The following publication Tsang, K. K. M., & Siu, K. W. M. (2016). The 3Cs model of sustainable cultural and creative cluster: The case of Hong Kong. City, Culture and Society, 7(4), 209–219 is available at https://doi.org/10.1016/j.ccs.2016.09.001.

The 3Cs Model of sustainable cultural and creative cluster: The case of Hong Kong

1. INTRODUCTION

The global economic structure sees a fundamental change in the post-industrial era. The Cultural and Creative Industries (CCIs) becomes a key driver for profit making and a new orthodoxy to urban viability (DCMS, 2001). In order to support the Creative Industries, clusters in various forms and scales have been erected across the globe; many governments follow the successful formula from the West, i.e., by retaining the creative practitioners together through the provision of large space with cheap rent. In 2010, over 300 artist villages of various size and function were founded all over the world (Hong Kong Arts Development Council, 2009). However, whether the clusters able to grow and develop sustainably is one of the major challenges for the creative cluster. For the densely populated city like Hong Kong, land is the outmost important sources; it is a waste of resource if the cluster cannot meet the real needs of the creative practitioners, let alone the expansion of creative industries.

It is believed that establishment of cultural and creative cluster (or, cultural / creative cluster) becomes an uncritical strategy in sustaining the creative industries. The cluster approach not only becomes an attractive strategy to regional development, it has also drawn much scholarly attentions. As clearly stated by Martin and Sunley (2003), the notion *cluster* has become 'a world-wide fad, a sort of academic and policy fashion item' (p. 9). Since the canonical theory on cluster developed by the influential geographic economist Alfred Marshall (1890) and Michael Porter (1998) on economic perspective of the cluster, a wide range of scholars from cultural, political and even technological fields had their inputs in the discussion (Bayliss, 2007; Comunian, 2010; Cooke & Lazzeretti, 2008; O'Connor & Gu, 2014; Sasaki, 2010; Zukin & Braslow, 2011).

Regarding the setup of cluster, the focus of studies has also extended from the spatial qualities of cluster (Jacobs, 1961; Landry, 2000) to wider social and cultural context of the cluster. Other areas of discussion have been connected to the development of cluster, for example, relation between cluster and network formation are the key concerns for the works of Harvey, Hawkins & Thomas (2012) and Kong (2009). While other group of scholars focused on the relation between cluster development and creativity (Drake, 2003; Mensburger 2009; Leslie & Rantisi, 2011; Grandadam, Cohendet & Simon, 2013.) Also, Adler (2015) & Capaldo (2007) also highlighted the close relation between the creative community and creativity.

Definitely, it is rewarding to link up the development of cluster with creativity or community in the scholarly discussion. However, such dualistic preposition towards the cluster study could not totally explain the complexity of cultural and creative cluster in a number of ways. Firstly, some researchers do not consider creativity in their studies, the sole emphasis on the relation between community and cluster has light-ened the unique mode of creative production. As cultural and creative cluster has its own logic in operation due to the unique lifestyle of creative practitioners. The homogenous practice in running the industrial clusters does not ensure the success of creative clusters in every city (Kong, 2009; Mommaas, 2009).

Secondly, for those who mainly stresses on the relation between cluster development and creativity, it will be problematic to downplay the importance of community formation in the cluster. As mutual support and trust generated within the creative community are the vital factors for holistic development of creative practitioners. Remarked by Rantisi (2004), "Creative process does not occur in a vacuum" (p. 91) and community does not form arbitrary. With reference to the extensive empirical study on cultural and creative space in Chicago and New York conducted by Llyod (2005) and Currid (2007) respectively, both further highlight the crucial elements in the making of successful cultural and creative space is not solely the bounded space itself, but the quality of neighbourhood space that favour and support the creative community. In the present literatures, some influential studies (Brooks, 2000; Florida, 2002; Lloyd, 2005) indicate the importance on the study of creative community and the cultural and creative clusters.

Thirdly, for those who focus on community formation and creativity may neglect the qualities of place that encourage creative production. As highlighted by Landry (2002), creative milieu could be produced with the presence of both soft and hard in-frastructures. The basic amenities and physical environment are therefore influential to support the unique nature of creative production.

