

# Co-working Space: Project Based Transversal Competencies

Heppy Jundan Hendrawan, Sucipto, Ahmad Munjin Nasih  
*Universitas Negeri Malang, Malang, Indonesia*

**Keywords:** Co-working Space, Business Model Canvas, Transversal Competencies.

**Abstract:** The existence of co-working space in the industrial revolution 4.0 era demands a fundamental breakthrough. Issues no longer stop at the matter of facilities, types of services, organizational management and atmosphere that must be prepared. But how to build a transversal competencies skill. Especially the main skills that should be owned by the host, as the impact of demands from the user at the same time. This condition is then important to be studied further, to know how far positioning co-working space can support student productivity optimally. The next interesting thing is how ideal conditions are expected if co-working space is then built within the campus location. Because of course there are several strategic factors that must be formulated more comprehensively related to business potential, blue print and strategic plan of the university itself. By using the business model canvas analysis it is expected to be the beginning of how to formulate the ideal model of co-working space designed to meet the needs of developing a model of project based transversal competencies.

## 1 INTRODUCTION

A conducive atmosphere for prospective creativepreneur is ideally created with a variety of innovative approaches, so as to be able to trigger the productivity of its workers. Large corporate headquarters in the field of digital industries such as Google which carries the concept of open space and whatsapp with the concept of urban street, is designed in such a way as to ensure the productivity of creative work in it is well implemented. Of course, to create these ideal conditions requires a lot of financial support. Because it is related to the development of infrastructure, architecture and the blue print of the environment.

Seeing the character of students as generation Y who are all multitasking, of course the working environment must adjust to their needs. As reminded by President Jokowi at the 2017 Bank Indonesia Meeting, the President reminded it was time for the world of Higher Education to focus specifically on the digital economy sector. "... whose name is generation Y, students today. Five to ten years to come, the hold is only this (device). Want to find news just click ". So that the typology of generation Y characters that tend to get bored easily, do not like being in a hierarchical structure, like new adventures, critical, creative and rich in fresh ideas must be

considered carefully. As reminded by (Tepper, 2002): "People with ideas-people who own idea-shave becomes more powerful than people who work machines and, in many cases, more powerful than people who own machines ". Therefore students always need alternative space to develop and explore their ideas and ideas productively.

Co-working Space should be able to become a model as well as an alternative in the form of creative space offered to be used as a solution amid infrastructure problems as supporting work productivity, as well as answers to the characteristics and needs of millennial-era students. Therefore it is important to then conduct a study to answer the problem of how to build an ideal co-working space within the campus as a development of project-based student transversal competencies.

## 2 LITERATURE REVIEW

Co-working space is actually an evolution of individual freedom at work. Freelancers who used to work at home or coffee shops have shifted to co-working space. (Spinuzzi, 2012) found that even though workers have to pay rent per month, workers get more benefits than working individually at a coffee shop or home. Some benefits such as

(Spinuzzi, 2012): collaboration, community work, sustainability, openness and accessibility.

### 2.1 Co-working Space

Another advantage of co-working space is a clear separation between work time and personal time (Kwiatkowski and Buczynski, 2011). This is often an obstacle for creative industry workers, where they seem unable to separate work time and personal time; work when you should rest, and rest when you should work. In addition, co-working space provides the most basic function for humans, namely socialization. This is what will not be obtained from workers who work individually at home.

There are two types of co-working space orientation (Spinuzzi, 2012). The first is the outward-facing front stage which shown in Figure 1. In this type, in one location the co-working space consists of business people who have different backgrounds and expertise. For example, there are those who are engaged in interior design, web development and real estate. Each has a client. However, because they are in the same co-working space, they are able to collaborate in serving clients.

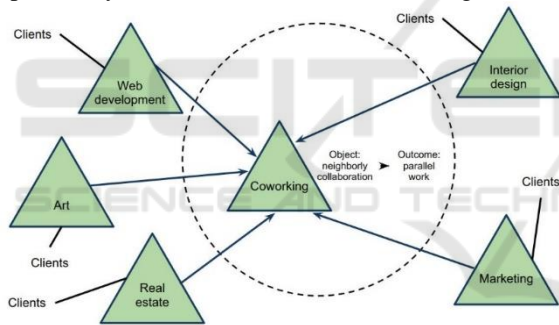


Figure 1: Outward-facing front stage (Spinuzzi, 2012).

