Figure 2: An example of the tiled images that would slide behind the Apply Here button on the Events page.

Spaces Section

Priority	Task
High	This page becomes a list page in Hugo of all available spaces. Upon clicking one, it will take you to a single page, similar to **Figure 1**, with more details on that space including: - Size (dimensions) - Capacity (of people) - A carousel of the empty and furnished space - Another carousel of nice events that have occured in the past.

	- 3D images of the space - Location of the room in the building (on a highlighted floor plan) - A link to the event application with the current venue already selected
Low	Upon hovering a space, it can fade through previous uses of that space, while also displaying an "Apply Here" button.
High	If an administrator logs in, the information should include the occupant and if they have paid for the space, along with any other information. Also includes what events are scheduled to be used and when.
High	When not logged in, the information should show cost for renting the room, what amenities and features the room offers, and how big it is (carrying capacity)
Medium	Every space should be represented in some way.

Function Room 1
- 800 sqft.
- 200 people

Business Hours: 30€/hr
After Hours: 40€/hr
Half-day: 100€/hr
Full-day: 350€/hr
Weekend: 100€/hr

Book Space

Figure 1: *An example of a single page for events with a carousel for the current space as well as what was hosted in the past*

Login

Priority	Task
Low	More aesthetic login page/drawer system.
Low	Potential removal of the login page as seen in **Figure 1.**

Figure 1: The old login screen that is still accessible with the slug /login. There are currently no links directing the user to this page

Register

Priority	Task
High	Registered users do not get immediately added to the system, but require approval.
Medium	After administrative levels are in-place, re-include commented out "Register Here" from the login page and login drawer. Registered users would be added at the "guest" administrative level until approved by SerenDPT to be an H3 employee or administrator.
Low	Include more information on registration, including payment options or profile image.

Database/Backend

Priority	Task
High	All events are stored with keys so that there can be multiple events of the same type.
Medium	Events should be stored in a different format that is easier for multiple events in multiple locations.

Events Application

Priority	Task
High	Robust system to account for: - An event using multiple spaces - An event that occurs on multiple dates - Repeating events (weekly/monthly discounts)
Medium	Include all other information that is in the event/exhibit application pdf on the application.
Medium	Appropriate multiplier for prices on nightly events, repeating events, and weekends.
Low	Include a different form for events and exhibits
Medium	Include the ability to search for events by time or by venue space
High	Add a secure payment method. Include a description of payment policies. Can use a request format that is similar to Airbnb
Medium	User needs to submit all required fields in one tab before moving forward.
Medium	Make the tab bar more of a progress bar as seen in **Figure 1** so that it is visible that these are steps.
High	Administration needs a method to approve events (achieved through dashboard).

Figure 1: An event progress bar to show progressive steps.

Dashboard Page

Priority	Task
Medium	Each level of administrative access has a different display for their information: - Guests can see the spaces that they have booked, and update this information. They can also see the events that they have signed up for. See **Figure 1**. - Employees can view the service requests they have submitted, and modify them. See **Figure 2**. - Administrators can approve new users and events here. They can also view, modify, and complete service requests. They also see information on each event being held. See **Figure 3**.
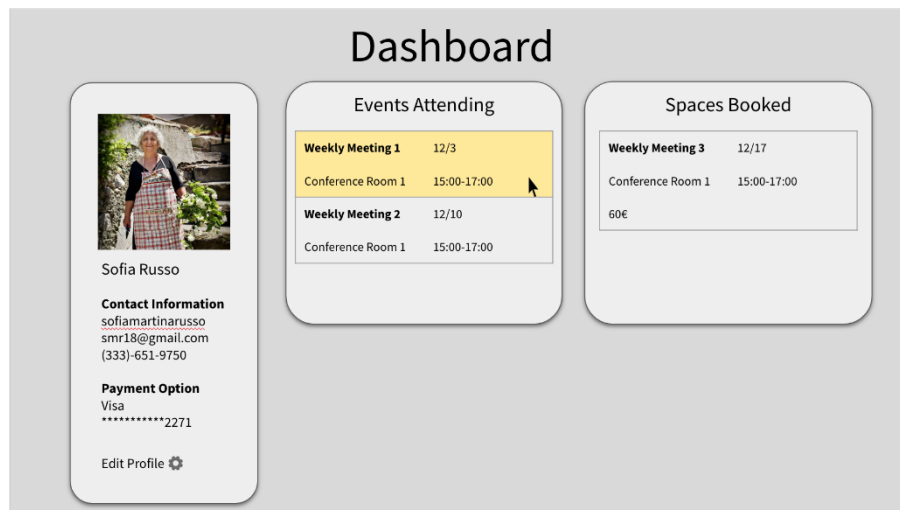
Figure 1: The dashboard for a guest user
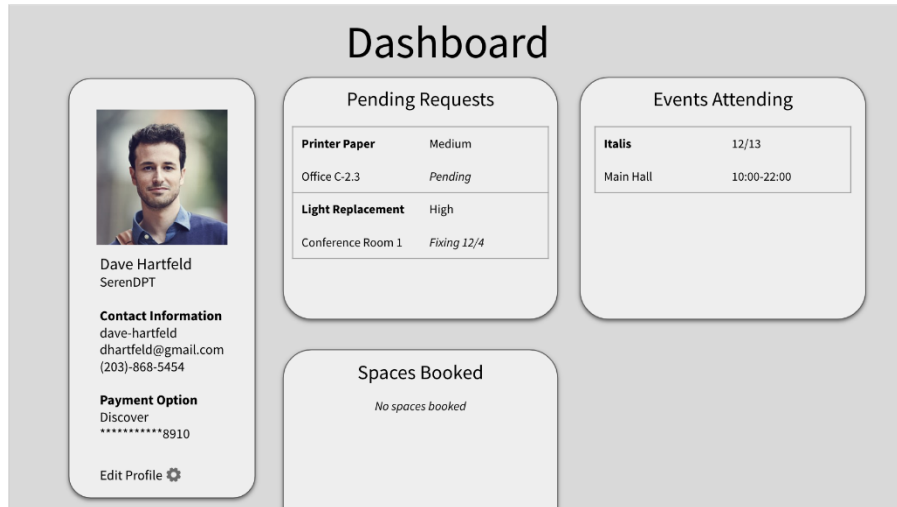
Figure 2: *The dashboard for an employee*
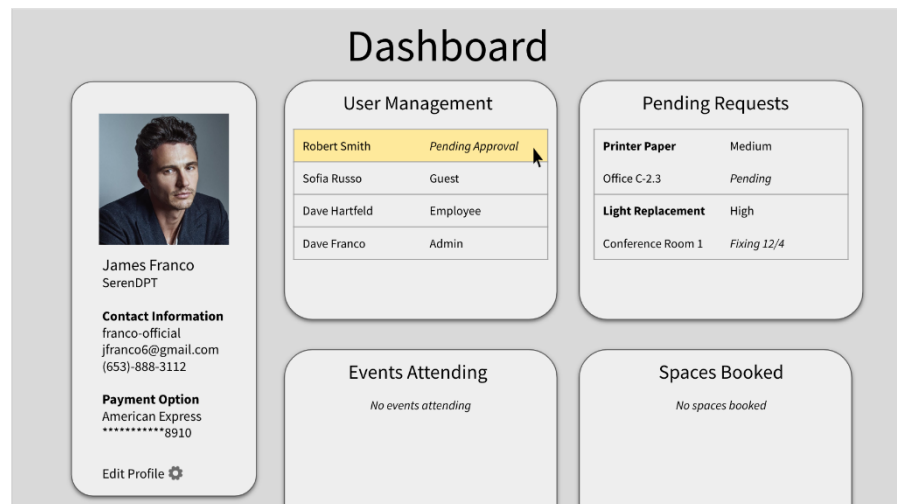
Figure 3: *The dashboard for an administrator*

Service/Maintenance Request

Priority	Task
High	Only H3 employees and Administrators can see this page
Medium	Maintenance request form that includes: - What room it's for. - What is needed. - What type of request it is (maintenance/supplies) - A priority level: High, Medium, Low. High priority sends a notification to administrators. Medium is still for important things, and low is for things

| | that do not need to happen immediately or soon. |

Documents Page

Priority	Task
High	Only Administrators can see this page, and potentially H3 employees if deemed necessary
Low	See if you can pull the documents from the Google Drive folder and represent the information in a different way, so that there is an image preview of what the document is.
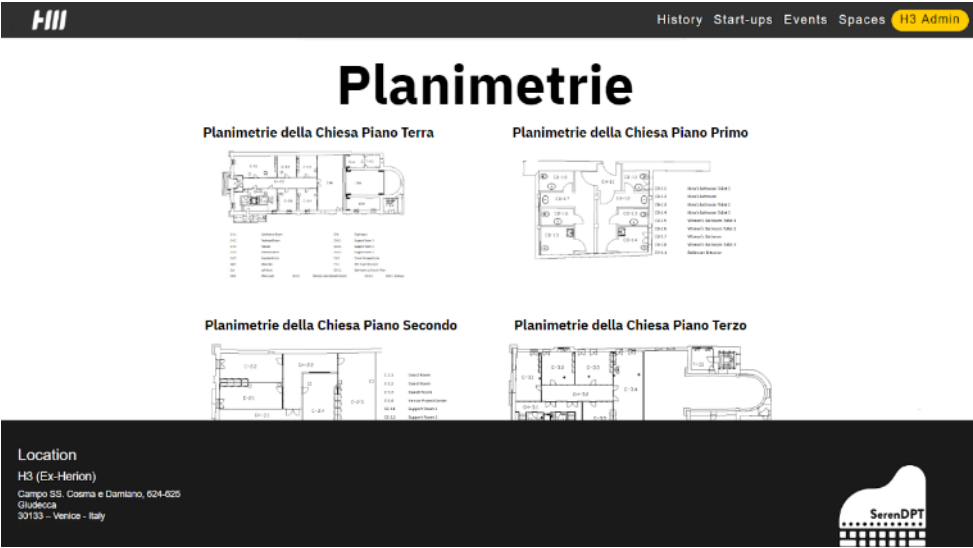
Figure 1: *Floor Plans can be presented in a format similar to this one.*

Design Contest Page

Priority	Task
Medium	Any user can submit their thoughts on the interior design catalog here.
Medium	Competitors can submit their design plans here
Medium	The rules are listed on the page and not as a linked Google Doc
Medium	The design catalog can be seen beneath the rules
Medium	Normal users can register for the design contest here, have to register for the

	contest before submission. Only one team can submit a design which will be a .zip file of renderings, links to buy items, etc.

R-Lab Page

Priority	Task
Medium	Include information that is relevant for the Basque Culinary Center, which will have access to this page along with administrators.

Appendix U: List of Surviving Artworks of the Church and Locations

Map of all locations:

https://goo.gl/maps/KifQwFY8ris

Paintings at Parrocchia Di Somaglia, Piazza del Popolo

- Angelo Trevisani, Cristo scaccia i mercanti dal tempio/Christ throws out the merchants from the temple
- Sebastiano Ricci, Il Trasporto dell'Arca/The Transport of the Ark

Paintings at Vicenza, collection of the Banca Popolare di Vicenza (private collection)

- Giovanni Buonconsiglio il Marescalco, Vergine con il Bambino e Santi/Virgin Mary with Baby Jesus and Saints

Paintings at Selva del Montello, chiesa parrocchiale

- Jacopo Tintoretto, Crocifissione/Crucifiction

Paintings at Modena, Galleria Estense

- Alessandro Varotari il Padovanino, Sposalizio mistico di santa Caterina/Mystic Marriage of Saint Catherine

Paintings at Duomo di Thiene
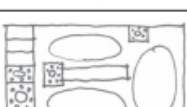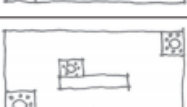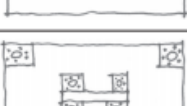
- Sebastiano Ricci, Salomone parla al popolo/Solomon speaks to the people

Paintings at Galleria dell'Accademia
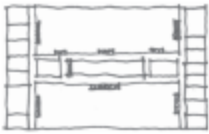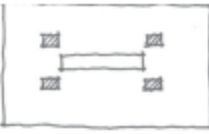
- Giambattista Tiepolo, Il castigo dei serpenti/the casting of the serpents
- (deposito) Giambattista Pittoni, La moltiplicazione dei pani e dei pesci/The multiplication of the bread and the fish
- (deposito) Sebastiano Ricci, Mosè fa scaturire l'acqua dalla roccia/Moses causes water to flow from the rock
- Jacopo Tintoretto, Vergine con i santi Cosma e Damiano/Virgin Mary with Saints Cosma and Damian
- Giovanni Buonconsiglio il Marescalco, Madonna in Trono con il Bambino/Virgin Mary on the Throne with Baby Jesus

Appendix V: Workplace Collaborative Space Graphics
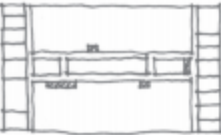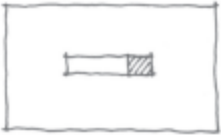
The following are related graphics from "*Workplace collaborative space layout typology and occupant perception of collaboration environment*" *(Y. Hua, et al.)*

	Diagram	Description
M1		No dedicated meeting space on the floor (often cases with meeting space in supervisor's office).
M2		One big meeting room for the whole floor.
M3		Group meeting rooms with various sizes.
M4		Distributed meeting rooms, not reflecting occupant density (often concentrated close to closed offices).
M5		Evenly distributed meeting rooms, reflecting occupant density.
M6		Distributed meeting rooms, located around the core (easy to find).
M7		Distributed meeting rooms, around the core and at the corners (with views to the outside).