This paper thus emphasizes the importance of considering the correlation between three factors, i.e., quality of cluster, formation of community and happening of creativity in constructing a sustainable cultural and creative cluster. Moving forward, this paper will be organized as follows: (a) The conceptual model of Cluster, Community and Creativity, i.e., 3 Cs model for the sustainable cluster; (b) Case studies for demonstrating the applicability of 3Cs model by comparing a large planned creative cluster and an organically formed small creative cluster in Hong Kong; and (c) Verification on the sustainability of clusters. This paper will end by re-examining the very meaning of cluster and clustering in the densely populated city.

2. SUSTAINABLE CUTLURAL AND CREATIVE CLUSTER

Sustainability is a fuzzy concept that has a wide range of definitions according to different disciplines. This paper would adopt the definition of sustainability from the studies of Kong (2009; 2012). She carefully defined sustainability of cluster in terms of social, cultural and economic aspects in Asian context.

According to Kong (2012), social sustainability relates to "the sense of support that derives from social interaction within the space" (p. 187). This paper agrees that the community building is the fundamental factor for a sustainable cluster. To demonstrate the effectiveness of formation of community, the *dropout rate* under affordable rent is therefore an important indicator to see if the tenants are willing to stay or leave the cluster when the economic burden is not the major concern. For the cultural sustainability, Kong refers to "The continued ability for cultural workers to engage in their cultural work, and the conditions that support the specific nature of that cultural work" (p. 186). This paper basically agrees with Kong's understanding on cultural sustainability, but a bit moderation will be made as Kong's research target was mainly about artists, while this study focus on designers who need to particularly consider the commercial needs. The cultural sustainability in this paper emphasizes the continuous ability to produce new creative works. From Kong's sense, the economic sustainability

ity could be understood as the happening of commercialization, this study would investigate the commercial activities found in the cluster.

Therefore, the sustainability of cultural and creative cluster could reflect from three areas: (1) dropout rate of the tenants; (2) change in operation mode; and (3) new form or collaboration of creative works.

3. CLUSTER- THE QUALITY OF CLUSTER

Numerous academic literatures have stated the importance of geography or spatial setting of the cluster (Cunningham; 2002; Scott, 2006; Kong & O'Connor, 2009), however, moving forward to the very practical concerns of cluster, a more systematic and detail framework should be developed.

Studio, where the creative practitioners produce their creative works, is more than a working space for temporary stay, it is essential to see how do the cluster meet the practical needs and fulfil the well-beings of the users. The proposed model makes reference to the classic theory *Hierarchy of need* by Maslow (1943), which introduced different levels of attainment for the well beings of people; different levels of need rather than generalized qualities are suggested for a sustainable working environment. Therefore, this conceptual model covered three levels of needs including (a) Basic need, (b) Specific need based on disciplines, and (c) Psychological need.

3.1 Basic Need

The first level is *basic need, which* includes the basic conditions (for example, the space with affordable rent) and amenities that retain the stay of creative practitioners. Those basic but essential amenities are suggested for the day-to-day practice for creation and realization.

3.2 Specific Need Based on Disciplines

The second level is the special needs especially important for different art and design disciplines. Although many scholars have highlighted the unique production mode of creative practitioners, the specific need relates to their own disciplines were often ne-glected. For example, product design requires workshop for prototype production or related testing. While fashion design requires ample space for storing fabrics and materials.

3.3. Psychological Need

According to the study of Landry (2005), both hard infrastructures and soft infrastructures are integral part for the making of creative milieu. Besides supporting the practical work, this level of needs is at a more advanced level. Many cultural establishments like live music house, gallery, greenery, sport court nearby will bring positive effects to the creative practitioners. The private toilet and reputation of the cluster may raise the level of satisfaction and support their self-esteem.