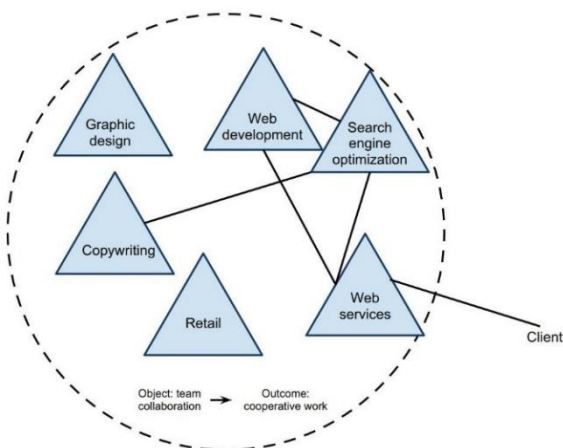


Figure 2: Inward-facing front stage (Spinuzzi, 2012).

Second, inward-facing backstage type which shown in Figure 2. In this type, there are several types of workers who are in the same field, for example in the field of web development. They all collaborate to serve the same clients.

### 2.2 Transversal Competencies

Transversal competencies are competencies that cover a broad field of knowledge or expertise. In the world of education, this competence can cover various fields of science. (Rychen and Salganik, 2000) stated that the increase in transversal competency is not solely carried out in schools or colleges but also includes processes in the world of politics, social networking, and interpersonal relationships (such as family), and the development of personal maturity. Transversal competency is useful in increasing the role of universities in the advancement of a country.

The Organization for Economic Cooperation and Development (2005) states that there are three key competencies that must be mastered by every workforce in the present shown in Figure 3. First, mastery of specific tools, such as equipment or foreign languages. Second, the ability to interact in heterogeneous groups. Third, the ability to work autonomously without supervision. These three skills must be able to be mastered together, there cannot be one area that stands out.

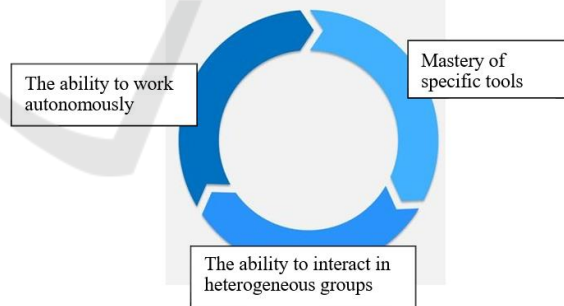


Figure 3: Three key competencies (Organisation for Economic Cooperation and Development (OECD), 2005).

The United Nations Educational, Scientific and Cultural Organization (2015) describes transversal competency as a competency that must continue to develop in several domains: (1) critical and innovative thinking; (2) interpersonal ability; (3) Intra-personal ability; (4) Global citizenship. Examples for each domain can be seen in Table 1.

Table 1: Definition of transversal competencies (Care and Luo, 2016).

Domains	Examples of Key Characteristics
Critical and innovative thinking	Creativity, entrepreneurship, resourcefulness, application skills, reflective thinking, reasoned decision-making
Inter-personal skills	Presentation and communication skills, leadership, organizational skills, teamwork, collaboration, initiative, sociability, collegiality
Intra-personal skills	Self-discipline, enthusiasm, perseverance, self-motivation, compassion, integrity, commitment
Global citizenship	Awareness, tolerance, openness, respect for diversity, intercultural understanding, ability to resolve conflicts, civic/political participation, conflict resolution, respect for the environment
Optional domain: (Example) Physical and psychological health	Healthy lifestyle, healthy feeding, physical fitness, empathy, self-respect

### 3 METHOD

This research is oriented to the birth of the formulation of the Development of Transversal Competency-Based Co-working Space Models for Digital Age Students, through a trans-discipline approach based on the 21st century skills. By focusing on the Project Based Learning factor, it is expected that it can be useful for strategic policy makers such as the formulator of the trans-discipline curriculum. Using descriptive qualitative methods about the development of creative economic space co-working models based on transversal competency for digital age students will be analysed using the Business Model Canvas approach adapted from the model developed in Business Model Generation (Osterwalder and Pigneur, 2010). The business model canvas analysis model approach will focus on nine core components (the nine essential components) which will be applied to 5 co-working spaces places in Java and Bali. The 5 co-working spaces can be seen in Table 2.

