Typology of Coworking Spaces in Israel: Location, Type and level of Services they Provide to Members

Since the appearance of the first coworking space in 2005 in San Francisco, the phenomenon has changed and adapted itself to changing conditions. The 2008 global economic crisis followed by transformation within the period of recession and recovery (e.g., the rise of the gigand service economies, etc.) contributed greatly to this change (Cheah & Ho, 2019). The increase in knowledge-based economy, the "digital nomad" lifestyle and mobile technologies (Yang, at al., 2019) led to a increase of consumer demand for such type of work environment.

'Coworking spaces' (CSs) beyond being merely a physical space, they have economic, professional and business benefits, and strive to create community values. In the ever-changing world of the third millennium, where the pace of innovation and new technologies is faster than ever, CSs are part of these changes. CSs and coworking as a practice can be understood as phenomena of the "new economy" or the "sharing economy" (Jakonen, et al, 2017) and it is based on a 'culture of sharing' (Bouncken & Reuschl, 2018).

This phenomenon started to spread and since about 2009, more and more companies are entering this field, including nationally and globally widespread companies (such as We-work, Mindspace, Impact Hub and more). The first company that applied the CS model in Israel was WE-WORK one of the pioneers in the world. The company, which was founded by Israeli entrepreneur Adam Neumann and its American partner Miguel McKelvey, has dozens of branches worldwide (Roberta Roggero, 2019). At this point, CSs have proven that they can be a profitable business, and several have expanded their scope by adding supplementary services that are welcomed by the entrepreneurs and self-employed (Jones, 2016).

This study which is part of the ongoing COSTAction project: (CA18214, 'The geography of new working spaces and impact on the periphery' (2019-2023)—focuses on examining the characteristics of CSs in Israel, where there is an increasing number of coworking spaces and start-ups, in order to shed light on this phenomenon and to understand in what extent these industries have a tendency to concentrate in core regions, or to what extent do some of them tend to extend to peripheral areas as well?

The main objective of the proposed study to build a typology of CSs based on their characteristics and level of services they provide, and assessing the functional and spatial dimensions of CSs as a new form of work environment. The fundamental research questions are what are the measurable functional, spatial, and social attributes of CSs which becomes part of the work environment ecosystem? Examine whether there are significant differences between coworking spaces located in central areas and those that are located in peripheral areas? And what was the immediate effect of COVID-19 pandemic on the coworking spaces?

In order to identify CSs groups based on their features, cluster analysis is conducted by means of a two-stage clustering method embedded in the software Synapse (Peltarion, 2010) that consists of SOM followed by neural gas, Bayesian classification and unified distance matrix (U-Matrix) edge analysis. With respect to alternative methods such as frequency analysis or regression models, the chosen approach is advantageous on the methodological perspectives. this approach allows avoiding restrictive a priori assumptions regarding the model structure, the distribution of the variables, and the interdependencies across variables. The two-stage approach has several advantages over a single-stage approach, including reduction of computational cost and noise reduction (Vesanto & Alhoniemi, 2000).

Data were collected by Desk Research – with primary data collected from the CSs websites, as well as websites that provide information about CSs in Israel (such as www.spacing.co.il; www.spacing.co.il; www.spacing.co.il).

The typology results show that there are different types of CSs. They differ in service type, service level, price level, design, and location. Based on the data we collected on 186 CSs in Israel at the beginning of 2020, we were able to identify five distinct clusters: Very Large Commercial CS at a high service level, Mixed CS at a medium-high service level, Mixed CS at a low service level, Large Commercial CS at a high service level, and Commercial CS at a medium service level.

With respect to the possible effect of COVID-19 pandemic, we found that by the end of the year, 23 CSs had been closed possibly both due to the lockdowns imposed on residents in certain months throughout the year, and due to the fear of infections with the disease from staying in work in common spaces. However, at the same time 33 new CSs were opened that increases the total number of CSs to 196, an increase by 5%. That is, despite the difficult situation in the labor market as a result of the pandemic and the lockdowns, the demand for CSs has increased.

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