4. FORMATION OF COMMUNTIY

Many scholarly works (Brooks, 2000; Florida, 2002; Lloyd, 2005) indicated the importance on the study of raising creative groups and the cultural and creative clusters. As noted by Currid (2007) and Llford (2005), formation of creative community was the most crucial factor in the making of vibrant cultural creative clusters. In the study of community, three lines of thoughts could be commonly found in the scholarly discussion. Starting from the classical work of Tönnies on Gemeinschaft and Gesellschaft i.e. community and society in 1957, the concept of community has become a well-established sociology discussion. Following the classical work of Tönnies, many researches shed light on the importance of social network (Piselli, 2007; Kong 2005;Coe & Johns 2004); imagined community (Malkki, 1994) or the Community of Practice(CoP) introduced by Lave and Wenger (1991). We cannot deny the weak tie and social network may help the making of business; however, such remote relationship is weak in building up close relationship among the creative practitioners that are empirically important to the formation of creative community. As highlighted by Brint (2001), level of mutual support and trust is greater in this type of community comparing to other form of communities i.e. imagined communities or Community of Practice (CoP).

Therefore, this paper makes reference to the disaggregated approach on community by Durkheim, which emphasizes the traditional form of human interaction rather than taking community as a generic concept or social structure. Brint (2001) further extracted the concept of community by Durkheim and identified six important variables to understand the formation of community. Those variables, were categorized as structural variables and cultural variables, were particularly useful in evaluating the quality of community.

4.1 Structural Variables

Based on Brint's work (2001), three areas of the structural variables had been adopted: (1) dense and deafening social tie; (2) social attachments to and involvements in institutions; and (3) small group size (in relation to spatial setting) (p. 3). In order to fit well with the context, the first variable included both formal and informal interaction, the possibility of diversified face-to-face contact was vital in forming relationship e.g. formal networking session and trade show. Also, different level of informal of interaction like encounter, chitchat, having meal, entertainment, activities inside /outside the site were included. Participation of activities organized by the site or participation of ceremonial activities of the site showed the sense of belongings generated. The small number of creative practitioners in site also benefited the formation of community.

4.2 Cultural Variables

The feeling of safety and comfort could be enhanced through the social identification. Two cultural variables become crucial indicators to highlight its importance to the community. They are (1) perceptions of similarity with the physical characteristics, expressive style, way of life, or historical experiences of others are the basis for social identifications; and (2) common beliefs in an idea system.

5. HAPPENING OF CREATIVTIY

As stated by Comunian, Faggian and Li (2010), creativity becomes an unchallenged but fuzzy concept. What makes the creative people innovate should be the key consideration in the setup of creative cluster. Few studies were serious about the notion in itself but rather measure its effectiveness by all means. In fact, creative production is by nature spontaneous and unpredictable. If the setting of cluster does not support the happening of creativity, it is meaningless to call such place as creative cluster.

This paper shares the view on creativity with Drake (2003) that creativity should not be examined in its own sphere. Creativity was often regarded as the outcome of social process; the collective nature had been pinpointed. The sociocultural approach towards the creativity was adopted in this paper that research was initiated by Amabile (1983) who highlighted that definitions of creativity should include two key factors, i.e., (a) *Novelty* of product / process and (b) *appropriate to some domain of human activities* (Sawyer, 2012) These two terms could help to illustrate the value and operation of novelty and appropriateness in a practical way.

5.1 Novelty

Under (a) Novelty, three components would be accessed: (1) availability of different domains i.e. the availability of multidisciplinary and dynamical synergistic environment; (2) New works to the domain, and (3) Chance for divergent thinking (for inspiration).

5.2 Appropriation

For (b) Appropriation, chance for exposure of creative outcome is a crucial way for the design field, for example, the market transaction is an important way to know the feedback and response from the market. Event or activities for (1) Self-initiated chance for exposure, or (2) Officially organized event for exposure could help to evaluate if the cluster could support the creative production.

<u>6. THE 3Cs CONCEPTUAL MODEL – THE COLLRELATION OF</u> <u>CLSUTER, COMMUNITY AND CREATIVTIY</u>

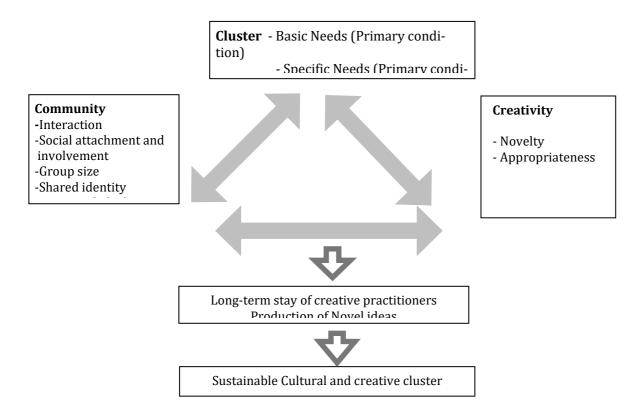
In this 3Cs model, three factors are regarded as the fundamental elements for creative production. Three factors do not function independently but they are interwoven to support the creative practitioners (refer to Fig. 1).