Figure 1: *Layouts and Descriptions of Teamwork-Related Spaces. Displays teamwork space the layouts obtained by the study in the column titled "Diagram", and a brief description of each layout style on the right in the column titled "Description."*

	Diagram	Description
C1		Copiers located randomly in vacant workstations.
C2		Copiers located on circulation aisles.
C3		Copiers in dedicated space, centralized (often in the building core, serving the whole floor).
C4		Copiers in dedicated hubs, distributed to serve neighborhoods of workstations.

Figure 2: *Layouts and Descriptions of Service-Related Spaces Displays the service space layouts obtained by the study in the column titled "Diagram", and a brief description of each layout style on the right in the column titled "Description."*

	Diagram	Description
K1		No kitchen or coffee area on the floor.
K2		Kitchen or coffee area located in vacant workstations.
K3		Kitchen or coffee area located in main circulation aisles.
K4		Kitchen or coffee area in dedicated space, centralized in the building core (without views to the outside).
K5		Kitchen or coffee area in dedicated space, on the perimeter (with views to the outside).

Figure 3: *Layouts and Descriptions of Amenity-Related Spaces. Displays the amenity space layouts obtained by the study in the column titled "Diagram", and a brief description of each layout style on the right in the column titled "Description."*

Perceived Support for Teamwork Layouts
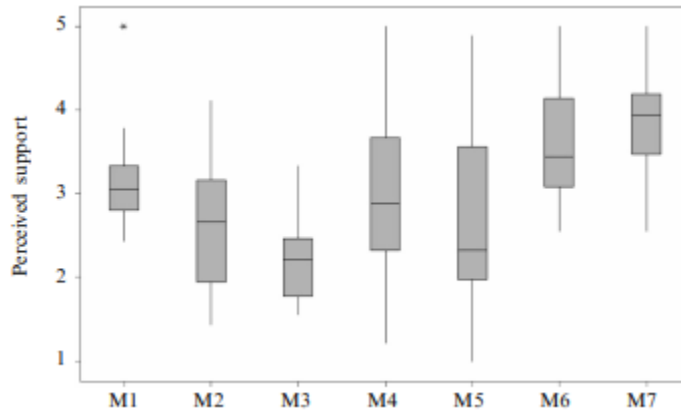
Figure 4: *Shows a box and whisker plot of the data collected for each teamwork space layout style. Higher is better.*

Perceived Support for Service Space Layouts
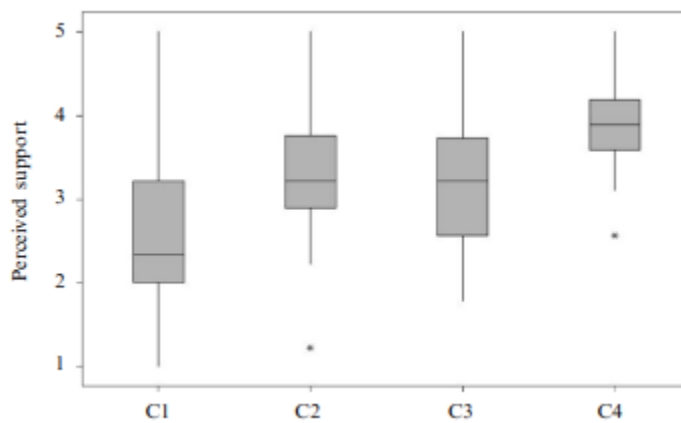
Figure 5: *Shows a box and whisker plot of the data collected for each service space layout style. Higher is better.*

Appendix W: "Thematic Catalog"

Thematic Catalog

Talent garden
H-Farm

Table of Contents

Nearby Spaces

Technocopia
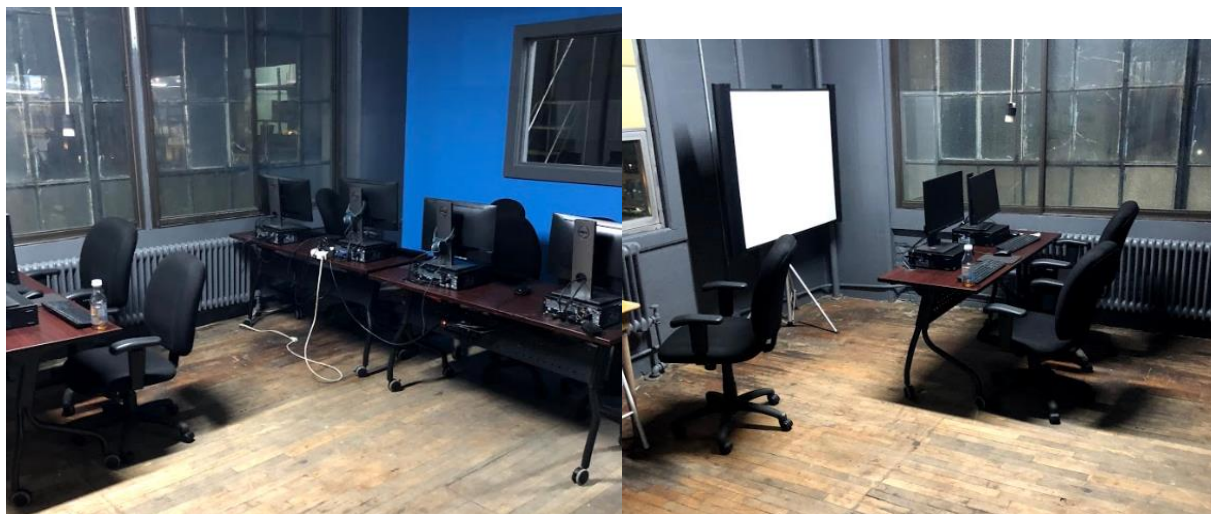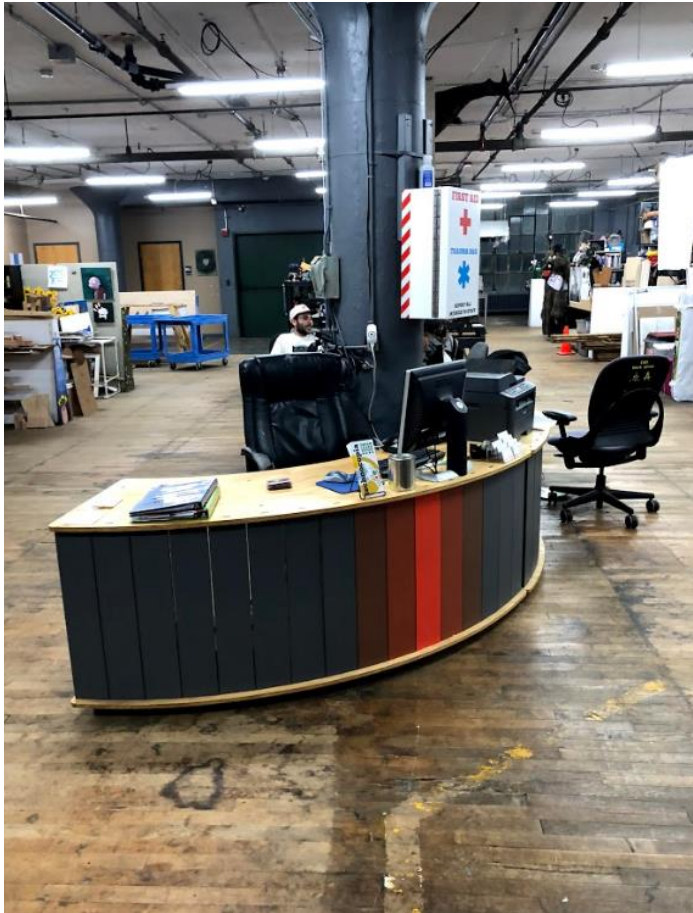
Worcester Clean Tech Incubator

CURE Innovation Commons
https://curecommons.org/

reSET Hartford
https://resetco.org/

Upward Hartgord
http://www.upwardhartford.com/
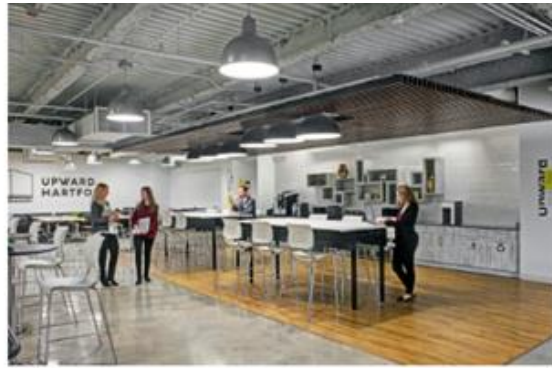
Running Start Coworking
https://www.coworker.com/united-states/massachusetts/worcester/running-start-coworking

Cowork Hudson
https://www.coworkhudson.com/

Innovative Images

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https://www.coalesse.com/blog/best-modern-offices-of-2015/
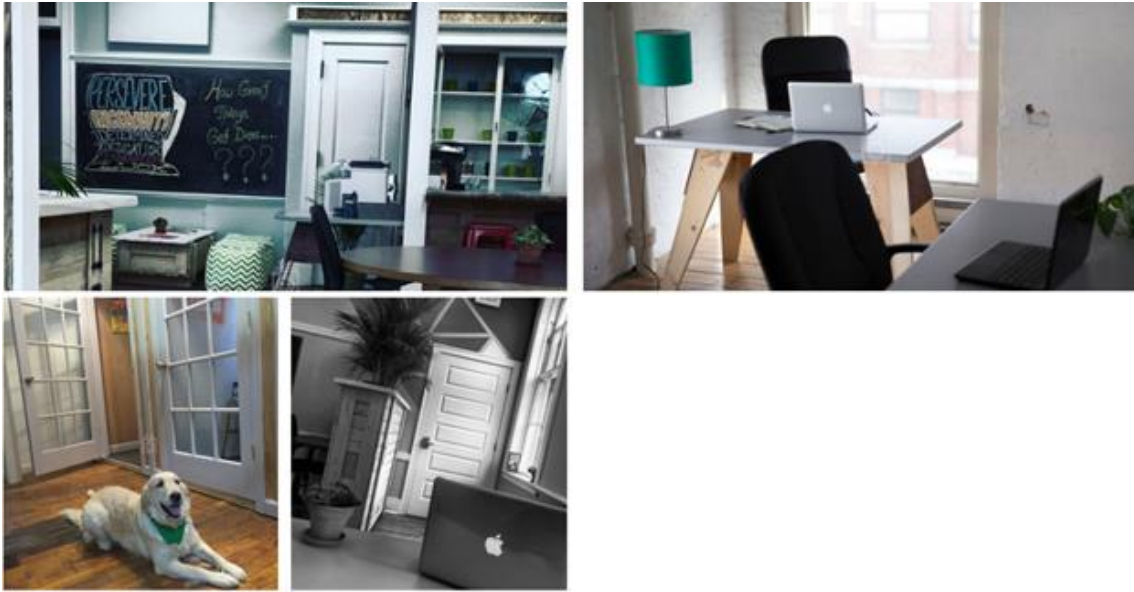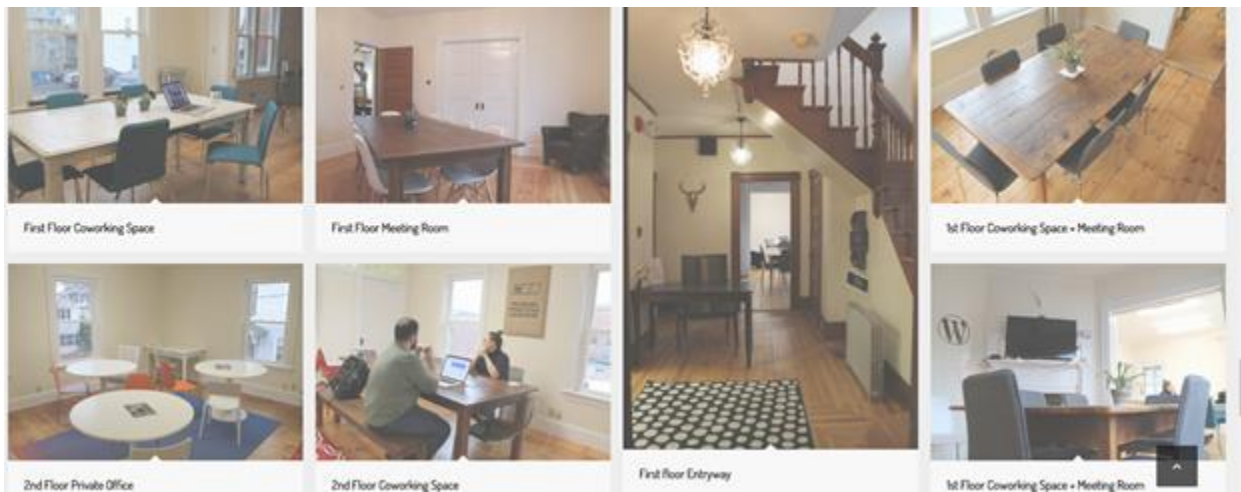
Images found on Pinterest

