ADAPTABILITY OF SHARED WORKSPACE CONCEPT IN OFFICE BUILDINGS IN SRI LANKA

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ABSTRACT

A well-organised, well-designed workspace in an organization will help it to fully achieve its goals. Although visiting staff are also considered as staff of an organisation, they often face difficulties in finding space within the organization for working as they are not generally assigned specific workspace to work from. In Sri Lanka, many office buildings have unutilised floor space. These unutilised spaces are quite costly to maintain. Moreover, an unutilized space will have an adverse impact on the sustainability of the organisation. This study addresses these issues by investigating the adaptability of shared workspace concept in office buildings in Sri Lanka. To achieve this aim, a literature review, 14 expert interviews and two case studies were conducted. Content analysis was used to analyse the findings. The study identifies the type of office spaces that can be used as shared workspaces. It is found that not all offices with unutilised space will be able to decide to adopt the shared workspace concept as that decision has to be based on the type and operating hours of the office, core business of the organisation, organisational culture and the support structure and the accessibility of the building in which the office is housed.

Keywords: Co-working; Flexible Spaces; Office Buildings; Shared Workspace; Sustainable Facilities.

1. Introduction

Many industries and sectors are now making a shift towards an increasingly complex, unpredictable and dynamic knowledge environment (Saurin *et al.*, 2008). According to Laterveer (2011) and Ketting (2014), different individuals have different needs for space and they can rent out the space they require for a day, a month, a year etc. With the advent of the new millennium, workplaces have become fluid and multi-layered with their boundaries blurring (Saurin *et al.*, 2008). Calder and Courtney (1992) believe that market trends have created a new paradigm in office space usage. In the ever changing global and competitive business world, it is necessary to be able to adapt to change both as an organisation and as an individual to achieve one's business goals (Bridges, 2009). When leasing a building for use as an office in a market that requires constant changes, it is desirable to have flexibility in the duration of the building lease, use of services and choice of space (Gibson and Lizieri, 1999). The increasing number of self-employed workers, and other labour market trends such as the growth in the use of technologies and the decrease in the amount of workspace allocated to individuals have also influenced the use of office space (Green, 2014; De Vries and Van de Besselaar, 2013).

Until the turn of the century, most white-collar workers remained securely bound to their office desks simply because they could have all the tools they required for their jobs available in one single place close to their desks (Felstead *et al.*, 2003). The space they required consisted of the space they needed for their jobs as well as storage space, meeting rooms, communal areas and equipment space (Brooks, 1998). Today, working practices of many organisations have made this requirement to change (Fawcett, 2009). Not all employees today will need permanent space for their work. Van Zutphen *et al.* (2015) have described a new way of working called flexible working which allows the workers to have their own work schedules and work from a location of their choice without requiring expensive space to work from.

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Waber *et al.* (2014) defines shared workspace/co-working space as a membership-based workspace where diverse groups work together in a shared, communal setting. According to International Facility Management Association (IFMA) (2016), headcount has always been a challenge to organizations when the space available becomes insufficient to accommodate the uncalculated labour, with staff except full-time staff having no assigned workspace. Although these employees account for only 10% of the total workforce, 90 % of the time and effort of the organization is spent in finding space for them. There are spaces in offices which are not being effectively utilized because of planning failures and other reasons and there are costs involved in their maintenance.

There have been studies done in the past on areas related to this concept. For example, Duffy (2000) and Harrison *et al.* (2014) have studied the number of workstations that have to be provided for a given number of flexibly working employees, known sometimes as workstation-sharing ratio. Fawcett and Rigby (2009) have reported on using a simulation model to explore workstation sharing in a probabilistic way. Laing (1990) did studies on desk sharing. Leclercq-Vandelannoitte and Isaac (2016) have studied co-working/ shared work spaces in detail along with the issues which the concept has with other areas. However, it was found that there is a research gap between the adoption of the concept in office buildings and sharing the office space with outsiders.