As cluster is not simply a physical site, it also refers to the spatial settings that support the special nature of creative production. The basic needs and specific needs could be regarded as primary condition for them to stay at the cluster, in addition, the psychological needs should be considered due to the unique characteristics and production mode of creative practitioners. Actually, the spatial setting of cluster will largely influence the chance of face to face interaction and stimulate the spurring of creativity.

Formation of community among the practitioners is crucial that it allows information exchange and mutual support of practitioners. Especially for the creative production which often highlights team work and collaboration, the cultivated sense of belonging and mutual trust among the creative practitioners support the creative work in a positive way. The frequent social interaction actually generated the "trust-based, cooperative behaviour" (Bassett et al. 2002, p. 172).

With the long term stay of creative practitioners, spatial settings encourage interaction between the creative minds-alike under the creative atmosphere. Novel ideas will be generated simultaneously and as one of the ultimate goals of creative cluster.

Therefore, the conceptual model comprised three aspects i.e. quality of cluster, formation of community and the happening of creativity, namely the 3Cs model. The detail parameters of the three factors will be discussed and analyzed in the conceptual model for sustainable development.



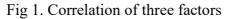


Fig. 2 Detail	s of 3Cs Mc	odel		
	(a) Basic No	eeds		
Cluster	Parameters		Examples	
	Inside the site	Conditions for stay	Space with affordable rent	
		Amenities	Window Air-conditioning system(Central/ split system)	
			Elevator(Passenger/ Cargo)	
	Surrounding	g environment	Convenient transportation Affordable meal	
	(b) Specific	need based on de	esign disciplines	
	Parameters		Examples	
	Inside the si	te	Graphic- e.g. provision of printing & exhibition venue Photographic studio- e.g. provision of high ceiling premises) Fashion & Product – e.g. provision of showcase, workshop, storage	
	Surrounding	g environment	Graphic – printer, courier Fashion & Product –resources, materials, courier	
	(c) Psychol	ogical need		
	Parameters		Examples	
	Inside the site Surrounding environment		Meeting place (formal / casual), place for enter- tainment, relaxation, flexible management, strict security, reputation of the cluster Environment (Open space, fresh air & greenery) Cultural facilities (Live music house, café, gallery)	
Community	(a) Structure			
	Parameters	5	Examples	
	Dense and	Formal	Chance for networking	
	deafening	interaction	(e.g. event opening , market fair, trade show)	
	social tie	Informal	Chance for encounter, chitchat,	
		interaction	Information exchange, meal, entertainment, collab- oration, activities inside the site, activities outside the site	
	Social attack	nments ments in the site	Active participation of activities organized by the site (e.g. Open day, festival celebration)	
	Group size (in relation	to spatial setting)	Small group size preferred	
	(b) Culture			
	Parameters		Examples	
		of similarity with t		
	sive style, w	racteristics, express vay of life, or histo		
	Common be	nce of others eliefs in an idea system	1	
Cruce the ite	tem, an insti		planning)	
Creativity	(a) Novelty		E l	
	Parameters		Examples	
	Availability mains	of different do-	Varity of domains in the site	

New works to the domain	New designs/works/projects
Chance for divergent think-	Chance for brainstorming, inspiration and sharing
ing (for inspiration)	
(b) Appropriateness	
Parameters	Examples
Chance for exposure	Official organized event for exposure
_	(e.g. trade show, exhibition, flea market, showcase and
	display)
	Self-initiated activities for exposure
	(e.g. trade show, exhibition, flea market, showcase and
	display)

7. SCENARIO IN HONG KONG

Since 2005, Hong Kong recognized the economic potential of Cultural and Creative Industries (CCIs). In order to generate the considerable economic revenue, a number of measures had been suggested to develop Cultural and Creative industries as one of the 'Six industries' of the city (*Policy Address 2009-10*, 2009) In 2010, the government aimed to position Hong Kong as '*Asia's Creative Capital'* (*Information Services Department Hong Kong*, 2010) by developing "creative clusters in the territory to generate synergy and facilitate exchanges" (Create HK, 2009). Besides the controversial mega project West Kowloon Cultural District (WKCD), more than 7 instituted and 8 organic cultural and creative clusters could be found in this highly dense city.