Glass Offices

Plant Walls

Other

Photographs by David Wakely
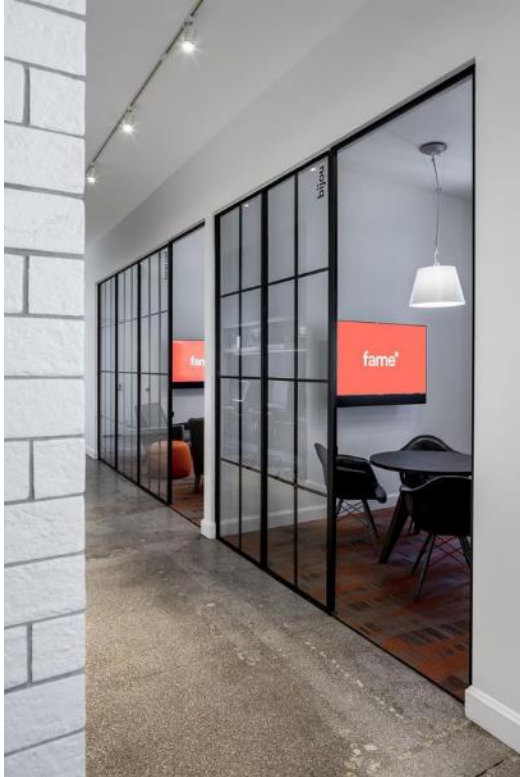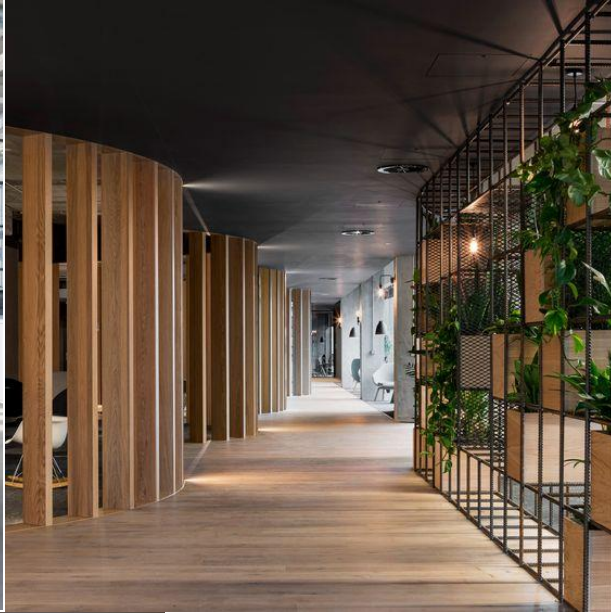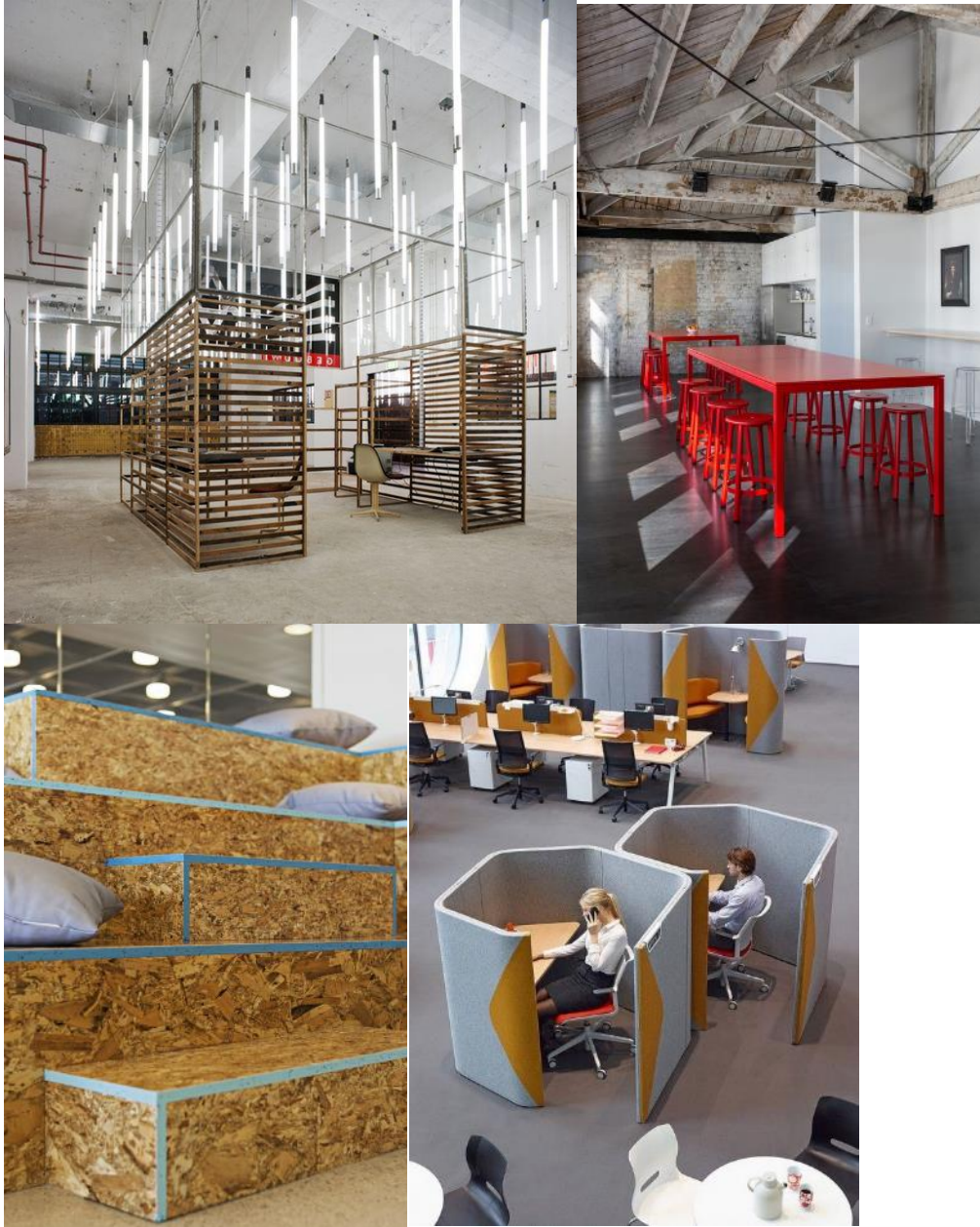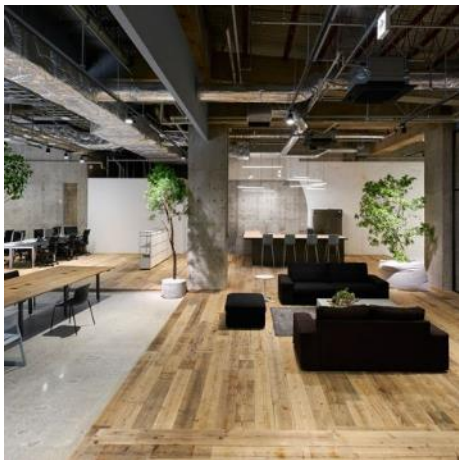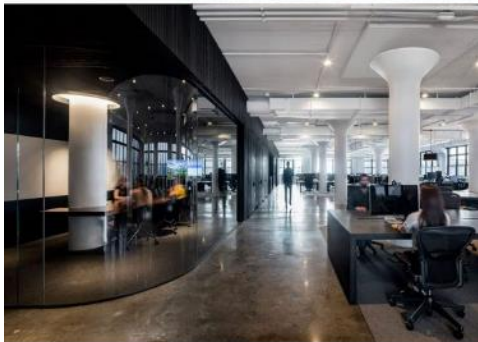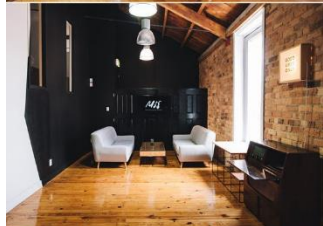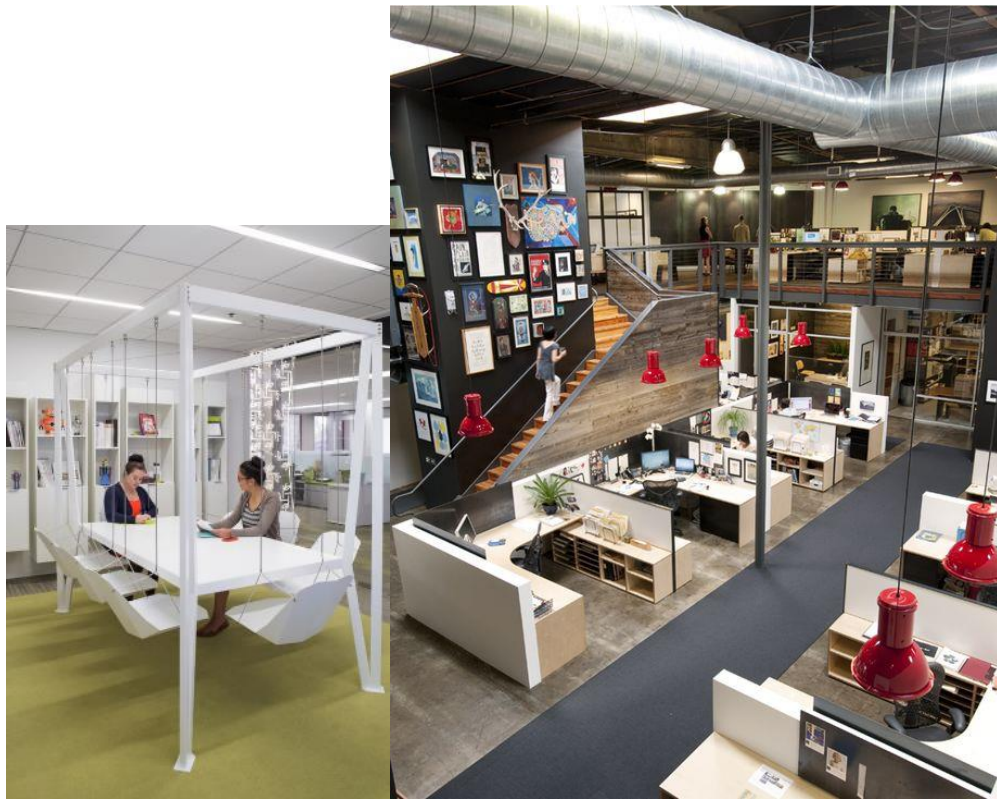
Local Innovation Based Spaces

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Cure Commons

Cowork Hudson

Cowork Hudson
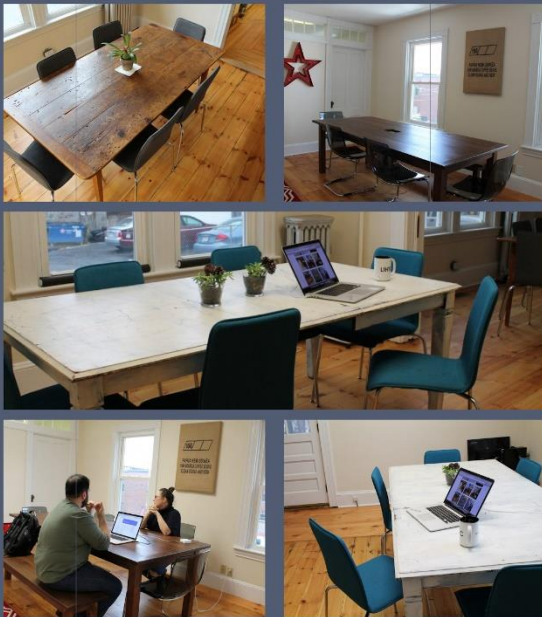
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Foisie Innovation Studio

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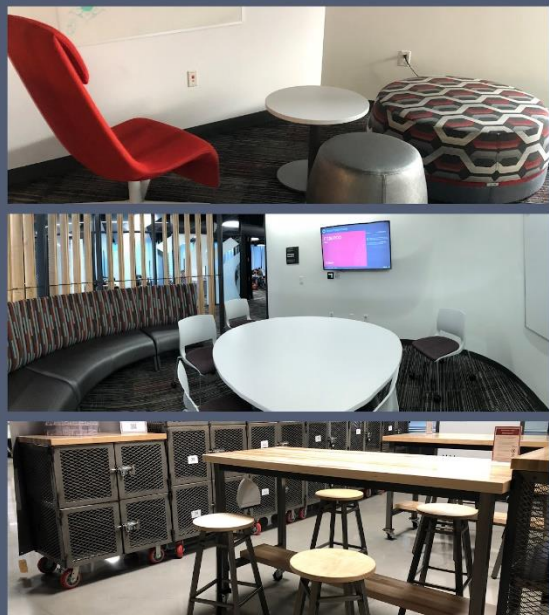
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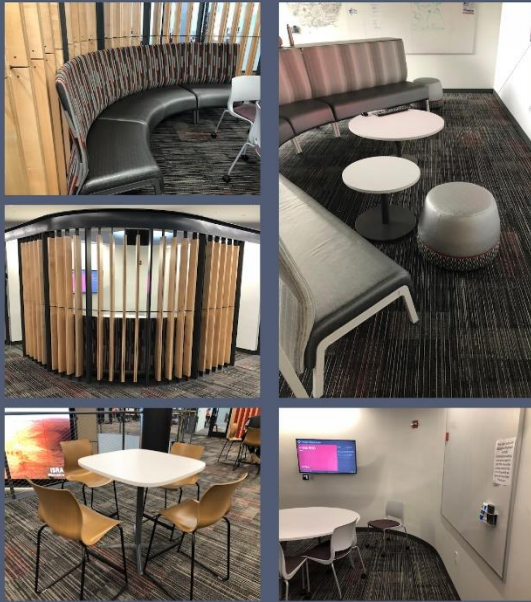
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Worcester CleanTech Incubator (WCTI)

Worcester CleanTech Incubator (WCTI)

Worcester CleanTech Incubator (WCTI)

Worcester CleanTech Incubator (WCTI)

Worcester CleanTech Incubator (WCTI)

Technocopia
Worcester, MA

Technocopia
Worcester, MA

Technocopia
Worcester, MA

Technocopia
Worcester, MA

Catalog of Inspiring Designs

Created by: H3 Design Team 2018

WPI

Welcome to the Catalog of Inspiring Designs!