The concept of shared workspace is still new to Sri Lanka. However, it is now gradually gaining popularity because of its ability to cater to the space needs of short term contracts. This study therefore aimed to look at the adaptability of the shared workspace concept in organizations in Sri Lanka that have unutilized space or are short of space for its non-permanent workers. The focus of the study was on converting unutilized spaces in offices located in Sri Lanka into shared workspaces that can accommodate non-permanent staff or the outside community. The objectives of the study were to make an in-depth study of the shared workspace concept and to identify the requirements that exist for shared workspaces in office buildings, the spaces in offices that can be used as shared workspaces and the characteristics an office building needs to possess if it is to successfully adopt the shared workspace concept.

2. LITERATURE REVIEW

2.1. SHARED WORKSPACES

Attitudes towards consumption have shifted in recent years resulting in increasing concerns over ecological, societal, and developmental impacts of consumption (Albinsson & Perera, 2012). A recent major evolution has reshaped the capitalist economy (Goudin, 2016). Transition from the traditional individual ownership of assets to accessibility-based models is present in a wide range of markets (Goudin, 2016). Belk (2007) defined sharing as the act and process of distributing to others for their use what is ours and the act or process of receiving or taking something for our use from others.

Today, there are many who prefer to work independently in a flexible work environment making use of information technologies. Three kinds of shared spaces exist: physically shared spaces, technically shared spaces, and cognitively shared spaces (Bhatt et al., 2014).

Co-working takes place in shared, collaborative workspaces in which the emphasis is on community (not space), relationships, and productivity. It is a new form of working in which workers from different companies or freelancers with different profiles and objectives work as a community within a shared space (Johns and Gratton, 2013). Leclercq-Vandelannoitte and Isaac (2016) consider teleworking or remote or mobile working as the earlier versions of co-working. Waber, Magnolfi and Lindsay (2014) are of the view that the concept of co-working is a result of the drawbacks of remote working and excess virtualisation of people and organisations. Co-working spaces are utilised by different categories of professionals, mostly freelancers, who have various degrees of specialisations (Gandini, 2015). Kwiatkowski and Buczynski (2011) have stated that shared or co working spaces which are the foundation of the freelance/self-employed realm have now expanded into small and moderate sized businesses too. Co-working spaces are creative and energetic and people can interact, share, build and co-create in these spaces (Fuzi, 2015).

The characteristics expected of shared workspace users have so far failed to receive much attention. Each user has his or her own geographical characteristics (e.g., residential, city or village), demographic characteristics (e.g., age, gender, income and level of education), psychographic characteristics (e.g., interests, activities and

values) and behavioural characteristics (e.g. brand loyalty, readiness to buy or degree of loyalty) (Kotler, 1994).

2.2. OFFICE BUILDINGS

According to Building Owners and Managers Association, there are three classes of office buildings: Class A buildings are prestigious buildings which have the highest quality as office space with high-quality finishes, state of the art systems and exceptional accessibility and with rents standing above the average for the area. Class B building rents are higher than the average rent in the area: their building finishes are better in comparison to those of other buildings in the area and their systems are adequate. However, these buildings cannot compete with Class A buildings of the same price. Class C buildings attract tenants requiring functional space at rents below what is average in the area.

Laing et al. (1998) have identified, based on the number of contacts required among office workers and the level of their autonomy, four main types of offices: Hive, Den, Cell and Club. There are many different office layouts also, varying from traditional private office layouts to open office layouts. Even open offices have a major diversification (Sanders & McCormick, 1993). Brill et al. (2001) have defined the private cellular office as a workspace that has a door and four walls rising up to the ceiling and the open plan office as a workspace whose perimeter boundaries do not rise up to the ceiling. Charles et al. (2004) have stated that office layouts can influence employee satisfaction and the attitudes, behaviours and commitments of the employees. A change in the physical settings of an organisation will lead to organisational change (Kenreich, 2001).

2.3. OFFICE CULTURES

Culture can be formally defined as the beliefs, values, attitudes, behaviours and practices that are characteristic of a group of people (Warrick, 2015). Organizational cultures are mainly of four types. Hierarchy culture is present in formalised and structured places of work where what employees have to do are governed by procedures (Cameron & Quinn, 2011). Market culture as described in the Organizational Culture Assessment Instrument is found in results-oriented workplaces. Leaders of these cultures are hard driving producers and competitors. They are enthusiastic about market share and penetration (Grudzewski and Hejduk, 2001). In organizations with clan cultures, employees have a sense of being in one family and the more lenient policies adopted by these organisations encourage the employees to personalise their workspaces (Wells *et al.*, 2007). Adhocracy culture in an organization will discourage centralised power or authority. Instead, it will let the power to flow from one employee to another or from one job team to another depending on the problem in hand (Grudzewski and Heiduk, 2001).