However, the agglomeration of creative practitioners did not guarantee the sustainable development of cultural and creative clusters. Complaints and negative feedbacks of these cultural and creative clusters were frequently discovered from the users and creative practitioners ("Can revamped Police Married Quarters succeed as a hub for local design talent?", *South China Morning Post*, 18 April 2014). Facing the skyrocketing rent in the market, creative practitioners with limited budge preferred to set up the studio outside those subsided clusters. Ironically, some vibrant cultural and creative clusters formed organically in some worn-out factories, warehouses or at the subdivided flats without fresh air.

In order to address the applicability of model in the dense city, two cultural and creative clusters in Hong Kong had been selected for further discussion. The first one, PMQ, was a large-scale revitalized creative cluster set up by Hong Kong Government. The site was regarded as the creative landmark of the city after its completion. Another case, Easy-Pack Creative Precinct, was a small creative cluster formed organically in the old industrial area. They were selected because they reflected two different forms of clusters in terms of scale (large versus small), planning and management (top-down versus bottom-up approach) and support (subsidized rent versus selffinance) so that it could demonstrate the applicability and validity of the model for sustainable cluster.

7.1 PMQ - the Official Instituted 'Creative Landmark'

Opened in 2014, PMQ, named as the 'Hong Kong's New Creative Landmark' (official website of PMQ), was a \$500 million heritage conservation and revitalization projects by revitalizing the historical building. PMQ was recognized as the key development strategies for promoting the creative industries in the city. The project was run by a non-profit-making registered charitable organization in collaboration with government body, university and design institute.

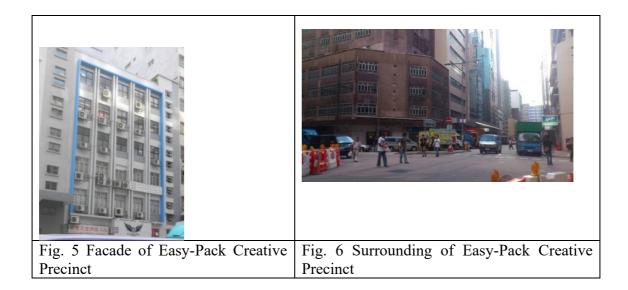
A brand new 'studio-cum-shop' concept was the major selling point of the site that the tenants had both work place and retail store in the premises. Not only did it offer more than130 studio units (approximate 40 m² per unit) for the start-up creative practitioners, it also provided ample space for events and exhibitions.

The site comprised 6000 m² floor area and was granted as Grade 3 historic building. Apart form the rich cultural and historical background of the building, the cluster had a number of strengthens including the ideal location for art and design, subsidized rent, strong project team, specialized PR for frequent events and promotions and guided tour for visitors. PMQ was surrounded by a wide range of cultural and historical spots like Dr. Sun Yet-sen Historical trail, galleries, antiques shops, boutiques and trendy shops selling edgy fashion and designs. Also, it was in close proximity to a handful of fine dining, café and bars in SOHO area.

7.2 Easy-Pack Creative Precinct- The Creative Cluster in Subdivided Flat

In contrast to the PMQ, Easy-Pack Creative Precinct was a cluster of old factory located at the industrial district Kwun Tong. It was a 40 years old industrial building with 5-story. The present owner bought the building and established the Easy-Pack Manufacturing Limited in 1982. Due to the location and the lack of elevator, the owner used only two floors and the three upper floors were remained abundant. In 2011, the site was turned into a small cultural and creative cluster. In order to maintain the reasonable rent for the practitioners, the property owner divided the gross floor area into many small premises with shared toilets and pantry; the format of the cluster was in the style of subdivided units, which was a new kind of rental house in Hong Kong. Currently there were 16 premises in the cluster that housed 18 creative practitioners/groups from various creative industries.