The following document was created to provide SerenDPT with a catalog of inspiring images to aid them in their thought and creative processes centered around creating a new design for the interior spaces of their newly acquired H3 Complex.

This catalog features designs from a number of design firms, websites, and companies that are using their designs. To aid in the thought process and for easy reference, a numbering system was created to label the images. The system numbers the images from left to right and top to bottom. The numbering scheme resets when a new space is featured.

This catalog is interactive. The the table of contents is linked to the respective sections of the document. Additionally, this catalog features links to the respective sources and design firms behind the inspiring designs featured. Clicking on the bold title, the company that uses the design, will bring you to the source of the images for that particular design. This source contains additional images and textual informaton about the design, the choices behind the design, and the work between the firm and company that requested the design. Clicking the lower title, the name of the firm responsible for the design, will bring you to the official webpage of the design firm that created the space pictured.

We hope you enjoy this catalog, and are as inspired by these images as we were.

-H3 Design Team

Contents

Contents

Designs by
D/Dock

OVG Amsterdam
By D/Dock
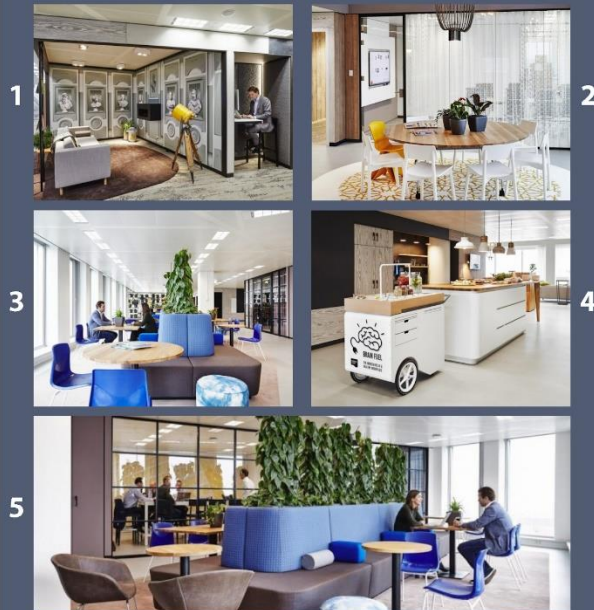
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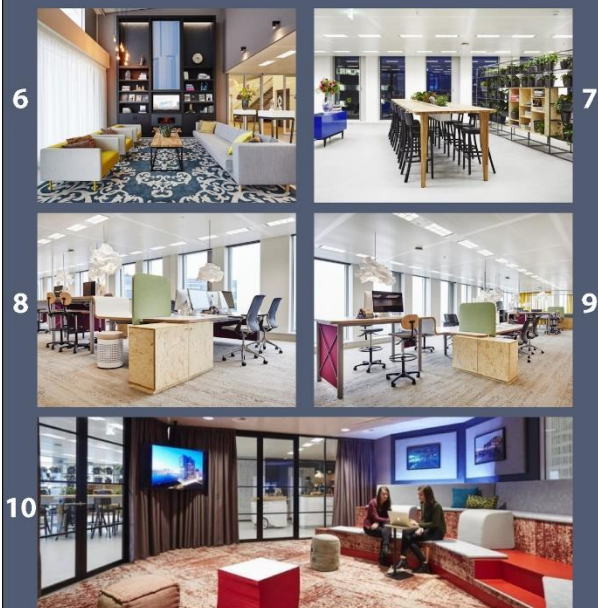
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Designs by
OEG Interiors

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Hazlewoods (The HUB)
By OEG Interiors
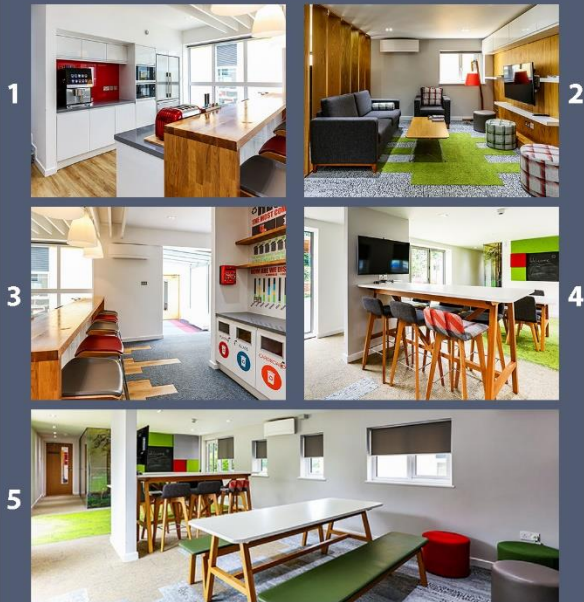
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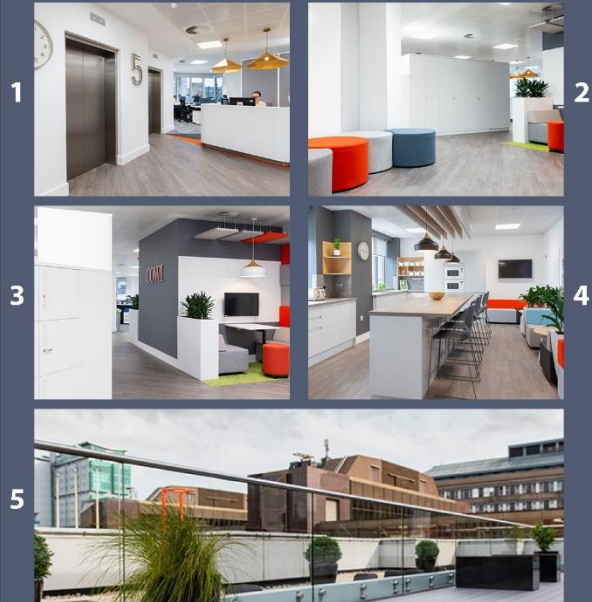
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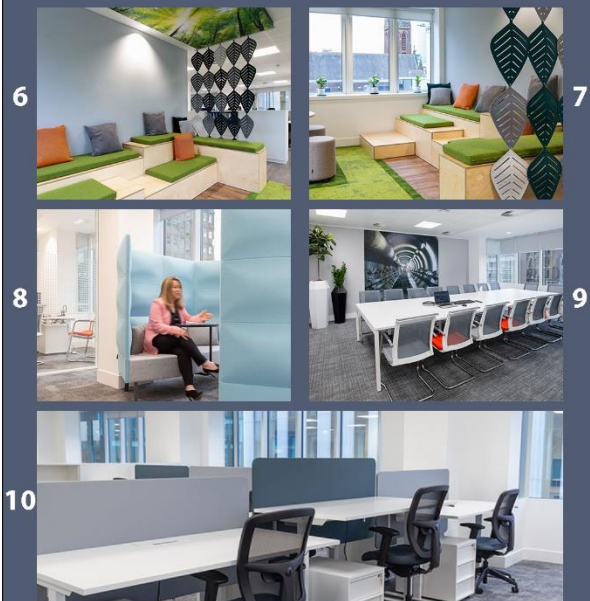
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Avon Group
By OEG Interiors

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Avon Group
By OEG Interiors

Cray
By OEG Interiors

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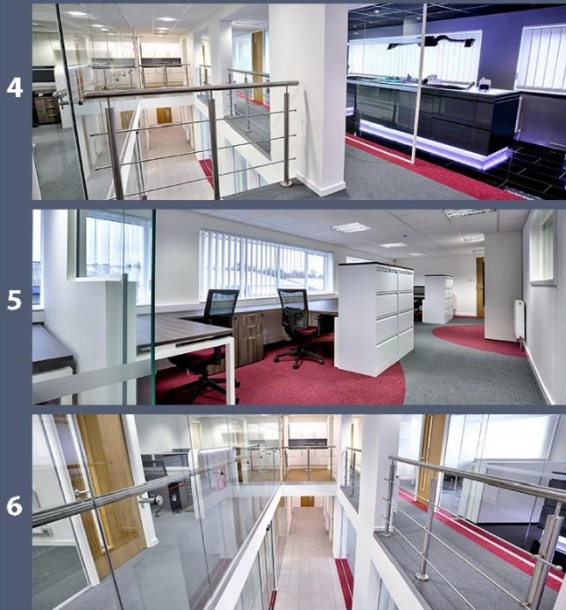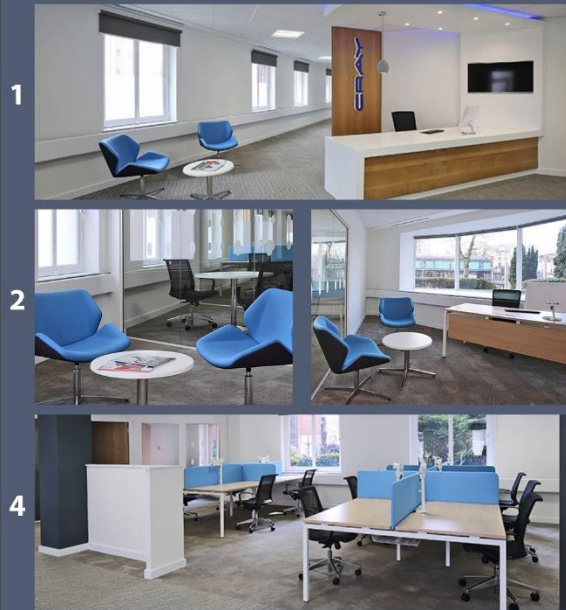
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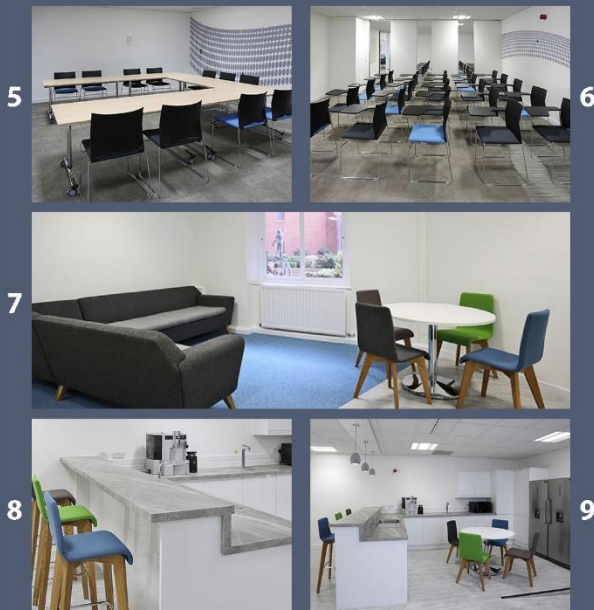
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SMS Environmental
By OEG Interiors

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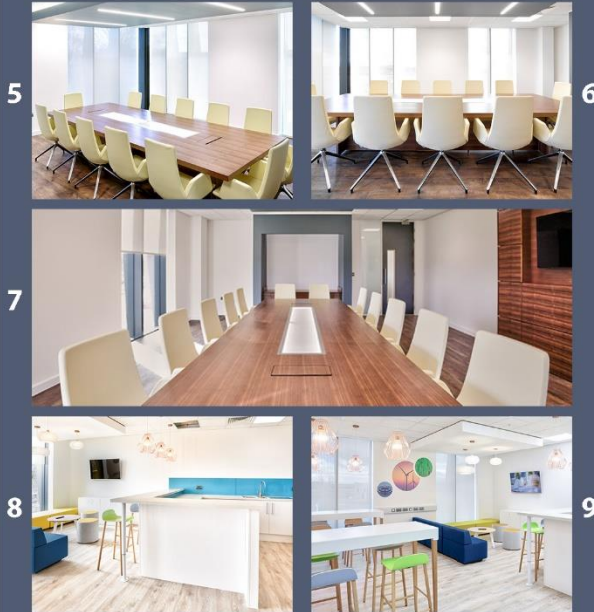
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MULTIVAC
By OEG Interiors

