A proposal for

# **City of Toronto**

# NEIGHBORHOOD COWORKING (NECOWO) SPACE

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#### Introduction

Not many people would have thought that the whole world, despite its developments and progresses in medical sciences, would be so overwhelmed by the insane growth of a virus that would cause a major disruption in the management system of countries and complications of their businesses.

Governments, organizations, and health-oriented institutions encourage people to stay home and avoid crowded environments and work remotely from their homes; in some cases, they have even forced them to do so, but can this strategy keep businesses run at home in the long run? Are all sectors able to communicate with their employees? Is there adequate infrastructure everywhere on this planet? Do all businesses have the possibility of remote working and living at home? And hundreds of similar questions that we must analyze to find a suitable solution for these issues.

The spread of Coronavirus and changes in all aspects of life, work, social, economic and livelihood relations, international relations, etc., on the one hand, and the continuation of its effects in the future on the other hand, the need for change in urban spaces, work and life, seems to be unavoidable. The manner of economic and business interactions and, as a result of that, the spaces they need must be adapted to the new conditions and requirements as soon as possible.

This proposal focuses on coworking spaces, remote working, etc., and reviews its advantages and disadvantages for optimization of this space and defines coworking spaces in the scale of neighborhood.

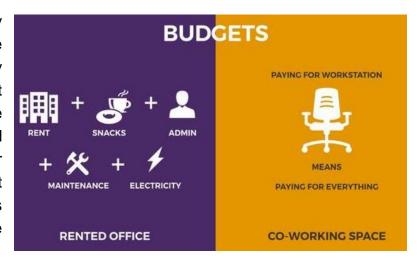
# **Coworking Space**

In recent years, coworking spaces have become popular among business activists with flourishing of modern the concepts employment. A coworking space community of people who share values while doing independent activities, and of course people who are eager to collaborate with each other which can happen by working with people who work together in a shared environment. It is also a good solution for isolation problems of many wage earners who have experienced





working from home; they can also escape from the distractions they may experience while working at Nowadays, home. some large companies and business accelerators or research and development centers of large companies are also located in these spaces.



Coworking spaces are generally set up in large buildings so that they can be used to provide a variety of services to users. Generally, the company that rents out these spaces, will buy or rent the large office space (it may be one or two floors in an office building) and then turns it into smaller office and/or public spaces. Then, these offices are equipped with necessary facilities and equipment, and are rented out to individuals or groups who wish to use these facilities in the form of one or more small desks or private offices.

# **Coworking Space Users**

The main users of these centers are professional freelancers or professional wage earners, independent contractors, remote workers, founders of small and medium-sized companies and start-ups, who pursue activities in the community in a spirit of cooperation.

Freelancers, as the most important actors in the business world, generally carry out projects for various employers individually and under specific contracts. Such people do not generally have much connection with the client and also do not need to be in a fixed office due to their individual activity and lack of need for constant physical presence in the workplace. People who are self-employed or work remotely generally do not need, and in some cases can not afford, to have independent offices, while working in a coworking space has benefits such as





working with colleagues, networking, increasing customer engagement channels, and even improving morale.

## **Remote Working**

ITAC¹ defines remote working as "a form of teleworking in which individuals are flexible in terms of time (part-time or full-time) and location (home, remote centers, company offices or on a mobile basis) to perform their duties and respond to assigned tasks."



With the development of communication facilities such as the internet and cyberspace, the subject of remote working has gradually developed; as large companies are using the services of freelancers and employees who are not necessarily based at headquarteres and sometimes they use the expertise from overseas due to cheap labor and existence of specialized labor force, etc. Thus, by reducing direct and overhead costs, these companies expanded their activities and employed a large number of remote workers who work in their homes. In many parts of the world, home-based businesses are now an important part of the country's job market. For instance, home-based jobs account for 20 percent of all jobs in the United States.