Table 2: Co-working space and concept.

No	Co-working space	Address	Concepts
1	Kedasi	Jl. Cempaka Atas no. 24, Kelurahan Jati Pulo, Tomang, Jakarta Barat Telepon: 021-29401112 Email: ask@kedasi.co.id	Make use of its proximity to office and business environments
2	HackerspaceBDG	Jl. Dipati ukur no. 5 (Sukaluyu), Bandung, Jabar Telepon: 022-2534426 Email: halo@fowab.org	Carrying out the concept of donation in its management.
3	JDV (Jogja Digital)	Jl. Kartini no. 7 Terban, Kec. Gondokusuman, Yogyakarta, Jateng Telepon: 0274-556565 Email: admin@jogjadigitalvalley.com	Carry the free concept with Telkom as its endorser.
4	Ngalup.co	Jl. Sudimoro, Mojolangu, D'Wiga Regency. Kec. Lowokwaru, Kota Malang. @ngalup.co	Carrying out the concept of the event as a basis for its activities
5	Hubud	Jl. Monkey Forest no. 88X Ubud, Kec Gianyar, Bali Telepon: 0361-978073 Bit.ly/20X9dqV	Carrying out the concept of nature and open space as a basis for its activities.

The hope is that the results of the analysis using the business model canvas can map the potential as well as the opportunity to develop co-working space

on campus. Figure 4 shows the analysis of the business model from the co-working space.

<p><b>A. KEY PARTNER</b></p> <ol style="list-style-type: none"> <li>1. Community</li> <li>2. Internet service provider</li> <li>3. Cafe vendor</li> <li>4. Office stationery suppliers</li> <li>5. Members</li> </ol>	<p><b>B. KEY ACTIVITIES</b></p> <ol style="list-style-type: none"> <li>1. Meeting</li> <li>2. Project development</li> <li>3. Business deal</li> <li>4. Networking</li> <li>5. Events</li> </ol>	<p><b>D. UNIQUE VALUE PROPOSITION</b></p> <ol style="list-style-type: none"> <li>1. Co-working</li> <li>2. Design concept</li> <li>3. Meeting point</li> <li>4. Collaboration</li> <li>5. Exhibition project</li> </ol>	<p><b>E. CUSTOMER RELATIONSHIP</b></p> <ol style="list-style-type: none"> <li>1. Member system</li> <li>2. Networking</li> <li>3. Communities</li> <li>4. Special Price</li> <li>5. Gathering Party</li> </ol>	<p><b>F. CUSTOMER SEGMENTS</b></p> <ol style="list-style-type: none"> <li>1. Freelancer</li> <li>2. Professional</li> <li>3. Remote workers</li> <li>4. Communities</li> <li>5. Growing group</li> </ol>
<p><b>C. KEY RESOURCES</b></p> <ol style="list-style-type: none"> <li>1. Working space</li> <li>2. Free Wi-Fi</li> <li>3. Meeting room</li> <li>4. Comfort zone</li> <li>5. Coffee &amp; meals</li> </ol>		<p><b>G. CHANNELS</b></p> <ol style="list-style-type: none"> <li>1. Online platform (IG, YouTube Channels, FB, Twitter follower)</li> <li>2. Offline activities (Exhibition, Workshop, Event, Gathering)</li> </ol>		
<p><b>H. COST STRUCTURE</b></p> <ol style="list-style-type: none"> <li>1. Employee</li> <li>2. Facilities</li> <li>3. Maintenance</li> <li>4. Marketing</li> <li>5. Promotions</li> </ol>		<p><b>I. REVENUE STREAMS</b></p> <ol style="list-style-type: none"> <li>1. Rent meeting room</li> <li>2. Office rent</li> <li>3. Membership</li> <li>4. Venue rent</li> <li>5. Event supports</li> </ol>		

Figure 4: Analysis of business model canvas co-working space schemes.

## 4 RESULT AND DISCUSSION

The business model canvas analysis results are used to map potential that can be used to see opportunities for co-working space if developed within the campus. In general, it is found the fact that the average co-working space model has indeed made the community a key partner (A.1). These conditions are shown in Figure 5.