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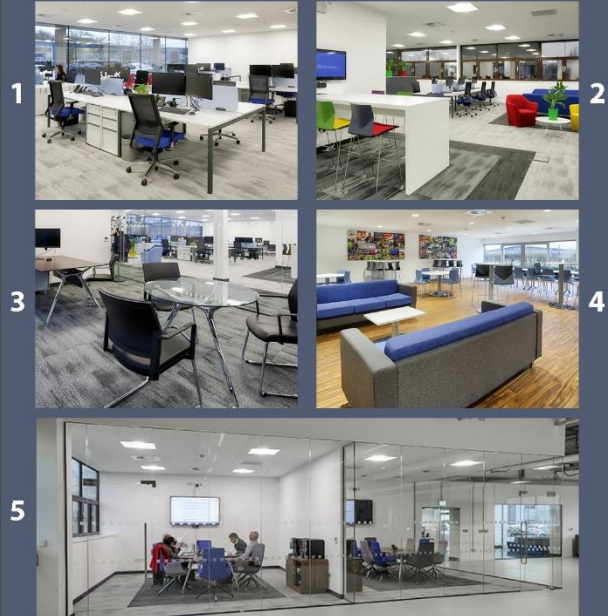
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Various High-Tech Companies

Uber - Perth
By Geyer

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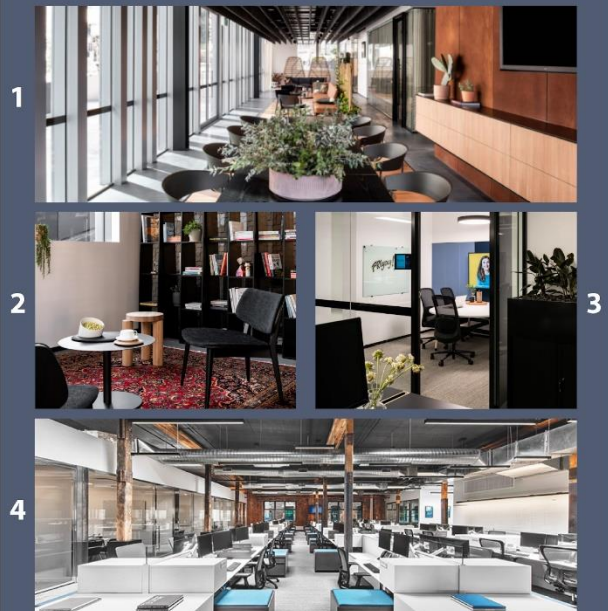
Uber - Perth
By Geyer

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Dropbox
From GQ

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Twitter
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Zebra Technologies - Milan
By Tétris

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Autodesk
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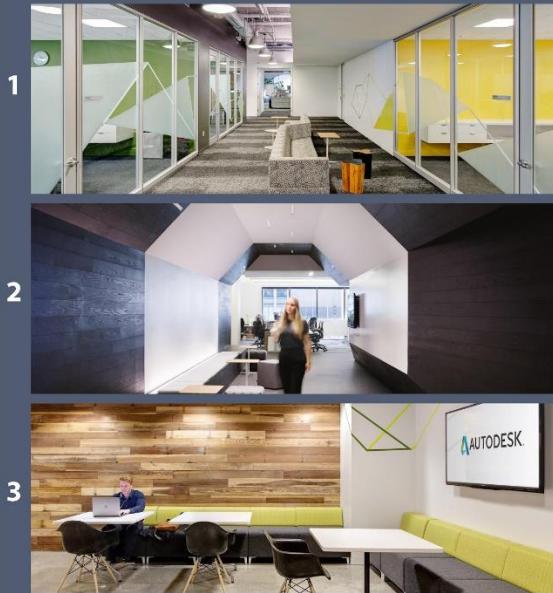
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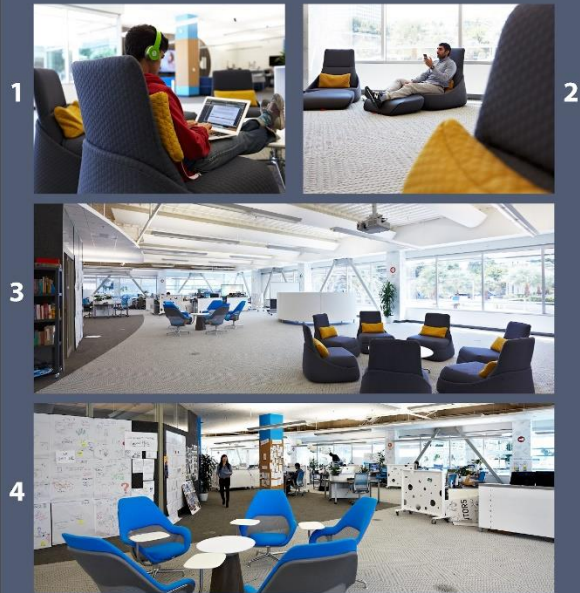
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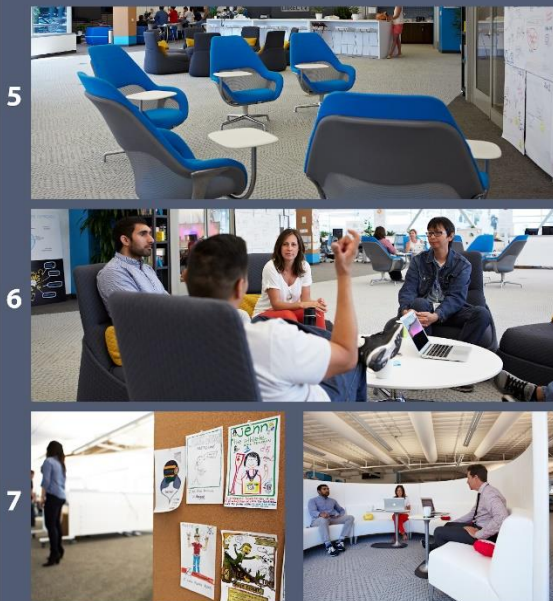
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Microsoft London Accelerator
By Gensler

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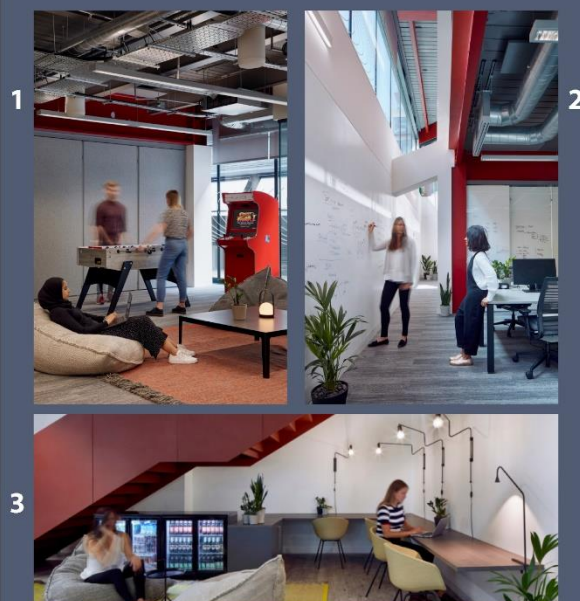
Microsoft London Accelerator
By Gensler

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Microsoft London Accelerator
By Gensler

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Microsoft London Accelerator
By Gensler

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Huawei Moscow
By ABD Architects

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Huawei Moscow
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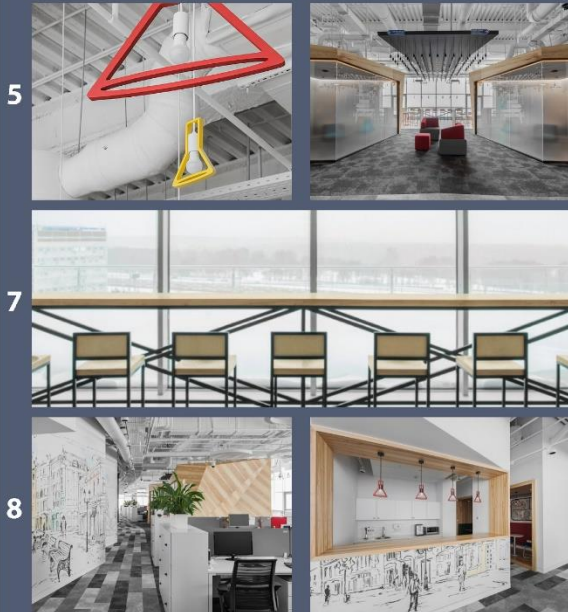
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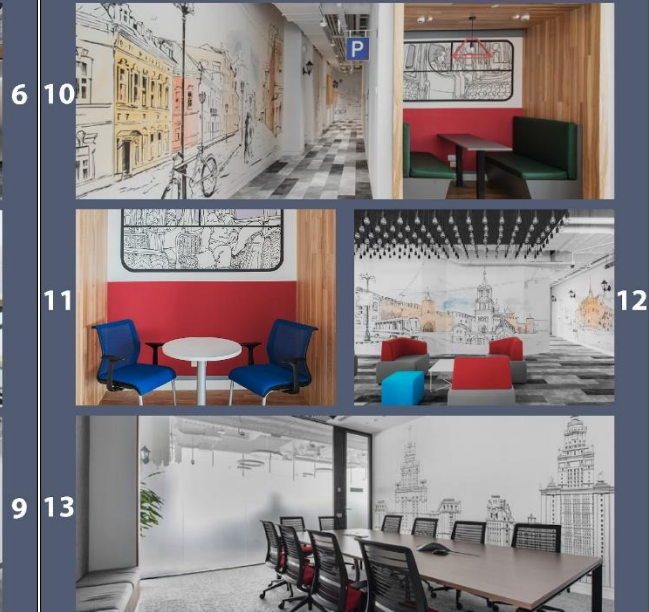
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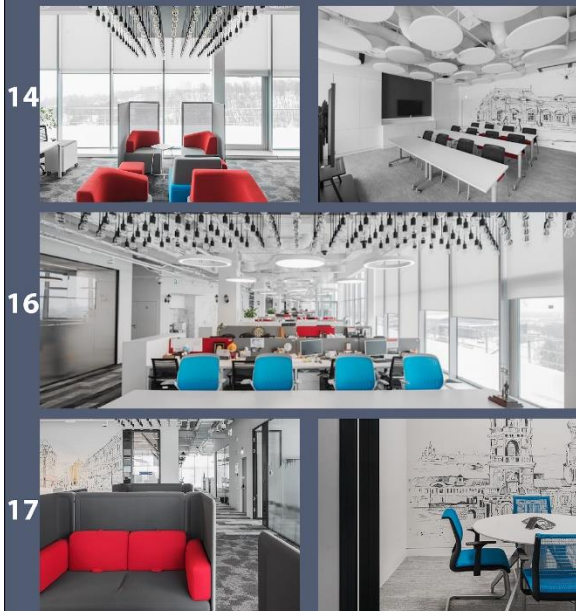
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Google - NYC
By Interior Architects

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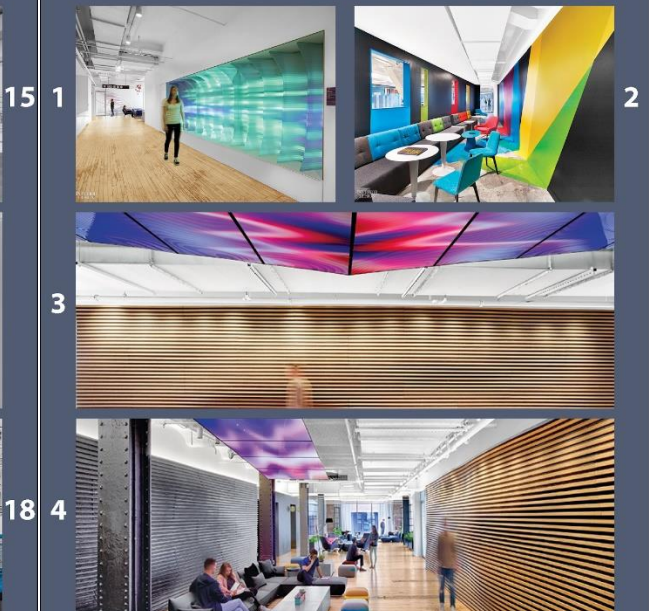
Designs by *Coalesse*