#### Covid 19 Crisis: Rapid & Major Changes

Based on the researches conducted as of the date of this proposal, the first case of Covid 19 was diagnosed in China in December 2019 and was then spread around the world. The rapid spread of the disease and its pathogenicity leading to death, prompted the World Health Organization, in collaboration with other countries of the world, to establish and comply with effective health codes and protocols to halt the growing trend of this invasive virus.

The pandemic has actually had a significant impact on life and work conditions of people around the world, and in many businesses, it has led to a complete shutdown or reduction in income. The latest figures show that just over a quarter of the world's 7.8 billion population now live at home and have somehow quarantined themselves at home. The economic downturn, declining incomes and livelihood concerns have

<sup>&</sup>lt;sup>1</sup> ITAC: International Telework Association and Council



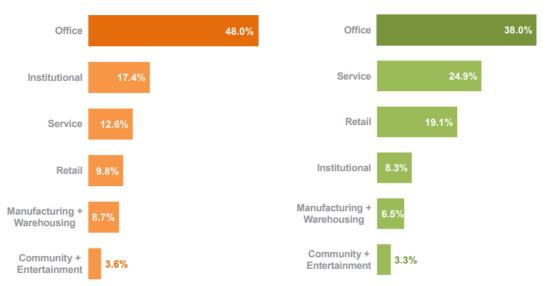
become a major concern for many citizens and private companies, and on a larger scale, for governments and community leaders. Due to lockdowns, the traffic in cities has decreased and as a result the environment of cities has become healthier and the air has become cleaner. In many parts of the world, borders, airports, hotels and some businesses have been closed and school and university classrooms have been cancelled. These cases have caused an unprecedented recession in the world, but what some are thinking about is the day after the end of Covid 19 pandemic.

# **Home Quarantine & Remote Working**

Coronavirus pandemic has changed the human resources management as well as the structure of various businesses. "Stay at home" was a recommendation to stay healthy and to break the spread and chain reaction of this virus, which led to many changes for various businesses and occupations.



In three main groups of the economy (industry, agriculture and services), the service sector can make the most of remote working.



City share of employment (left) & establishment (right) by category in 2019 in Toronto

If only a few months ago, organizations and companies were asked about remote working, perhaps a few of them had experienced it, but today it is safe to say that most

<sup>&</sup>lt;sup>2</sup> Stay at Home, Stay Safe.



businesses have gained valuable experience from remote working. Experience that was gained in very difficult conditions, but will undeniably lead to new methods of business in the future.

# **Lifestyle Changes**

# Family, Social, Economic, and Business Relations in the Long Term after Quarantine

In today's world, given the extent of social relationships, the ability to make a strong connection is very useful. Communication is considered as one of the main foundations for intellectual growth and personality development. Undoubtedly, when the current Coronavirus crisis ends, work methods and use of new technologies in the world will no longer be the same. Returning to work and social relations will resume over time, but with structural differences comparing to the past; there will inevitably be changes in business spaces, public transportation systems, social distancing and boundaries, etc.

Economic dynamism was closely related to people's social relations and their financial income before the Coronavirus outbreak; therefore, economics has never been an individual issue and the economic prosperity of any country is possible only with the cooperation and efforts of all people. A survey of the views of thousands of economic activists and market analysts suggests that there are four perspectives on the post-Coronavirus economy in different countries:

- 1. The Descent into barbarism (early human economics)
- 2. Strong government capitalism
- 3. Socialism of extremist states
- 4. Forming communities on the basis of mutual economic assistance

Each of these economic attitudes has advantages and disadvantages, that is. As much as they may be considered positive or negative at first glance, they also have constructive or destructive effects.