3. RESEARCH METHODOLOGY

The qualitative research approach considered by Brikci and Green (2007) as the best approach that can be used for collecting opinions and facts from people based on their experience was used in this study to collect the required data. Thus, a series of interviews with experts were conducted to confirm literature review findings and their applicability to Sri Lanka. Since the concept of shared workplace is novel to Sri Lanka, fourteen experts who had more than five years of industry experience were selected using snowball sampling for interviewing. These experts were engaged in either building designing or building operation or were building employers. Only questions related to their areas of specialisation were put to them during the interviews. Two case studies were used to validate interview findings. Semi-structured interviews, observations and document reviews were used during the case studies to collect data. Documents such as records and co-workers' complaints were perused during the case studies to identify the problems associated with the concept. Since the shared workspace concept deals with building space utilisation, observations were used to grasp the cores of the case studies as suggested by Strauss and Corbin (1990). Table 1 presents the profiles of the expert interviewees and Table 2 presents the details of the case studies. Case study interviews were with the managerial staff of the facility concerned and the coordinators of its shared workspace project.

Table 1: Expert Interviewee Profiles

	Profession	Designation	Industry experience
Interviewee A (IA)	Chartered Architect	Senior Lecturer	15 years
Interviewee B (IB)	Chartered Architect	Owner/Managing Director	26 years
Interviewee C (IC)	Chartered Architect	Senior Lecturer	8 years
Interviewee D (ID)	Chartered Architect	Owner/Managing Director	8 years
Interviewee E (IE)	Facilities Manager	Facilities Executive	5 years
Interviewee F (IF)	Chartered Engineer	Premises Project Manager	20 years
Interviewee G (IG)	Business Administration	Operations Manager	25 years
Interviewee H (IH)	Chartered Engineer	Operations and Maintenance Engineer	15 years
Interviewee I (II)	Graduate Engineer	Assistant Facility Manager	6 years
Interviewee J (IJ)	Graduate Engineer	Engineer	5 years
Interviewee K (IK)	Entrepreneur	Owner/Managing Director	5 years
Interviewee L (IL)	Lawyer	Director(Investor)	10 years
Interviewee M (IM)	Economist	Director	8 years
Interviewee N (IN)	Chartered Engineer	Facility Manager	26 years

Table 2: Case Study Details

Description	Case 01 (C01)	Case 02 (C02)
Core business	Marketing	Property development
Experience in sharing workspaces	01 year	08 months
Number of shared spaces available	Meeting rooms - 01 Private office rooms - 04 Open workstations -09	Meeting rooms - 01 Private office cubicles -07 Open workstations - 0
Time available for sharing	Weekly Monthly Semiannually Annually	Quarterly Semiannually Annually
Operating hours	24/7	24/7
Number of floors	2 floors	2 floors
Location	Colombo	Colombo

4. RESEARCH FINDINGS AND ANALYSIS

4.1. SHARED WORKSPACE CONCEPT

Table 3 below presents the expert interview findings used to validate the literature findings.

Table 3: Reasons for the Emergence of Shared Workspace Concept

Reasons	Expert Findings	Case 01	Case 02
Drawbacks of remote working and excess visualization	IA,IC,IE,IF,IG,IH,II,IK,IL,IM	✓	√
(Waber <i>et al.</i> , 2014; Leclercq-Vandelannoitte and Isaac, 2016)			
Impacts of knowledge, cognitive and sharing economy (Belk, 2010; Botsman & Rogers, 2010)	IA,IB,IC,IE,IF,IG,IH,II,IK,IL, IM	√	V
Low initial investment required	IA,IB,IC,ID,IE,IF,IG,IK,IL	✓	√
Exposure to integrated facilities	IA,IB,IC,ID,IE,IF,IG,IK,IL	✓	√
Availability of a decent address for the business	IA,IB,IC,ID,IE,IF,IG,IK,IL	✓	√
Increasing independence sought by employees	IA,IB,IC,ID,IE,IF,IG,IK,IL	✓	√