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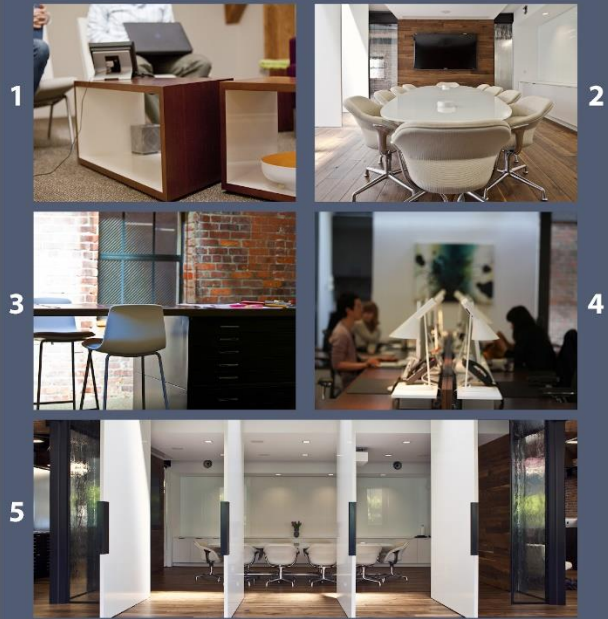
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Tolleson
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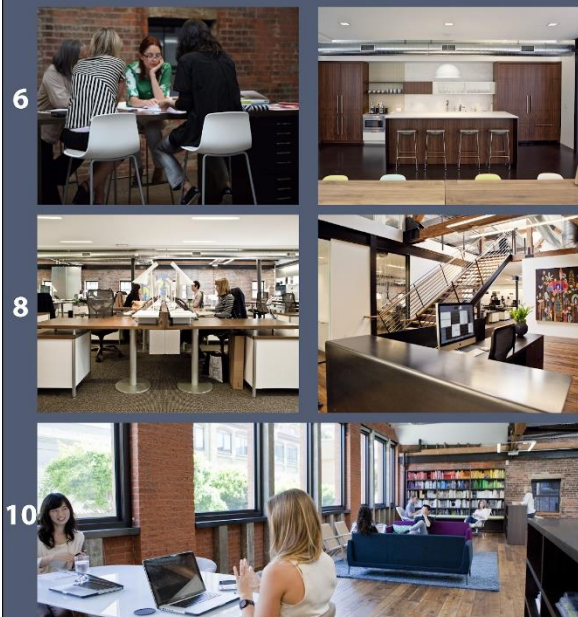
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Quicken Loans
By Coalesse

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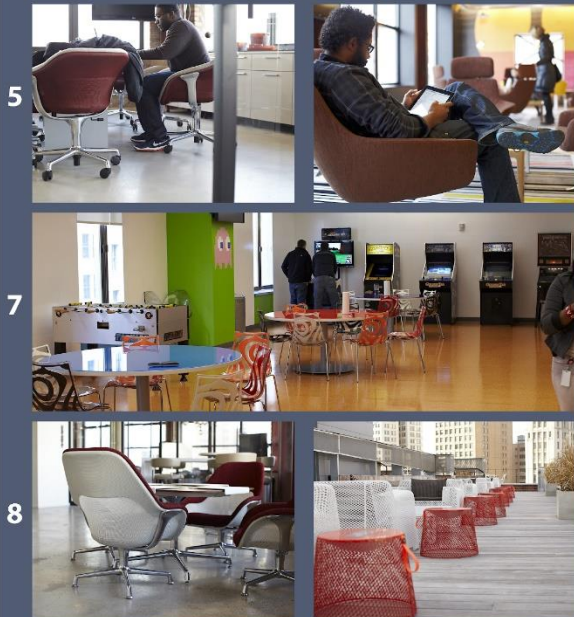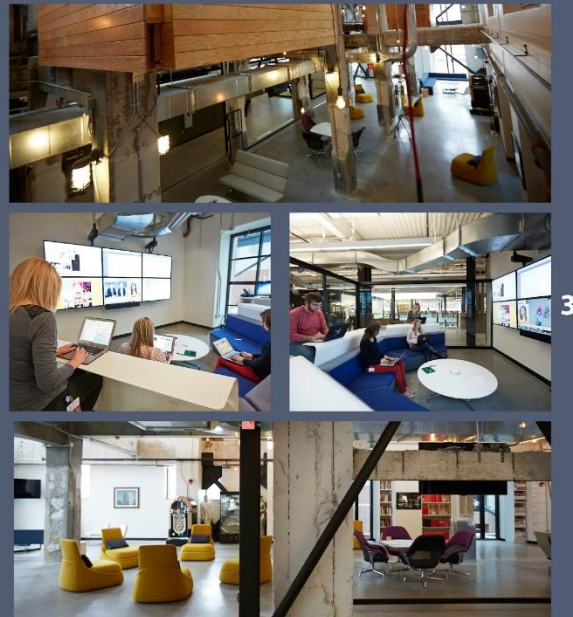
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Quicken Loans
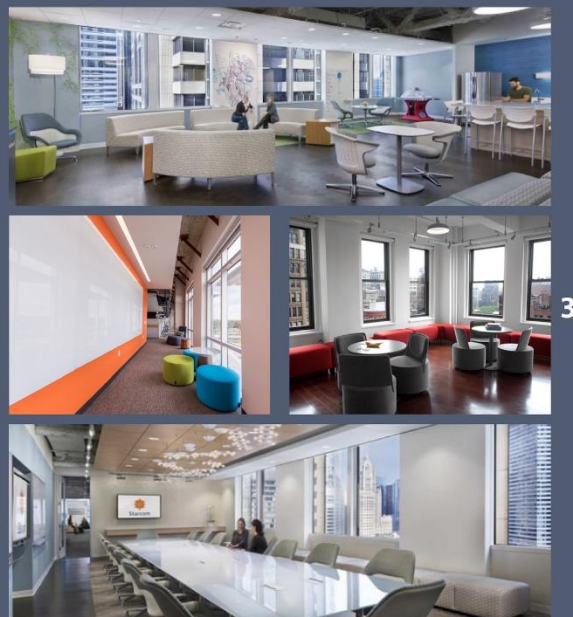*By Coalesse*

Campbell Ewald
By Coalesse

Campbell Ewald
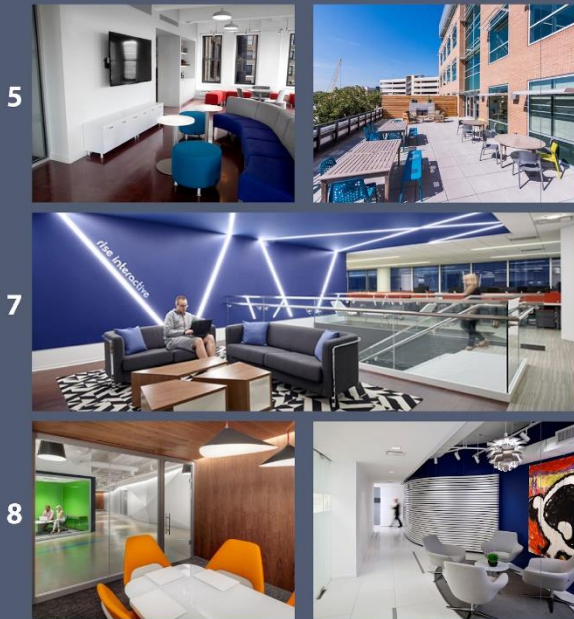*By Coalesse*

Various Office Spaces
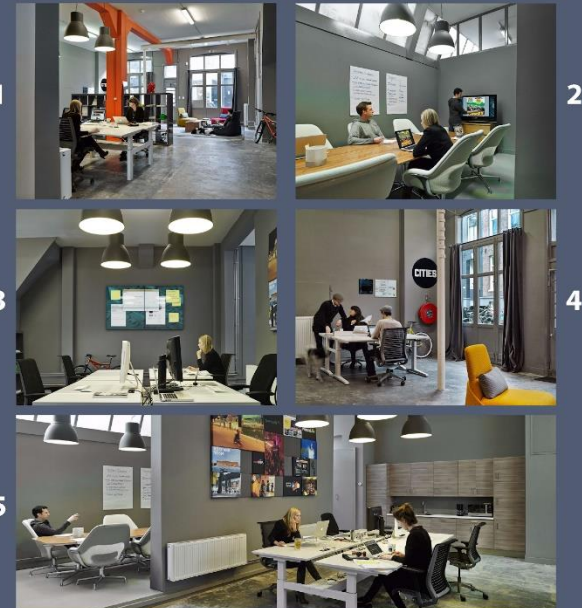*By Coalesse*

WORK WITH PURPOSE
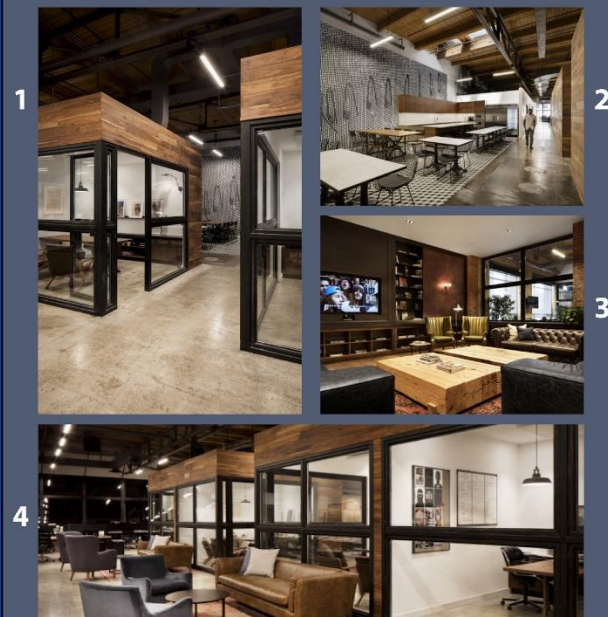
Various Office Spaces
By Coalesse

Scape
By Coalesse

Designs From
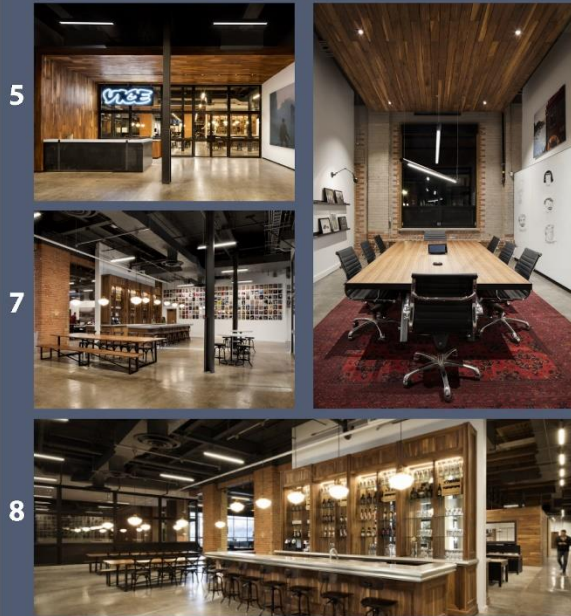*Office Snapshots*

VICE Media
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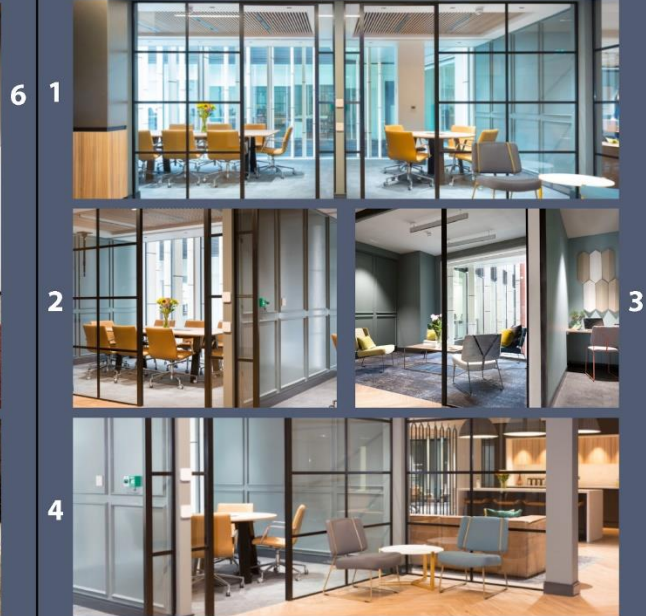
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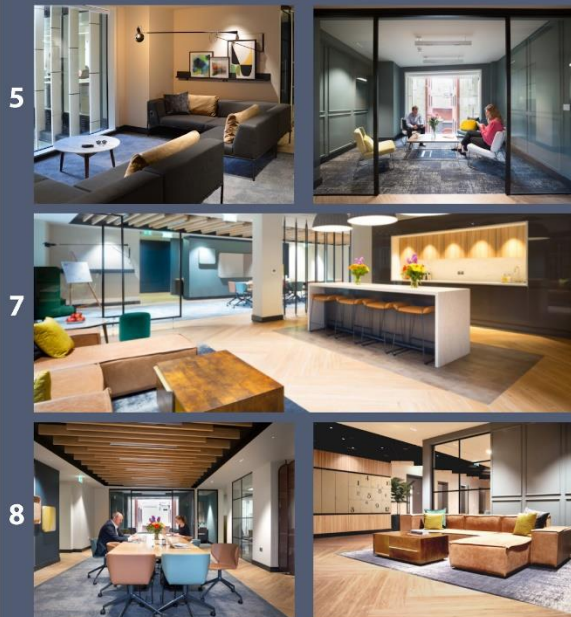