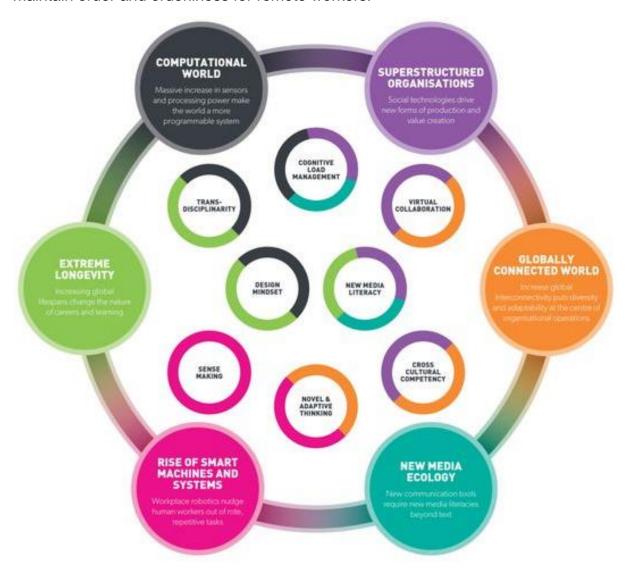
#### **Remote Working & the Future**

Experts acknowledge the experience of remote working during Coronavirus pandemic as the beginning of a change in human resources management as well as the business structure. They believe that many companies and organizations have experienced



remote working in critical situations; however, they can use it as an option under normal circumstances.

Therefore, having accepted the remote working culture, the next step is to prepare the workforce for this period, provide the necessary software and to create a platform and access to information about the company and the organization, and of course to maintain order and orderliness for remote workers.



skills needed in the future workplace



# **Pros & Cons of Remote Working**

Clearly, increase in individual productivity, increases the productivity of companies and organizations apart from reducing costs by saving overhead costs. Remote working has many advantages for the urban environment; reducing congestion and traffic will provide healthier environment in cities resulting in reduction of greenhouse gas emissions and creating sustainable cities. Remote workers are also kept away from the hustle and bustle of city center and can save time. However, lack of full coordination of the members of an organization, decrease in group effort of colleagues due to the lack of meetings and participation in group programs, and absence of benefits achieved from the positive impact of people present in the workplace, are some of the disadvantages of remote working.

According to new research, the benefits of remote working for individuals and organizations outweighs its problems. More than 60% of people who were working remotely during the Coronavirus quarantine, tend to continue remote working. On the other hand, many businesses also want to extend remote working as it has had economic benefits due to reductions in overhead costs of employee remote working.

#### **Remote Working Problems at Home**

Lack of separation of living space from work space and interference of these spaces (home and workplace), limited housing space for many people, lack of proper work equipment, continued presence home and consecutive encounters with family members, are some of remote working problems that will exacerbate in the long run and may also lead to adverse psychological effects.



In this regard, a similar study in 2007 showed that many remote workers are concerned about isolation and the loss of human interaction, or in another study, one-third of private and public sector employees said they did not want to work at home; in other words, the possible solution is remote working but not at home; therefore, the need for coworking spaces as a bridge between working in concentrated work spaces and work space at home should be considered.

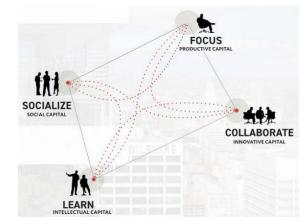


# **Future Workspace Design**

The more people work remotely for longer periods of time, newer habits and ways of working will be formed, and consequently different ways of virtual collaboration will be discovered. We must accept these changes and let them flourish. Therefore, it is expected that the coronavirus pandemic has already caused many changes in world, and when this crisis ends, there will be fundamental changes in the work methods and

design of the workplaces.

In designing the future work environment, the basic principles of workplace design will continue to be used, and therefore a framework for understanding the work from four perspectives of mental focus, cooperation, learning and socialization should be created. Can these four criteria be applied at home?



How can you focus when your children are at home? How can you participate in video conferences when your place of residence is not suitable for visual conditions? Do you really have an ergonomic workstation when you are sitting in the dining room and your laptop is put on a box on your dining table?