Reasons	Expert Findings	Case 01	Case 02
Increased awareness	IA IC ID IE IF IG IK IL	/	√
Poor bonds that exist with the third parties	IC ID IE IF IG IK IL	-	-
Interactions with other parties	IC ID IE IK	J	✓
Changes in consumer life cycles and expectations	IB	J	-
Convenience of the work environment	IA	✓	✓

The concept of co-working spaces or shared workspaces emerged because of the drawbacks of remote working and excess visualization. Most of the workers who remotely work from homes may at times need an office for their meetings, daily work, etc. Shared workspaces have come into place to cater to this requirement. The other contributory factor to the concept is the low initial investment it requires for implementation. Start-ups/entrepreneurs/freelancers/co-workers do not possess sufficient capital to invest in an office at the time they begin their businesses even though what they require at that time is only a small space for their business work. If they are willing to make use of shared workspace/co-working space available, they need to invest only very little for working space. They can use this space only at the time they exactly want it by paying rental at an hourly rate (e.g., 500LKR/hour). Integrated facilities such as utilities, data connections, high quality office furniture, interior décor etc., available in shared workplaces and which make the working environment comfortable, also have contributed to the emergence of the concept of shared workspace. Users of these workspaces are unable to have these facilities on their own during the early stages of their businesses. However, most co-workers require only a table and a chair, a decent address and very limited building services. In a shared workspace, the user automatically gets entitled to a decent business address which every organization is in possession. For start-ups, a good business address is always of value.

4.2. SHARED WORKSPACES IN OFFICES

In Sri Lanka, there is so much space that can be used as office space but they lack the characteristics of an office environment. The owner of an office having unoccupied space can always benefit by letting out that space for use as a shared workspace. At a time when owners of office buildings are reluctant to rent out on long term leases unoccupied space in their offices, the shared workspace concept will be an eye opener to them. Table 4 presents the reasons given by the experts during case studies for adopting the shared workspace concept.

Table 4: Reasons for Shared Workspaces in Offices

Factors	Experts' Findings	Validations from cases	
		Case 01	Case 02
Failure to accurately estimate the headcount at the design stage	IA, IB, IC, IL, IE, IF, IG, IH, IK	√	-
High cost of workspace (Rs./m²)	IA, IB, IC, IL, IE, IF, IG, IH, IK	✓	✓
Income generation	IA, IB, IC, IE, IF, IG, IH, IK, IL	✓	✓
Lack of office space in urban areas (Colombo)	IA, IB, IH, IG, IJ, IH	✓	✓
Not having ownership but only sharing	IA, IB, IC, ID, IK, IL	✓	
Millennials' requirements	IA, IB, IC, ID	✓	✓
Asset sharing/ Resources	IE, IG, IF	✓	✓
Parking and accessibility	IA, IB, IH	-	-
Inadequacy of the existing workspaces for the available workforce	IG, IK	-	-

According to IB, though the concept of shared workspace is novel, most designers consider at as a concept that is sustainable. When constructing an office facility, it will always be challenging to get the correct head count (IFMA, 2016). Therefore, the actual headcount of an office building can often be different from what was estimated during its design stage. There can even be excess space. At the same time, an organization encountering financial difficulties may decide to reduce its labour force which can have a direct impact on the space requirements. The idling space can be rented out without temporarily shutting down the office.

Irrespective of whether all the space in an office is effectively used or not, its overhead costs will always be quite high as especially in urban areas like Colombo, it is costly to maintain space. These overhead costs will therefore depend on the extent to how effectively the space is being utilized. With the adoption of the shared workspace concept, income generation from idling office space will become a reality.

The cost of owning a space will always be greater than the cost of using a shared space. Thus, for a co-worker, a start-up or a freelancer, it will always be more beneficial to use a shared space rather than one's own space.

According to the experts, most buildings do not have facilities expected by their prospective tenants, which increases the demand for space with the required facilities. In Colombo, there is a shortage of office space (Jones Lang LaSalle, 2016).