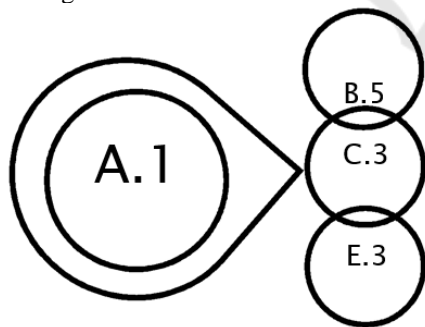


Figure 5: Community based co-working space.

From this scheme it can be seen that the relationship between co-working space and the community is very close. It also shows that community is still a key factor for co-working space. This means that positioning of the community occupies a strategic position for several reasons, namely:

- The community has relatively routine activities, namely events. Although not all

events are large-scale and strategic. So it is natural that co-working space has not placed events (B.5) as key activities.

- The nature of community activities that are more collective in nature so that placing the community as part of the customer relationship (E.3) that is built by the co-working space even though it is not yet a major priority.
- Because of the above, it is only natural that most co-working spaces still place the needs of the community as part of key resources by relying on meeting rooms although not the main thing (C.3)

To formulate the extent of the ideal conditions that can later be recommended as a fundamental platform in designing a co-working space, the survey results are first presented to show some of the influential variables in building co-working space. Some of the factors that become variables are: segmentation, activities, consideration, environment, design concept and average age. With the following data:

### 4.1 Segmentation

The results of the survey conducted from 5 selected co-working spaces. It shows that for segmentation variables, it appears that the co-working space user is still dominated by freelancers (37%). While the independent professional group (25%) is in the next position. The remote workers group (17%) and a growing group (13%) are in the next position. These conditions indicate that in fact the growing group has the potential to grow and accelerate optimally. Especially because the position illustrates that the

beginner segment includes students in it who might also be included in the others group (8%), becoming dynamic, open and growing segments. The co-working space based on segmentation can be seen in Figure 6.

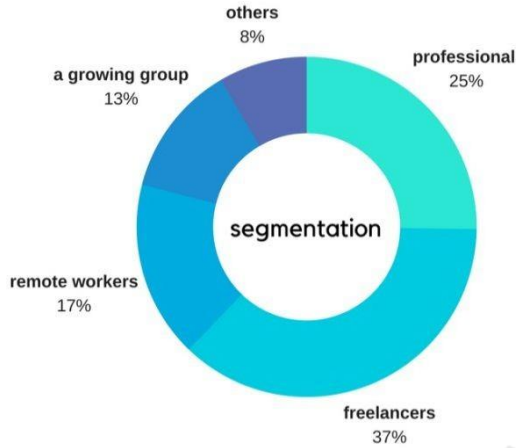


Figure 6: Co-working space based on segmentation.

#### 4.2 Activities

The survey results that have been carried out show that for variable activities, it appears that users of co-working space are still dominated by meeting activities (37%). Next, the project development group ranges (25%). The group with business deal activities and groups hang out in the same zone (16%). This means that there are still opportunities to optimize the group's productivity by hanging out activities, especially if added with the others group (8%). Assuming that the hangout group and the others are dominated by students.

#### 4.3 Consideration

The results of the survey that have been conducted, show that for the consideration variable of the user, it appears that the user of co-working space is still influenced by location factors (37%). Next, new factors are affected by facilities and price (24%). The group affected by ambience is in the next position (16%). This means that if contextualized on the opportunity to build co-working space on campus, there are opportunities. Due to location considerations where co-working space stands still affected by location. The co-working space based on consideration can be seen in Figure 7.

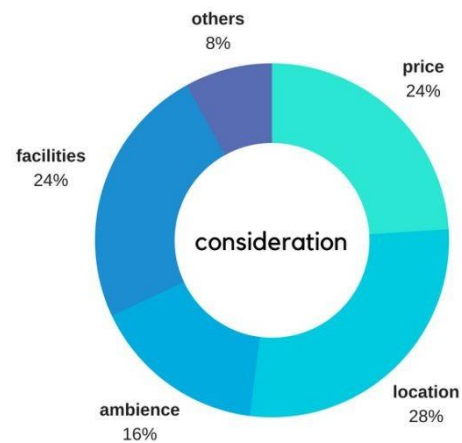


Figure 7: Co-working space based on consideration.