In fact, a well-designed workplace is still where people want to work; according to a 2020 Gensler Architectural Company survey of workplaces in the United States, without a doubt, people prefer working in offices when other options included working at home, company, shared work space and coffee shops.

In other words, we need work spaces that are able to provide the potential for remote working, hygienic requirements and regular office equipment are considered and must have the reasonable discipline and order of an office work space, while at the same time the work and rest spaces are separated.

# The Neighborhood

The neighborhood is a pillar between family and the city. Neighborhood is made up of adjacent houses in a specific geographical space, and families have similar feeling to their home when they enter their neighborhood, and find themselves in a familiar and intimate environment, such as home. In fact, a neighborhood is formed by aggregation, gathering and strong neighborly relations among a group of people.



To better understand the issue, it is necessary to mention that planning can not be done without a holistic approach, and therefore the knowledge of planning is based on the basic principles that are the same holistic principles in planning that were briefly discussed above. These principles can be summarized as follows:

- Variability: understanding the unique characteristics and needs of places, social classes, cultural, economic, gender, age, different subcultures, etc.
- 2. **Sustainability**: paying attention to planning issues in short-term, medium-term and long-term.
- Integration: proper integration of programs, goals and related activities to obtain effective and efficient totality.
- 4. **Learning and participation**: recognizing, attracting participation and interaction with individuals and stakeholders in the planning process.



# **Neighborhood Coworking Space Proposal**

Given the general approach and continuity of remote working, it seems that due to the need to separate home space and work space and benefit from the aforementioned advantages of remote working, we can propose coworking spaces that are located within the neighborhood. Doing so, not only we can benefit from reduction of traffic load, parking demand, air pollution and congestion in city centers, but we also will have working spaces with the required supplies and facilities that is only 10 to 15 minutes away from home.

These small-scale neighborhood coworking spaces should have the potential to go through building use change by interior architecture schemes and be transformed from residential, library, cultural center or educational and commercial spaces to coworking spaces. Clearly, health codes and regulations and having an efficient and safe space with appropriate interior design will be considered. (Distance between desks, separation of paths and necessary boundaries, sanitary equipment, maintenance and disinfection system as well as face-to-face and virtual meeting rooms, office equipment and support systems such as servers, high-speed internet, etc.). In fact, these workspaces are flexible and are offered based on the applicants' conditions, with

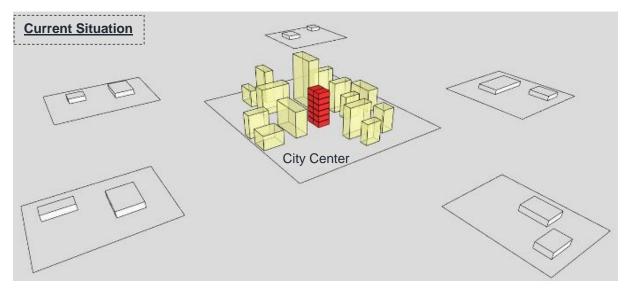


respect to dimensions and the times they want to rent them. These spaces are defined in the form of a network of workspaces with specific definitions, regulations and standards and can be presented as a specified brand throughout the city.

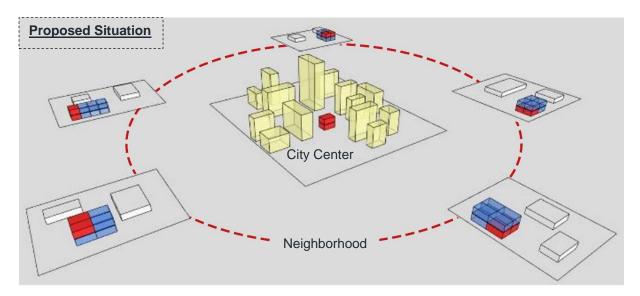
In other words, neighborhood coworking spaces are defined as work spaces that are formed in residential areas. As a result, we can save a lot of time and money by providing a suitable work environment in the neighborhoods, rather than wasting a lot of money and energy on development of transportation networks and consequently imposing financial, psychological, time and environmental costs on the city.