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Landmark Co-Working
By Design Command

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Landmark Co-Working
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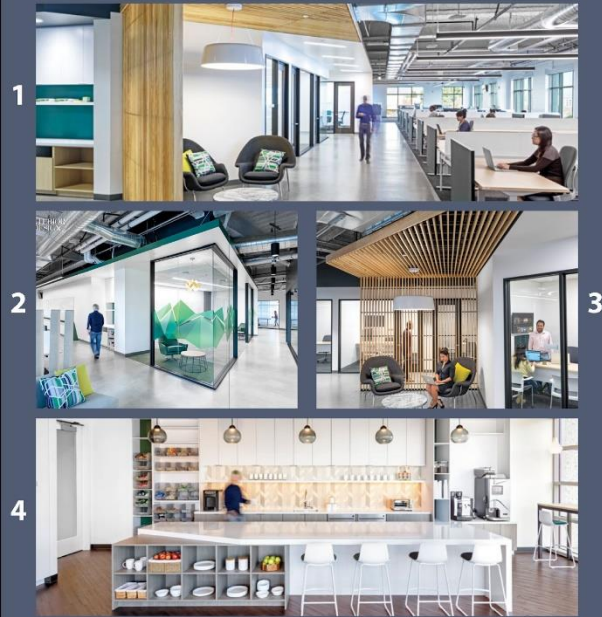

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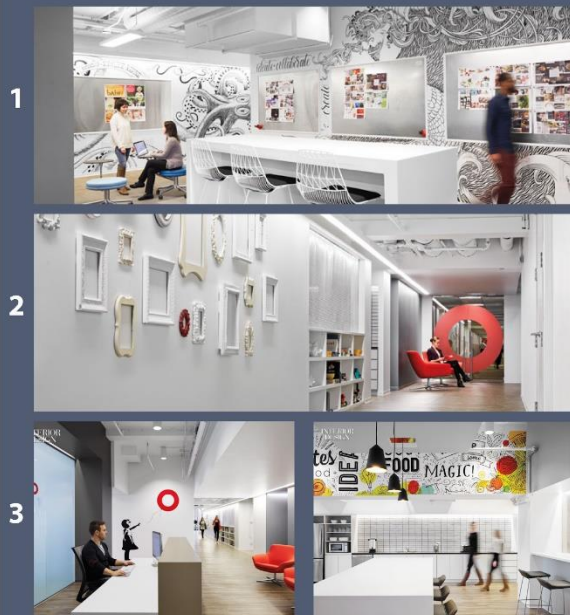# CitNOW
By Amos Beech

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Designs From
Interior Design

Comcast
By Design Blitz

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Equator Design
By Eastlake Studio

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Optimedia
By Nefa Architects
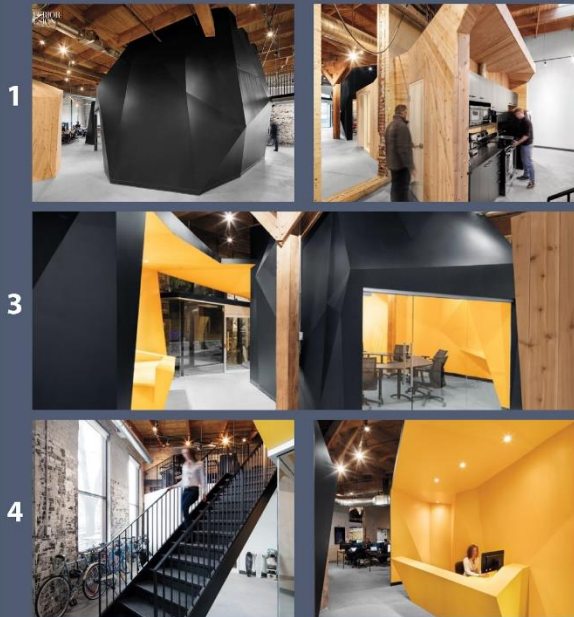

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PixMob
By: Jean de Lessard Designers Créatifs

WELD
By: Shelden Architecture

Inertia Engineering
By Studio 15B

Argo Group
By TPG Architecture
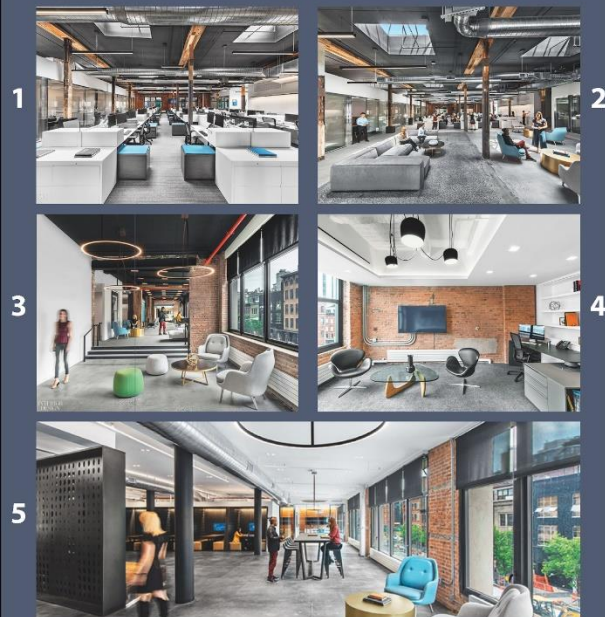
Designs From *Indesignlive*

Silicon Straits
From Indesignlive

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Campfire Collaborative Spaces
From Indesignlive
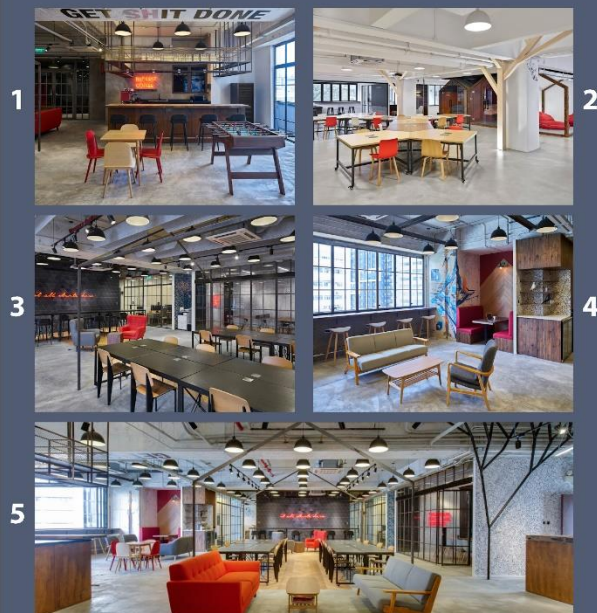
- 59 -

Campari Canada
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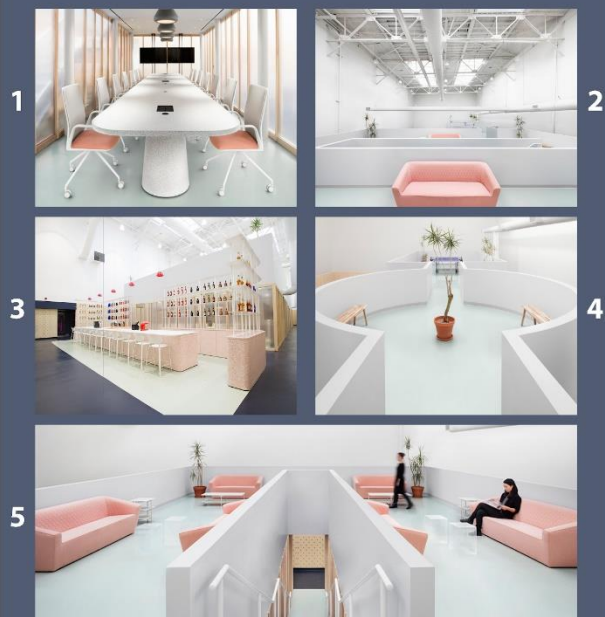
- 60 -

Designs From
Innovative Office Solutions (IOS) Inc.

Private Office Solutions
By Innovative Office Solutions (IOS) Inc.

1

2

3

4

- 62 -

Private Office Solutions
By Innovative Office Solutions (IOS) Inc.

5

6

7

8

9

- 63 -

"Learning" Space Solutions
By Innovative Office Solutions (IOS) Inc.

1

2

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4

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- 64 -

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"Learning" Space Solutions
By Innovative Office Solutions (IOS) Inc.

6

7

8

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10

Lobby & Reception Solutions
By Innovative Office Solutions (IOS) Inc.

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Lobby & Reception Solutions
By Innovative Office Solutions (IOS) Inc.

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Cafe & Dining Space Solutions
By Innovative Office Solutions (IOS) Inc.

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Cafe & Dining Space Solutions
By Innovative Office Solutions (IOS) Inc.

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Meeting & Huddle Space Solutions
By Innovative Office Solutions (IOS) Inc.

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Meeting & Huddle Space Solutions
By Innovative Office Solutions (IOS) Inc.

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6

Meeting & Huddle Space Solutions
By Innovative Office Solutions (IOS) Inc.

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148

Meeting & Huddle Space Solutions
By Innovative Office Solutions (IOS) Inc.

- 73 -

Collaborative Space Solutions
By Innovative Office Solutions (IOS) Inc.
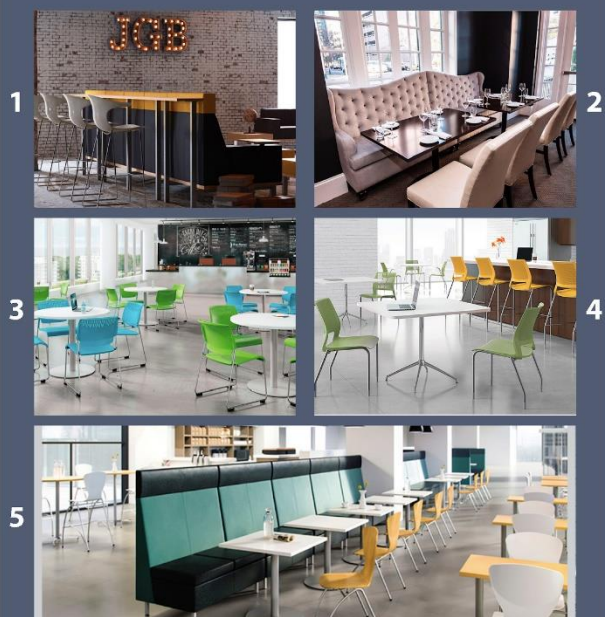

- 74 -

Collaborative Space Solutions
By Innovative Office Solutions (IOS) Inc.

- 75 -

Collaborative Space Solutions
By Innovative Office Solutions (IOS) Inc.

- 76 -

Collaborative Space Solutions
By Innovative Office Solutions (IOS) Inc.

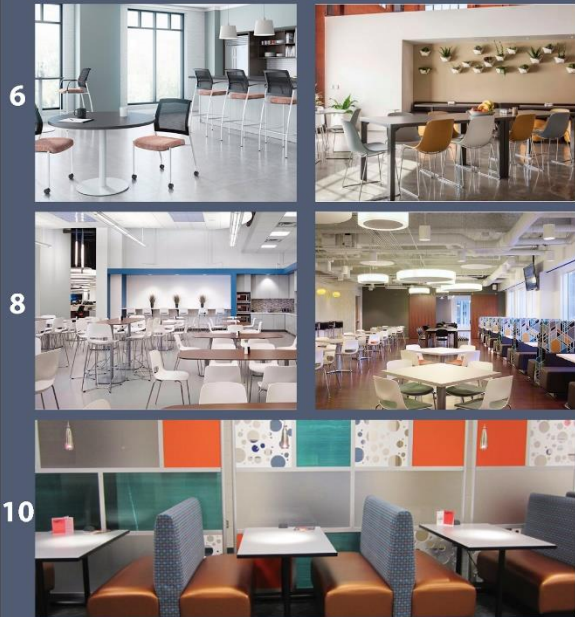
10

11

12

- 77 -

Resources

The images used in this catalog were obtained from the following locations. This catalog was created by college level students as a resource to advance project completion.