#### 4.4 Environment

The survey results that have been carried out, show that for the user environment variable shows at Figure 8, it appears that co-working space users are still influenced by cafe atmosphere (32%). The next user is influenced by music factors (27%) as the atmosphere. The group affected by garden (18%) and multimedia (14%) are in the next position. This means that if contextualized on the opportunity to build co-working space on campus, there is still an opportunity because the others (9%) might develop.

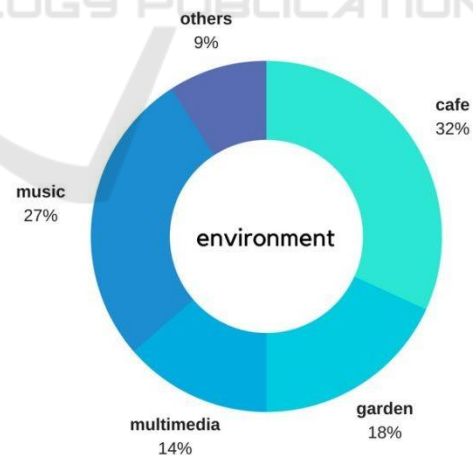


Figure 8: Co-working space based on environment.

#### 4.5 Concept Design

The survey results that have been conducted show that to design the concept as a variable from its users shows at Figure 9, it appears that the average user of co-working space is still influenced by the industrial



concept design (27%) and urban design (25%). Whereas in the next position the co-workers group was affected by eclectic factors (22%) as the design concept. Only then a small part of co-workers still choose an eclectic concept design (16%) as a concept that is considered appropriate for co-working space.

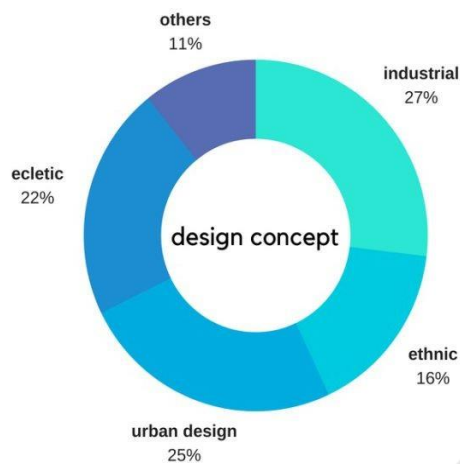


Figure 9: Co-working space based on design concept.

#### 4.6 Average Age

The survey results that have been conducted show that for the age variables of its users, shows at Figure 10 it appears that the user of co-working space is still dominated by those aged 30-39 years (33%). Next, followed by the age group 40-49 years (28%). While users in the age group of 20-29 years (17%) and 50 - 59 years (13%) are in the next position. This means that the opportunity to optimize in the age group of 20-29 years is dominated by students, especially if added with the group of the others (9%).

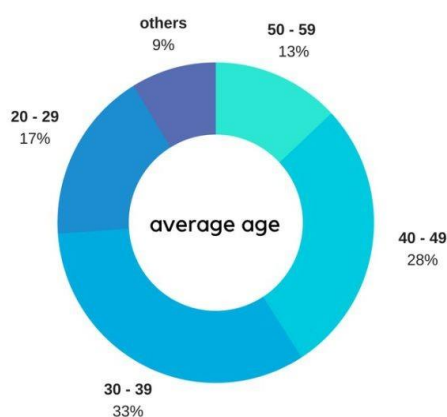


Figure 10: Co-working space based on average age.

To sharpen the results of Business Model Canvas analysis from the co-working space. In general, it produces 6 classifications according to the user's interests as follows:

- Co-working space based on its segmentation, is dominated by those from: freelancers, professionals, remote workers, a growing group and new segments.
- Co-working space based on its activities, dominated by activities ranging from: meetings, project development, business deals, hangouts and other activities.
- Co-working space based on choice considerations (considerations) is dominated by factors: location, price, facilities, ambience, and new other considerations.
- Co-working space based on the preferred environment, dominated by nuanced factors: cafe, music, garden / interior, multimedia and other factors.
- Co-working space based on the design concept, is dominated by the choice of concepts: industrial, urban design, eclectic, ethnic, and new followed by other concepts.
- The co-working space is based on the age range of its users, dominated by age groups: 30 - 39 years, 40 - 49 years, 20 - 29 years, 50 - 59 years and only other ages.