8. METHODS

An empirical study was conducted in Hong Kong from September 2012 to October 2015. Data of this paper emerged from direct observation and semi-structured interview to illustrate the applicability of the model. Direct observation on two sites was undertaken during weekdays/weekends and different periods of time. While the interview data used in this paper was derived from 35 creative practitioners who set up their design studio at two sites i.e. PMQ and Easy-Pack Creative Precinct. All interviews were undertaken in a face-to-face format at the studio of interviewee. Each interview lasted for approximately one and half hour. The interview was aimed to collect primary data on (i) usage of the studio in the cluster, (ii) the relationship between the creative practitioner and the locality as perceived by the creative practitioner, and (iii) the formation of creative community and happening of creativity within the cluster.

9. FINDINGS

9.1. Comparison of PMQ and Easy-Pack Creative Precinct under the 3Cs Model

9.1.1 Comparison on quality of cluster

With strong support and detail planning, PMQ provided very good environment with subsidized rent. Places for showcase and retail were the outstanding features of PMQ that many creative practitioners dreamed of. The ample open space, various exhibition and event venues, garden, high-end cafe and dinning place and handful of cultural and historical establishments nearby fulfil the *Basic needs* and *Specific needs* of the tenants. However, the spatial setting did not meet the *Psychological needs* of creative practitioners as it discouraged the tenants to work. The presence of good environment and facilities turned the site into a popular tourist spot rather than the place for creative production. According to the promotion booklets of PMQ (2015), there were over 3millions visited since its opening in 2014. Many visitors came to the site for phototaking and dinning (Fig. 7). During the interview, all interviewees clearly expressed that they seldom used the public area and garden outside their premise as they don't have any purpose to stay outside and they were required to keep the door open. The

frequent patrolling of security make sure the studios open door, and mark would be deduced if they failed in following such rule. The strict management actually hindered their work.

On the contrary, the Easy-Pack Creative Prescient had a number of drawbacks in the spatial setting in terms of *Basic needs* and *Specific needs*. With the small unit and unpleasant surrounding, the environment was not desirable for both tenants and visitors. However, the satisfaction of psychological aspects overcame the physical drawbacks. The enclosed spatial setting, corridor with warm lighting, small but well-equipped pantry, free of charge rooftop garden for relax and prototype testing and humanistic management encouraging flexible use of space helped the building of sense of belonging and further supported the formation of community.



9.1.2 Comparison on the formation of community

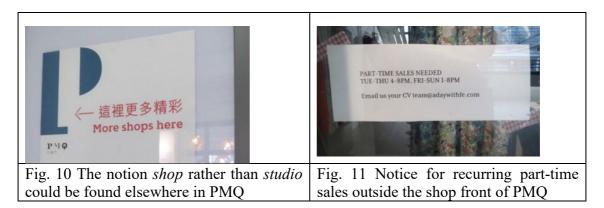
In PMQ, the brand new 'studio-cum-shop' concept and the architectural structure were the outstanding features of cluster, the subsidized retail space in high end shopping district was attractive for the start up to showcase their work. In reality, these characteristics hindered the creative production and even weakened the possible social tie between tenants. In order to keep the shop open , many designers had to recruit part-time staff to take care of the shop while he/she was away for sourcing , meeting or production. Some interviewees mentioned that they needed some time to identify which one was the designers but not the sales. In order to cater the retail need, the designers seldom left the premise unless it was necessary. In addition, interviewees mentioned that the architectural setting lowered the motivation for interacting with others, as the cluster was structurally divided into two sections i.e. two individual blocks connected by 4th floor garden. Unless his/her premise was located at the 4th floor, the practitioner had to go up/down and to walk through the garden for accessing premises at the opposite block. It was seldom to see the practitioners wandering around or chitchatting with other tenants in the site.

From the signage to the public notice, the notion *shop* rather than *studio* could be found elsewhere. (Fig .10) Such understanding of the premise could also be reflected from the interviewees of PMQ that they regarded the site mainly for retail purpose. Apart from retail /working/ meeting, other form of activities rarely happened in the premise. Most practitioners left the premises immediately after work, they would not stay at the premise for any kind of relaxation, chitchatting and entertainment which were important factors for making connection, as reported by all interviewees.