From another perspective, the headquarters of large companies that are often located in city centers and make their staff commute from different parts of the city, can have their branches in the neighborhoods and close to their employees' residences; as a result of which they can reduce the size of their headquarters to the minimum. Government centers or ministries and agencies can also be located in the same neighborhood coworking spaces.







Initially, the coworking spaces can be defined by changing the functionality of the existing buildings (such as residential or commercial or part of government buildings) in appropriate locations, and are measured according to the regulations and standards that are developed for this brand, and are quickly prepared to be operated by users. Another way could be to develop a system based on the performance of building features to measure, validate and monitor the factors that affect human health and well-being. This system can perfectly increase the buildings' efficiency by using factors such as air, water, nutrition, light and comfort.

Therefore, in this proposal, the mentioned spaces are located at the possible closest distance to residential areas, either by changing their functionality or by equipping and furnishing. In which case, in addition to reducing traffic load, transport costs and parking demand especially in crowded cities, air pollution is also reduced.

In other words, shared work offices are suggested within the neighborhood, where there is less need to use cars and vehicles, but office equipment and technology to communicate with the full implementation of health protocols for both private and similar companies, and also for the government. As a good practice, these shared offices could be located next to cultural centers and libraries. Also it is possible to inspect and identify the buildings around these centers to see if they meet the requiremens for renovation and for being transformed into a coworking space. As stated earlier, Covid 19 has accelerated the acceptance of remote working for companies and individuals, and therefore this is a good opportunity to introduce this new concept in cities before the aforementioned problems or decisions lead to the remergence of this virus or similar diseases in cities.



In the following, we will provide appropriate solutions for these fundamental changes:

#### **Short-Term Solutions**

To fully implement these coworking offices, the process of documenting the performance of the building and completing the review process can be very time consuming. Therefore, what can building owners and managers of companies and organizations do in the short term?

#### 1. Review the meeting spaces

Using 50% of the actual capacity of conference rooms and virtual participation of other people in meetings can be an immediate and reconsiderable solution for gathering people in the meeting space.

2. Implementing health and prevention protocols throughout the building

Organizations should implement health and hygiene protocols and use specialized disinfection procedures for workstations, conference rooms, reception desks, and shared social venues at regular intervals throughout the day. Therefore, it is necessary for building managers to be able to work with a specific standard and goal in order to create confidence and comfort by following the protocol.

# 3. Concentration on indoor air quality

By immediately rehabilitating existing buildings, we can take steps to help filter out and kill bacteria and viruses in our indoor environments. Other measures that mechanical engineers recommend include adding ultraviolet lights to air conditioners, which can help purify the air and help create a safe and healthy indoor environment.

## 4. Updating safety measures and displaying them

Developers can take immediate action to measure indoor air quality or environmental cleanliness in different parts of their buildings and share that information with their users through display screens installed in the lobby of the building or other areas such as elevators, or applications that users can have on their phones.

#### **Medium-Term Solutions**

Sometimes, we will go through a phase of change and reach a new normal state. While none of us can predict the future, it seems reasonable to expect there to be a constant



focus on health and well-being, and this could inform us of the solutions that may require extensive retrofitting or solution designing, such as:

#### 1. Review of air purification systems

Using openable windows, not only let the fresh air flow into indoor spaces and purifies the air but also dilutes potential airborne contaminants that are transmitted from person to person. It also gives occupants a sense of control over their office environment.

2. Increase outdoor space in the adjacent to indoor spaces

Using roof decks and outdoor terraces for the integrated connection of indoor and outdoor spaces, improves the communication between people in the workplace in addition to creating spaces with fresh air.

3. Implementation of biophilic design elements

Another way to make the office environment healthier is having plants in indoor environment, which increases creativity and improves the well-being of occupants as a result of reducing stress.