#### 4.7 Implications for Future Work

If (Spinuzzi, 2012) in the Journal of Business and Technical Communication at least managed to find a classification of two types of co-working space orientation, namely: a) Outward-facing front stage, which is a type of co-working space which consists of business actors who have background and expertise different. Then because they are in the same zone of co-working space then collaborate in serving clients. b) Inward-facing backstage space, namely several types of workers who are in a relatively similar field, then they all collaborate to serve the same client. The results of the analysis of this study found at least 3 classifications of co-working space based on projected arable fields that could be developed productively can be seen in Figure 11.

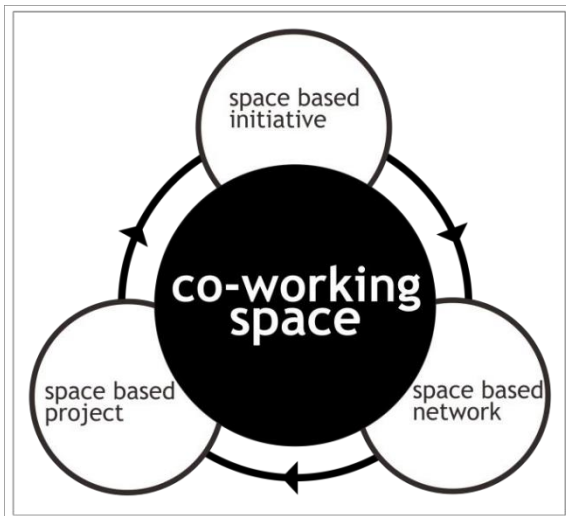


Figure 11: Co-working space based on arable field projections.

#### 4.7.1 Space Based on Project

It is a type of co-working space that is used as a space for gathering creative workers with the same motives in working on projects that have been obtained previously. In this type of co-working space, co-workers will be in a situation where the project to be developed has been agreed upon in advance. So that the position of the co-working space is pure as space to execute the project.

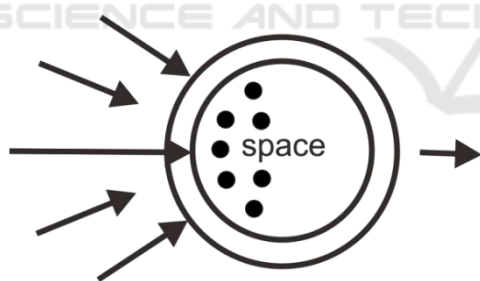


Figure 12: Space based on project.

The main character that develops significantly in this type is co-workers working on existing paths as their expertise background or their respective knowledge. This means that co-workers' passion for a project is relatively the same, even though their basic interests may be different. But co-workers who join the space already have a track record in managing the previous project. Like projects with types such as: program events (32%), personal projects (29%), start-up projects (26%) and others.

#### 4.7.2 Space Based on Network

Is a type of co-working space that is used as space to build or form a network at the same time. This type of co-working space is usually the type where the project that is focused comes from the relationships that are built between co-workers who interact before or when in the same space.

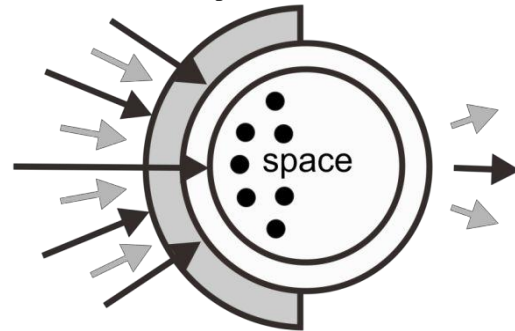


Figure 13: Space base on network.

The space with the project type is usually not final because some may still need to be developed. Therefore the opportunity to perfect the project depends very much on the network that is built in it and the relation between their expertise background or their respective knowledge. Co-workers involved are usually a combination of those who have a track record with those who are still in the early stages. Usually dominated by those who are incorporated into the classification: community (34%), partnership (31%), independent workers (23%) and new groups of users.

#### 4.7.3 Space Based on Initiatives

It is a type of co-working space that will be used as a space to initiate a project. Co-workers who join in, rely more on ideas or ideas that are brought from outside or when they are in the same space then explored. This means that co-working here acts as a space to design possibilities that are still open.