On the contrary, Easy-Pack Creative Precinct was a small cluster with a number of weaknesses and limitations, but the creative practitioners regarded it as an anchor rather than merely a workplace. They formed a strong community with dense social ties. First of all, due to the small size of the cluster, interviewees bumped into each other at corridor, staircase and lift on nearly daily basis. Through the day-to-day encounter, tenants got familiar with each other by chitchatting, dinning out, playing video games etc. Most interviewees shared the experience on hanging around at others' studios for few hours due to the cosy atmosphere in the site. Different festive gatherings like moon cake sharing, hotpot gathering and BBQ evidenced the close relationship between the creative practitioners in the cluster. Sometimes they went out together for picnic, local band show and film appreciation.

In this site, the creative practitioners had built up a strong sense of community and belonging that whenever there was an event happened in the site; for example, rooftop music show, workshop and flea market, most tenants showed support by participating and promoting the event through the social media e.g. their Facebook or Instagram. Also, they organized joint exhibition and some tenants even initiated camping activities at rooftop garden regardless the noisy and polluted industrial area.

As emphasized by most interviewees that it was not easy to make a living in the fields of cultural and creative industry in Hong Kong. The long working hour with low income usually made them frustrated. It was therefore important to have the exchange of information and mutual support among the peers. Similar situation was also evidenced in Kong's study (2005) on Hong Kong film industry that social networks, interpersonal relationship and trust were the crucial elements in different stages of the creative works. (p.67)





9.1.3 Comparison of happening of creativity

PMQ was named as the new creative landmark of Hong Kong, provided great chance for work exposure. Not only did the premise serve the retail function, the possibilities for receiving comment/ feedback/recognition from buyers and customers were much greater.

Even though there were over 80 creative premises at PMQ, only 3 major domains of creative industries could be found. Similarity of business nature and work mode did not favour the spurring of creative idea, even worst competition between creative practitioners were resulted. Since the formal opening, only one joint sale initiated by a group of tenants at 4th floor was recorded.

For the Easy-Pack Creative Precinct, there was no official chance for showcase and display of the creative works. Some tenants had therefore initiated a number of flea markets to get the feedback from customers or experts. However, in this small cluster, there were seven major domains of creative industries which were beneficial to divergent thinking. As a result, a wide range of collaboration and crossover projects between different units could be found. A new group was even formed from three different creative units i.e. leather workshop, product design and music label. Tenants of Easy-Pack Creative Precinct attained high level of novelty.

	Fig. 14 Compa	rative table of Easy	-Pack Creative Precinct and PMQ		
Factors	Parameters	Parameters		РМQ	
Cluster (17)	Basic need (8)	Studio Unit	tive Precinct Subdivided studio unit (Weak)	Large studio unit (Strong)	
		Purpose	Studio purpose only (Weak)	Flexible /Multi-purpose studio space (studio cum shop/studio/shop) (Strong)	
		Rent	No subsided rent (Weak)	Concessionary Rents (Strong)	
		Window	Not all premise has window(Weak)	Every unit has windows and balcony (Strong)	
		Air-conditioning	Split air- conditioning system (24 hours availa- ble) Possible to work round the clock under hot and humid climate (Strong)	Central air-conditioning system (11am-11pm available) Impos- sible to work round the clock under hot and humid climate (Weak)	
		Elevator	l elevator (for both cargo and passenger use) (Weak)	6 elevators (2 cargo elevators and 4 passenger eleva- tors)(Strong)	
		Transportation	Convenient trans- portation (3-5 mins walking distance from major transportation) (Strong)	Inconvenient transportation (10-15 mins walking distance from major transporta- tion)(Weak)	
		Meal	Affordable meal available (e.g. factory can- teen near- by)(Strong)	Mainly expensive meal (High –end café and dinning places in SOHO)(Weak)	
	Specific need (2)	Supporting facil- ities inside the site	Limited supporting facilities for crea- tion, testing, pro- duction. No formal exhibition and event venue (Weak)	Professional photo shooting studio. Various exhibition and event venues. Shopfront for display and retail. (Strong)	
		Supporting facil- ities in the sur- rounding envi- ronment	Various disciplines related resources available nearby (e.g. printer, couri- er and hardware stores)(Strong)	Limited disciplines related re- sources available nearby(Weak)	
	Psychological Need (7)	Public spaces inside the site	Public spaces for casual meeting, gathering, enter- tainment &relaxation (e.g. Rooftop garden, lift lobby, staircase,	Formal meeting room, ample open space with greenery for relaxation (Strong)	