4. Revision in the design of floor spaces

Floor space design should be made in a way as to provide a healthier environment for the users. While many companies are finding ways to reduce the density of their offices in short-term periods, there may be more sustainable ways to achieve this goal by changing building forms.

Shared restrooms are one of the key areas that need to be revised and redesigned; implementing a solution that does not require the user to touch the external surfaces such as door handles (which can transmit bacteria or viruses). Similarly, doors can be designed with a foot pedal contact point, or they can be installed with an automated technology or sound sensors that allows them to be opened and closed by shaking hands or a voice command.

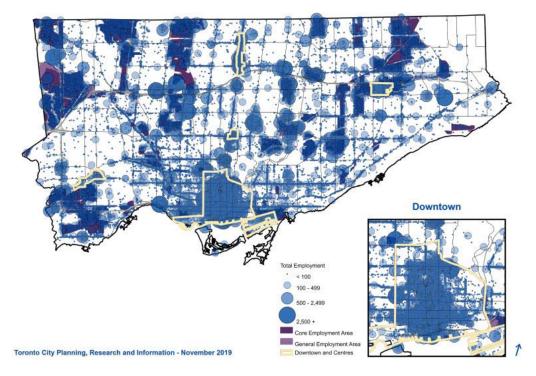
#### **Long-Term Solutions**

Eventually, by creating this logic and workspaces based on all the points mentioned above and the day-to-day considerations (technology and concepts of sustainable architecture, etc.), smart buildings are designed to be a complete symbol of the brand and this mindset.



#### **Location Selection Criteria**

Effective criteria for selecting a suitable location for such spaces include proximity to public transportation centers, available public spaces such as municipal areas, cultural centers, public libraries, or available spaces within large commercial and residential complexes that could have their share from the partnership revenue.



**Employment Concentrations, City of Toronto (2019)** 

# The Required Infrastructure & Equipment to Establish Remote Working Spaces in Neighborhoods

# Establishment & continuous implementation of health protocols for visitors

Without a doubt, the physical and mental health of visitors is one of the most important goals and concerns of public service spaces, as they could be subject to temporary and permanent closure due to negligence and prevalence of the disease among users of such spaces. Therefore, preventive measures must be taken carefully and thoroughly from the moment of arrival, time of work and upon departure. In addition to this, complete disinfection of building spaces in accordance with hygienic protocols which includes disinfection of shoes, clothes, bags and other belongings as well as taking their body temperature. For this reason, allocating a space at the entrance is necessary to have the health control station that includes a disinfection tunnel, a desk



for providing health services such as face masks, medical gloves, and temperature control for visitors.





# **Work Spaces**

Regarding the allocation and arrangement of workspaces in coworking spaces, which on the one hand face a relatively wide range of businesses and, on the other hand must comply with health protocols, the most important design principles for division of such spaces include taking into account the social distancing, geometric requirements, services and working relations.



Since the working spaces must offer a safe and healthy environment in addition to providing spaces with potential for efficiency, freshness, dynamism and, intellectual networking and ideation.



#### **Exclusive Desks & Chairs**

These spaces are for those who need a quiet and private environment, and their business is basically conducted individually or limited to a few number of people, or need a specific space permanently and for a long time. These spaces are located and arranged away from the common parts, and they offer special facilities.



These exclusive spaces can be categorized in terms of the number of users and the required facilities. Also, these spaces can be used as multi-person work offices.

#### **Shared Desks & Chairs**

These spaces are for businesses and individuals who use this space temporarily (on a need basis) and according to their group schedule, and by its nature, this type of desks can accommodate several people during the month. These types of spaces are very important for freelancers, as they cost less and gives them the chance to connect with other similar businesses. These spaces have more limited facilities than exclusive spaces. Observing health protocols and rules and social distancing is mandatory in this spaces.

#### **Exclusive Work Rooms**

Offices with limited area seem to be a suitable option for those who have just started their business, as they can focus more on their goals and business rather than focusing on overhead costs such as the rent, bills, equipment, insurance, personnel, property taxes, etc. The exclusive work rooms can be categorized according to the type and quality of service.