D/Dock
OVG Amsterdam: https://www.archiscene.net/interior-design/ovg-amsterdam-ddock/

OEG Interiors
Hazlewoods (The HUB): https://www.oeginteriors.co.uk/case-studies/hazlewoods-the-hub-staverton/

COWI: https://www.oeginteriors.co.uk/case-studies/cowi-glasgow/

Avon Group: https://www.oeginteriors.co.uk/case-studies/avon-group-cannock/

Cray: https://www.oeginteriors.co.uk/case-studies/cray-bristol/

SMS Environmental: https://www.oeginteriors.co.uk/case-studies/sms-environmental-didcot/

MULTIVAC: https://www.oeginteriors.co.uk/case-studies/multivac-swindon/

Various High-Tech Companies
Uber - Perth: https://officesnapshots.com/2018/10/22/uber-offices-perth/

Dropbox, Twitter, Autodesk,: https://www.gq.com/story/san-francisco-interior-designer-lauren-geremia-tech-startups?verso=true

Zebra Technologies - Milan: https://officesnapshots.com/2018/10/10/zebra-technologies-offices-milan/

DirecTV DLab: https://www.coalesse.com/us/case-studies/directv-dlab/

Microsoft London Accelerator: https://officesnapshots.com/2018/10/01/microsoft-accelerator-hub-offices-london/

Huawei Moscow: https://officesnapshots.com/2018/08/16/huawei-offices-moscow/

Google - NYC: https://www.interiordesign.net/projects/13738-google-s-nyc-office-by-interior-architects-has-eye-catching-features-at-every-turn/

Designs by Coalesse
Tolleson: https://www.coalesse.com/us/case-studies/tolleson/

Quicken Loans: https://www.coalesse.com/us/case-studies/quicken-loans/

Campbell Ewald: https://www.coalesse.com/us/case-studies/campbell-ewald/

Various Office Spaces: https://www.coalesse.com/blog/best-modern-offices-of-2015/

Scape: https://www.coalesse.com/us/case-studies/scape/

Designs from Office Snapshots
VICE Media: https://officesnapshots.com/2016/08/01/vice-offices-toronto/?utm_source=Office+Snapshots+Weekly+Newsletter&utm_campaign=e4e3868e2b-Newsletter_8_8_168_6_2016&utm_medium=email&utm_term=0_82997c3ce9-e4e3868e2b-91058629

Landmark Co-Working: https://officesnapshots.com/2018/10/24/landmark-space-serviced-offices-london/

CitNOW: https://officesnapshots.com/2018/04/18/citnow-offices-stirling/

Designs from Interior Design
Comcast, Equator Design, Optimedia, PixMob, WELD, Inertia Engineering: https://www.interiordesign.net/slideshows/detail/9117-green-with-envy/10/

Argo Group: https://www.interiordesign.net/projects/15558-at-insurance-company-argo-group-s-new-york-office-tpg-proves-good-design-is-the-best-policy/

Designs From Indesignlive
Silicon Straits: https://www.indesignlive.hk/articles/projects/co-working-a-case-study

Campfire Collaborative Spaces: https://www.indesignlive.hk/articles/projects/campfire-co-working-spaces-arent-everyone

Campari Canada: https://www.indesignlive.hk/articles/projects/office-stuff-dreams

Designs From Innovative Office Solutions (IOS) Inc.
Private Office Solutions: https://ios-inc.com/inspiration/private-office/

"Learning" Space Solutions: https://ios-inc.com/inspiration/learning/

Lobby & Reception Solutions: https://ios-inc.com/inspiration/lobby-reception/

Cafe & Dining Space Solutions: https://ios-inc.com/inspiration/cafe-dining/

Meeting & Huddle Space Solutions: https://ios-inc.com/inspiration/meeting-huddle/

Collaborative Space Solutions: https://ios-inc.com/inspiration/collaborative-open-spaces/

Appendix Z: "Sticky Dot" Protocol

The following protocol will be used to gauge opinion of the "Catalog of Inspiring Designs" created by the H3 Design team. This feedback will be used to condense the catalog, and gain a sense of what SerenDPT deems to be an inspiring design. The dots will be used to select the designs that are considered appealing to the occupants of the H3 complex. The polling population will include both the employees of SerenDPT's startup companies housed within H3 and the SerenDPT administration. The protocol will be completed as follows.

1. The catalog will be printed and hung along the walls of the H3 Startup Factory.
2. The participants in the survey will be given a set of "sticky dot" stickers to use as their votes for certain designs. The following quantities of sticky dots will be assigned to each participant at the following weighting:

   - 4 Black (Special Dislike: -3)
   - 6 Hot Pink (Extreme Dislike: -2)
   - 10 Red (Dislike: -1)
   - 5 Brown (Neutral: 0)
   - 10 Green (Like: +1)
   - 6 Blue (Extreme Like: +2)
   - 4 White (Special Like: +3)

   Administrative members will receive the following special stickers, based on their position within the company:

   - 3 Administrative Choice (Bold Yellow: +4)
   - 3 Administrative Decline (Light Pink: -4)

   Any photos that receive a score of less than ZERO will be immediately discarded and removed from the final product delivered to SerenDPT. Any photos that score a ZERO will be immediately removed if they have not received any votes. Photos scoring a ZERO that HAVE RECEIVED votes will be kept and processed into the photos that are kept on the following conditions:

   - The final score is zero with an Administrative Choice
   - The final score is zero and only includes Brown (Neutral) votes
   - The final score is zero and has more positive votes than negative

Photos with a score GREATER THAN zero will be used in the field for the final submission based on the following criteria.

The goal is to take the number of images from **283** to **100** (35%). Based on these criteria, if more than 35% of images have scores GREATER THAN zero, then the top **100** will be selected based on average score. If less than 35% of the images have a score greater than zero, then those images with a score of zero AND an ADMINISTRATIVE CHOICE vote will be included in the top 100. If after these the top 100 are not filled, then those with a total score of zero AND more POSITIVE votes than negative, will be included in the top 100. If after these the top 100 is not filled, then those with a score of zero ONLY BY NEUTRAL VOTES (containing only brown stickers) will be included in the top 100. If the top 100 is still not filled, then no more images will

be added to a condensed catalog. By no means should images with no votes or negative scores be selected for the final inspiring catalog. In the event such a result should occur, it should be immediately noted and documented for the future design team to consider.

Any data that could be classified as being an "anomaly" should also be noted. This includes:
- Images with a number of votes well above the average number
- Images with single votes
- Images in designs with single votes (i.e. only one image on page 26 has a single vote)
- Images with a disproportionately high number of negative votes
- Inconsistent counts (more/less stickers given than dispersed)

Based on these results, it is the goal of the H3 Design team to present to SerenDPT a set of inspiring images that will help them with their interior design choices going forward.

Appendix AA: Design Competition Framework and Example Cover

Framework:

H3 Startup Factory Interior Design Competition

Presented By:

Serenissima Development and Preservation through Technology

INTRODUCTION
Thank you for your interest in H3 Startup Factory Interior Design Competition. The H3 Startup Factory, created by SerenDPT, is located in the former Convent of Saint Cosmas and Damian. The ex-church, the headquarters of the Startup Factory, was renovated from 2005-2008 under the control of what was then the Herion Accelerator. The renovations, while essential and necessary for business, could use some improvements and a refreshing and innovative interior design is sought for the space. Through this contest, SerenDPT hopes to obtain a set of designs, themes, and styles which they may be able to implement through ongoing improvements to the interior spaces of the H3 Startup Factory and Complex as a whole.

HISTORY

The site of the project opened originally as a convent under Benedictine order. After being closed by Napoleon in 1806, the convent became a warehouse, military barracks, and eventually a hospice for cholera victims. Following those uses, the complex became a textile factory in 1897, under the name Herion, and remained as such until the1970s. The building, renovated by the city of Venice and EU in 2005, was acquired by the Herion Incubator and Accelerator in 2008. As of 2018, the building has been repurposed as a "startup factory" where startup companies are created from projects developed and advanced by SerenDPT, the newest occupant of the former convent complex.

For more information please view: *(insert link to history page of H3 Complex website)*

SPONSOR
The sponsor of this competition, SerenDPT, is an organization founded and located in Venice. SerenDPT is heavily involved in bringing technological solutions to Venice, and note that they as a company are inventors, job creators, social innovators, researchers, and coders. Through these solutions, SerenDPT is looking to create 100 jobs over the next 5 years within 12 startup companies.

More information on the sponsor can be found at: https://serendpt.net

THE SPACE
Located on Giudecca, the former Church and Convent of Saints Cosmas and Damian, is under lease by SerenDPT until 2027, for use as the H3 Startup Factory and SerenDPT headquarters. The complex includes the ex-church (The Startup Factory and Headquarters), the Deposito, and a courtyard space. For this competition, the area of focus is the 648m^2 ex-church and the courtyard area between the ex-church and the Deposito.

For more information about the space please refer to (page added by sponsor) or (insert link to website or a repository of the information included on any additional page).

THE CONTEST
The contest seeks to gather designs for the redesign of the interior spaces of the H3 Startup Factory. Elements of circular economy and use of sustainable, natural materials, natural light and a thematically Venetian design will be focal points for SerenDPT and the team of judges. Judges will also be looking for designs that foster an inspiring atmosphere, and promote collaboration and innovation. Additionally, sound quality has been a large issue within many of these spaces, and designs that seek to improve these problems are also sought. The best designs will create a space that creates such an atmosphere and embodies these attributes, while being budget and time conscious.

RULES
- Entrants must be 18 years of age or older.
- This contest is limited to one entry per team.
- Entries can be from any size team and from any discipline or profession.
- Individuals are permitted to be on ONE team only.
- Designs must include contributions to the following spaces:
  - Private Office
  - Open Office (Startup Space)
  - Public/Open Spaces
  - The Main Hall (Apse and entry area)

- o Bell Tower Rooms
- o Courtyard
- Final submissions must include:
  - o A PDF containing:
    - A list of all team members
    - A comprehensive textual overview of the design
    - Images, renderings, and graphics of the design*
    - Cost estimate for implementation
    - Time estimate for implementation
  - o All renderings/sketches/drawings relevant to the design submitted (PROOF)
- Final Submissions must be electronically to/at (email or web location) submitted no later than 23:59 (DATE TBA)

*Note: Any PHYSICAL sketches/renderings/etc. must be submitted electronically if no arrangements have been made between the submitting team and the sponsor/judging panel. Address to send physical items will be arranged as necessary.

AWARDS AND PRIZES
Grand Prize
The grand prize winner, selected by the judging panel, will win a cash prize of 1000 Euro and a chance to work with the SerenDPT team to bring their design to life within the H3 Startup Factory. Additionally, a plaque commemorating the award will be commissioned.

1st Runner Up
The first runner up, selected by the judging panel, will win a cash prize of 500 Euro and a chance to work with the SerenDPT team and Grand Prize Winner to bring aspects of their design to life within the H3 Startup Factory. Additionally, a plaque commemorating the award will be commissioned.

2nd Runner Up
The second runner up, selected by the judging panel, will win a cash prize of 200 Euro and a plaque commemorating the award.

All Other Entries
All other entries will receive a certificate of appreciation from SerenDPT for their contributions to the contest and the design of the H3 Startup Factory.

TERMS AND CONDITIONS (To be improved upon by a legal team)
The above contest is run by SerenDPT. All entries must be submitted by entrants aged 18. Submission of a design to this contest is a binding agreement with SerenDPT that you:
A.   Agree to any and all press and publicity surrounding the event shall you win
B.   Agree to meet with SerenDPT and it's constituents should you win
C.   Agree the above "RULES" section of the contest description

In addition to agreeing to the above conditions, you also agree that any and all elements of the design you submit, will become the property of SerenDPT and its affiliates. Submission of a design indicates forfeiture of all rights to royalties, and payment if elements of said design is to be implemented in the design of, or used in showcase of the final design of the H3 Startup Factory.

Concorso di
H3 Startup Factory
Interior Design

Presentato da:

Serenissima Development and Preservation through Technology

Appendix AB: R-Lab Project Description

SerenDPT would like to engage a <u>BCC</u> team to **develop a plan** and a **budget** for the best use of the <u>cafeteria space</u>, including the <u>outdoor courtyard</u>, so it can become a **Restaurant Laboratory** (R-Lab) where innovative **restaurant formats** can be tested and refined.
We would be happy to host a **thesis** in Venice in the **Spring of 2019** and/or to issue a **Venice Prize** to a BCC team that could be selected with a **contest**. We would be happy to discuss any form of collaboration.

The BCC project would include the design of the **kitchen area**, which needs to be operated without gas due to local restrictions, and needs to be equipped with all of the appropriate cooking and cleaning appliances, refrigeration and ventilation systems.
The team will be assisted by a local architect (Alberto Gallo) to ensure conformity with local laws and regulations. **Future BCC teams** will be able to come to Venice to develop and test innovative menus in this kitchen.

Moreover, the BCC team will design the **eating area** so that it can serve as a testbed for different **restaurant layouts**, including table sizes and shapes, chairs, table settings, lighting and other ambient features and decor. The space needs to be **flexibly reconfigured** every 6-12 months to allow different tests to take place.
All the while, the restaurant will operate as a **non-profit experimental eatery** open to both workers of the H3 complex as well as to the general public.

After 6 months of experimentation, the restaurant format, pre-tested at H3, will be transferred to a **pop-up restaurant** in the center of Venice, where its true market potential will be verified with real-world customers.
After 6-12 months of operation in the Venice market, if the format has proven to be commercially viable, the restaurant will be incorporated as an **independent company** (startup) and will move to a final location in Venice or elsewhere.

Meanwhile, another experimental format will have been tested in H3 and will re-open as a pop-up restaurant at the same central location to have a go as a successful eatery, while the previous one goes off into the real world as an independent venture. And **the cycle will continue**, with yet another new experimental format replacing the prior one at the R-Lab in H3 to start the process all over again.

The R-Lab designed by the first team of BCC students will be available to future BCC students to use as a testbed of their restaurant ideas, so SerenDPT hopes that this first project may lead to a **continuing relationship** with the Basque Culinary Center.