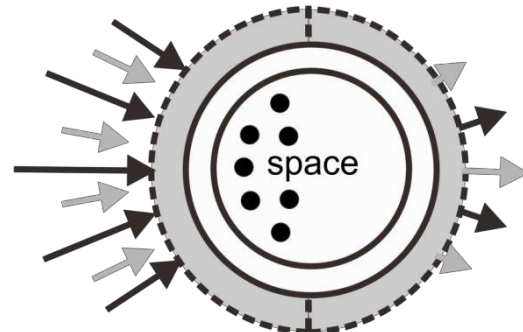


Figure 14: Space based on initiative.

The synergy in this space is very important, because the vision drive becomes dominant to determine the direction and type of project to be done. In general, this type of space will usually be filled with young co-workers, who come with diverse passion and basic knowledge. Of course co-workers who are involved are usually new to it for the first time or have relatively never had experience, so they have not succeeded in managing a previous project. In this space model actually the potential of co-working space is increasingly visible in its usefulness. Because in this segment students are usually present as productive users. What's interesting is that the type of co-working space based on this initiative is dominated by those involved in the industrial sector: creative (37%), online (33%), digital (21%) and new sectors.

This means that if you look at the potential of co-working space based on the basis of the project, network and industrial hub, it will be known the tendency of the dominant factors that influence their existence, namely:

- Co-working space based on the basis of the project is dominated by projects that are of a nature: event program, personal project, start-up project and other new projects.
- Co-working space based on its network base, is dominated by networks that are of a nature: community, partnership, independent workers and new networks.
- Co-working space is based on the industry sector basis, dominated by the industrial sector: creative, online, digital and other sectors.

## 5 CONCLUSION

Based on the results of the above analysis, it can be concluded that there is a functional relationship that is built from the co-working space by fulfilling the needs of developing student competencies related to transversal competencies. If we reread the key competencies formulated by UNESCO, the competency needs that students must have through the development of the co-working space will be answered. That is as follows; (1) to build critical competencies and innovative thinking, the co-working space will prepare or organize entrepreneurial activities to form application skills. So that it will shape the creative character of students, able to think critically and quickly in making decisions and then acting on arguments supported by complete data, (2) to realize interpersonal skills competencies, the co-working space will optimize the

function of meeting rooms to optimize space for mutual collaboration, socialization and organization. So that there will be wide open access to the emergence of initiations and ideas from students collectively or team work, (3) to realize the intra-personal skills competencies, the co-working space will elaborate its programs based on the development of self-potential both from the side of the manager and its users. So that the characteristics of students who have a mentality that has discipline, perseverance and high motivation will be built and committed to their choices with integrity, (4) to realize global citizenship competencies, the co-working space will facilitate the formation of global networks and give birth to understanding intercultural differences. So that the character of students will be formed who have the attitude and character of being open, tolerant, responsive, appreciating diversity, and sensitive to the environment and able to reduce issues that have the potential to trigger conflict.

This means that co-working space is appropriate and relevant to be held on campus. With the presence of co-working space on campus, it is possible to accelerate the formation of transversal competency in student characters. Especially if the implementation of built co-working space is not only based on space based on project schemes. But the campus as the organizer as well as the user, must dare to optimize the potential of co-working space with a space based on network scheme and space based on initiatives at the same time simultaneously.

## REFERENCES

- Care, E. and Luo, R. (2016) *Assessment of transversal competencies: Policy and practice in the Asia-Pacific Region, Network on Education Quality Monitoring in the Asia-Pacific*. Available at: <http://unesdoc.unesco.org/images/0024/002465/246590E.pdf>.
- Kwiatkowski, A. and Buczynski, B. (2011) *Coworking: How Freelancers Escape the Coffee Shop Office*. Fort Collins.
- Organisation for Economic Cooperation and Development (OECD) (2005) *The Definition and Selection of Key Competencies: Executive Summary*. Paris.
- Osterwalder, A. and Pigneur, Y. (2010) *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. Wiley.
- Rychen, D. S. and Salganik, L. H. (2000) 'Definition and selection of key competencies', in *THE INES COMPENDIUM (Fourth General Assembly of the OCDE Education Indicators programme)*. Paris: OCDE, pp. 61–73.



- Spinuzzi, C. (2012) 'Working alone together: Coworking as emergent collaborative activity', *Journal of Business and Technical Communication*, 26(4), pp. 399–441.
- Tepper, S. J. (2002) 'Creative assets and the changing economy', *The Journal of Arts Management, Law, and Society*, 32(2), pp. 159–168.