A business that is growing is expected to address the requirements of millennials as our future workforce will comprise of a higher percentage of millennials. Since they value innovative thinking, shared spaces have become common among them. Therefore, in the years to come, shared spaces will attract more attention. Along with the sharing of unoccupied space of an office building with outsiders, the assets of the office such as printers, air conditioners and machinery can also be shared. Asset sharing is a sustainable activity: it can also optimize the energy usage of the organization. It will also have an impact on the carbon footprint of the organization as if all the start-ups decide to buy printers, air conditioners and machinery for their day to day use then all these will have an impact on the environment and their unwanted emissions will indirectly increase the carbon footprint.

4.3. OFFICE SPACES THAT CAN BE USED AS SHARED WORKSPACES

An organization will have different types of underutilized or unutilized spaces. During the design stage of a building, it is always possible to create a space suitable for multiple purposes. Table 5 presents the type of spaces that can be used as shared workspaces as revealed by the experts and case study findings although some organizations for various reasons may not always want to use these spaces as shared workspaces. In the two cases studied, there were shared workspaces which were already being used by external parties on rent.

Table 5: Office Space	e that can be	Used as Shared	Workspace
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Type of space	Experts' Findings	Validations from cases	
		Case 01	Case 02
Board room	IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN	√	√
Meeting rooms	IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN	✓	✓
Auditorium	IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN	✓	✓
Cubicles	IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN	✓	✓
Workstations	IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN	✓	✓
Common facilities (washrooms, lobbies cafeterias)	IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN	✓	J
Parking areas	IA, IB, IC, ID, IE, IH, IJ, IK, IN, IM	✓	✓
Resource Room	IC, IE, IK, IJ, IL, IM	✓	✓
Rest Rooms	IA, IB, IC	✓	✓
Private lounge	IB, IE	✓	✓

IB mentioned that space that can be used for multiple purposes can be created when designing a building. He was of the view that there can be many ways of rearranging the space that has been designed only for one particular activity. When an organization shares its space with an external party, it will not be possible to compromise the facilities as the underutilized space is to be provided to the community as a shared workspace. Spaces in the hospitality trade are generally in demand for meetings and for team work. Since during most of the time, meeting rooms, the board room and the auditoriums of an organization are unoccupied, it will be possible to rent them out to an external party during these times. Before deciding to rent out these meeting rooms, board rooms and auditoriums, their frequency of use has to be determined. Organizations will benefit if entire floors can be renovated to create shared spaces.

Workstations are popular globally as shared workspaces. However, the expert interviewees opined that for several reasons it is impractical to share the workstations used by the employees as workstation sharing should not in any way disturb the existing operations of the organization. When organizations rent out space for short periods, areas such as washrooms, lobbies, vehicle parking space, cafeterias etc., also have to be provided to their customers. Some office buildings have their own private lounges where their employees can relax. These lounges can cater to private parties and gatherings as well. Therefore, this type of spaces can also be rented out to external parties for functions during day time. Adjacent offices can make use of unutilized rest rooms if possible. However, the particular office cultures prevailing in some organizations may not permit the sharing of rest rooms with nearby offices. The smooth operation of a shared workspace can be ensured by centralising it for ease of monitoring and controlling.

4.4. Characteristics of an Office that can adopt the Shared Workspace Concept

An organization planning to adopt the shared workspace concept should have certain characteristics. These characteristics were identified from expert and case study interviews and validations. Table 6 presents these characteristics all of which are focussed on the office building and user requirements.

Table 6: Characteristics of an	Office that can adopt the	the Shared Workspace Concept

Characteristics	Expert interview findings	Validations from the cases	
		Case 01	Case 02
Office class			
 Class B 	ID,IH,II,IK,IL,IM	✓	✓
 Class C 	ID,IH,II,IK,IL,IM	✓	✓
Type of office			
 Cell 	IA,IC,ID,IF,II,IK	✓	✓
Den	IA,IC,ID,IE,IF,IG,IH,II,IK,IL	✓	✓
Type of culture			
Task	ID,IE,IF,IG,IH,IL,II,IK	✓	✓
Person	ID,IF,IF,IH,II,IL	-	-
24/7 operations		✓	✓
Support structure to facilitate the users	IA,IC,ID,IF,IG,IH,II,IN	√	✓
Accessibility	-	✓	✓