#### **Meeting Room**

Meeting rooms are designed in coworking spaces to hold important meetings such as introducing plans and products for investors, inter-team coordination meetings, sales consulting meetings, etc.

Two important factors to be considered in these meeting rooms, are confidentiality of negotiations and their capacity to accept guests. The facilities and services offered in these spaces include filming and photography, high-speed internet, display screen, hospitality, etc. These rooms can have the capacities of 6, 8 or 12 people, depending



on the available space. It should be noted that health protocols and social distancing can be achieved by properly spacing tables and chairs, transparent room dividers, and proper ventilation of the environment.

#### **Conference Hall**

Conference hall is another available facility in coworking offices, as it is used for holding coordination meetings, introducing products, educational conferences and celebrations. The conference hall is equipped with visual and hearing systems such as display curtains, projectors, sound systems, microphones, lighting, comfortable furniture and proper air conditioning. Obviously, the observance of hygienic rules and social distancing in these spaces must be taken into consideration.

## **Services & Welfare Spaces**

#### **Office Management Space**

This space is intended for the manager and its executive and logistic team, which in terms of function and type of services will have a different feature from other departments of these offices. The required equipments for this section include: desks, meeting table, reception table for guests, bookshelves and documents storage, etc.

#### **Secretarial & Information Space**

The secretarial space should be considered independent of other sections in coworking spaces, as the functionality and characteristics of this section is different from others. Apart from considering a storage for a of files significant number and documents, a waiting area for clients and visitors is also mandatory for this section.



Other required equipment for this section are: reception desk and counter, table for placing the fax machine and printer, suitable furniture for visitors, closets for storing documents and in some cases display shelves.



# **Rest & Working Areas**

To improve the balance between work and leisure, there are rest areas that are furnished like home and different from work environment. Users can rest in these areas temporarily and after refreshing they can go back to work.



# Cafeteria & Staff Dining Room

In order to increase the welfare facilities in such spaces, cafeteria and staff dining room would provide catering services to their users; this means, on the one hand, desirability of the work environment is increased and on the other hand, it would be a source of income to cover the costs of these spaces. It is worth mentioning that preparing and serving food in these places is undertaken with respect to food service codes and regulations.

# **Virtual Library**

Ease of access to information is one of the key advantages of coworking spaces; ebooks and e-journals are provided by a free of charge and high-speed internet.

#### Lockers for Users to Keep Their Documents & Other Belongings

Offering lockers on a daily and long-term basis can minimize the need for daily movement of their documents, and the use of smart fittings with central control instead of keys and common locks will make it easier to manage and increases the security.

#### Childcare

Having childcare facilities within the coworking space with the relevant health protocols for taking care of the children of users who are unable to keep their children at home, attracts more people and increases the efficiency of coworking spaces.



#### Restrooms

Restrooms can be a source of contamination and can spread and transmit microbial and viral pathogens. Therefore, minimizing hand contact with the equipment of restrooms can play a significant role in cutting the transmission chain of this type of disease. For this purpose, the following arrangements are recommended:

- Remove the handles
- Installation of warning and health signs
- Installing sign boards on doors and walls to demonstrate how to open and close the door using the feet
- Installing electric locks with pedal keys to open and close the door
- Installation of pedal or automatic sensor faucets
- Installation of automatic and sensor soap dispensers
- Installing a toilet paper box
- Use of high-powered fans to ventilate the stale air



# **Support & Equipment Spaces**

- High speed wired and wireless Internet and Intranet
- Landline and cell phone network
- Technical services such as printing, plotting, binding and stationery
- Installation services such as air conditioning, heating and cooling, lighting, fire alarms and fire extinguishers
- Security cameras & CCTV (surveillance systems)
- Visual systems and the required equipments for meeting rooms and conference halls for physical and virtual attendence
- Interior green space