A client will always want to verify the class of a building before renting it out as the building class can provide useful information about the building. Shared workspace users have their own minimum requirements for their work environments. Thus, a Class B or a Class C building will always be more acceptable to them than a Class A building since the rental of the latter will be too high for them. IF endorsed this by stating that often reputed organisations having unoccupied space that can be used as shared workspace are generally not willing to give their space to outside communities as it can affect the comfort of their employees

A shared workspace of an organization has to be accessible to its users throughout the day and the employees of the organization should be careful enough to not to disturb the co-workers. Customer friendly office buildings will not be suitable for sharing. Similarly, sharing of a place that has limited office space designed for repetitive tasks will be difficult. Cell and Den offices are more suitable for sharing. In a cell type office, there will be many workstations used in isolation and thus it will be able to easily adopt the shared space concept. Den type offices are designed to cater to team-oriented operations and thus have more flexible office layouts.

Since the culture of an organization will help its employees to understand the basic assumptions, values and behaviours expected from them, it is important to understand the factors that influence employee perceptions of the organizational culture (Ofori & Sokro, 2010). A shared workspace rented out to outside parties can influence the employees' perception of the culture. This fact was emphasised during case study interviews although not much emphasised in the literature. According to case study findings, an organizational culture with flexible work practices will be more conductive to adopting the concept of shared workplace. In a culture that has rules and regulations, employees are judged by what they achieve rather than how they carry out their tasks. The experts, however, strongly disapproved this fact saying that the culture of an organization influences

only the time the workers come to work and where they work, eat, and relax. A culture with no strict rules and regulations will contribute to making business activities successful. Furthermore, to be able to have a shared workspace in an office, there has to be a flexible environment.

The higher the contribution of the support structure of a building make to any of its activities, the higher will be the performance of the building occupants in that activity. Thus, for a shared workspace to properly function, there has to be backup power systems and associated support structures that come into operation whenever there is a breakdown of the regular power supply or systems as otherwise the customers will become dissatisfied making their retention difficult. If a shared workspace that fails to give backup power or other supporting services with proper and regular maintenance will lose its reputation and customers.

Accessibility of the buildings, as revealed by case study findings, is another important factor when looking out for shared space. A separate access will always be preferred by parties rather than a common access or an access through the office space of the organization itself. A separate access can, however, disturb the day to day operations of the organization while posing a threat to the organization.

The acceptability of the concept of shared workspace can vary from business to business. Irrespective of the type of their buildings, not all organizations with unutilized space will want to adopt the concept as at times they will prefer to be left with unutilized spaces rather than renting out those spaces. Both practitioners and researchers in their individual capacities were interested in co-working using shared workspace. In the literature, the co-working concept has been highlighted as a separate business opportunity and not as a merger with the existing office operations. This study was on identifying how organizations can sustainably utilize their unutilized spaces.

5. CONCLUSIONS AND RECOMMENDATIONS

The study has been able to attain its research aim and associated objectives through its findings and outcomes. At a time when shared workspace is still novel to Sri Lanka, this study will draw the attention of the readers to the importance of using the office buildings in the country sustainably. Through the literature review done on the shared workspace concept nine reasons for adopting shared workspaces in office buildings could be identified. They indicate why a modern person will prefer shared space to ordinary office space. The study also identified ten spaces within an organization which included board rooms, meeting rooms and workstations as areas that can be shared. To be able to share its unutilized space, an office building needs to possess certain characteristics. These characteristics together will provide a platform to building owners to ascertain the adaptability of their buildings for space sharing. For a developing country like Sri Lanka, this concept will be useful to both building owners and their clients who are interested in making use of their idling space more productively.

It is recommended that action be taken to more systematically implement the shared workspace concept in Sri Lanka. All stakeholders need to be made aware of the advantages of this concept and how it can be implemented. In Sri Lanka, there is currently a growing tendency towards setting up start-ups as single entities by individuals and small groups. The government can financially assist these start-ups by reducing the taxes charged for shared workspaces so that there is encouragement to use shared spaces. Building designers can create flexible spaces suitable for sharing at a future date and thereby contribute to the betterment of Sri Lanka.

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