			some larger studios	
			in the site) (Strong)	
		Management of the site	Flexible manage- ment (Strong)	Strict management (noise cau- tion , open door policy –fixed opening hour) (Weak)
		Security of the site	Mid level of securi- ty (No security guard, equipped with CCTV .The main entrance is locked after 8pm) (Weak)	High security level (security company with frequent patrol- ling and CCTV) (Strong)
		Surrounding environment (open space, fresh air and greenery) Cultural facili-	Serve air pollution due to busy traffic and concentration of factories .Noisy and busy traffic with frequent load- ing of lorries (Weak) Next to the auto-	Nice environment with fresh air, plenty of greenery and am- ple open space. Quite and relax environment (next to the histor- ical trail) (Strong)
		ties in surround- ing environment	motive repair shops and hardware store (Weak)	shop (cultural atmosphere) . (Strong)
		Sense of security in surrounding environment	Poor sense of secu- rity due to many back alleys with dim light at night (Weak)	Good sense of security at night (Strong)
		Reputation of the cluster	No official promo- tion of the site (Weak)	The site was promoted as the legitimated home for the local and young creative practition- ers. Strong marketing and pro- motion. (Strong)
Community (5)	Structure (3)	Formal/ informal inter- action	Many chances for networking in event opening and flea market. Frequent day to day interac- tion in different public spaces. Strong social ties formed among the creative practition- ers (e.g. frequent encounter, chitchat, meal, TV game, appreciation of mu- sic show at live music house)(Strong)	Limited interaction (for- mal/informal) between the prac- titioners in the site under the open door policy & spatial set- ting. Common space was used by visitors (for photo taking / taking rest), tenants seldom use the common space. Weak so- cial ties formed among the crea- tive practitioners (Weak)

		Social attach- ments and in- volvements in the site	Active participation of the events orga- nized by the site (e.g. Joint exhibi- tions, flea market, rooftop music show, BBQ, hotpot and other festival activities) (Strong)	Passive participation of the events organized by the site (e.g. markets were held on a regular basis , but participants were mainly outsiders but not the tenants) (Weak)
		Group Size	18 creative groups- small group size preferred (Strong)	85 creative groups –difficult to develop dense social ties under big group size (Weak)
	Culture (2)	Perception of similarity with the physical characteristics, expressive style, way of life, or historical experi- ence of others	All tenants are crea- tive practitioners with similar work- ing hours and work patterns. (Strong)	Creative practitioners and sales persons mixed together. They have various work modes. (Weak)
		Common beliefs in an idea sys- tem, an institu- tion	Creative practition- ers with similar believes and future plan work in the site.(Strong)	The site was turned from nurtur- ing creativity to the marketplace of creativity. Creative practi- tioners have diversified believe in the mission and operation of the site. (Weak)
Creativity (5)	Novelty(3)	Availability of different do- mains	7major domains of creative industries could be found in the site . (fashion / product /interior /music /branding/ graphics /design service)(Strong)	3 major domains of creative industries could be found in the site. (Fashion &Accessories Design/ Product & Gifting de- sign/ Lighting & Exhibition Design/Cultural Design) (Weak)
		New works to the domain	Various new form of works (e.g. commercial/ cultur- al / cultural and commercial creative activities) could be found (Strong)	Limited new designs could be found (Weak)

	Chance for di- vergent thinking	Frequent collabora- tion /Cross-over work between ten- ants (Strong)	Limited interaction between creativity practitioners (limited chance for divergent thinking) (Weak)
Appropria (2)	ateness Chance for expo- sure (official event)	Few official orga- nized event for ex- posure. Low in popularity due to the lack of promo- tion (Weak)	Official display and showcase of the work Strong promotion and marketing (i.e. site promo- tion /event organization (Strong)
	Chance for expo- sure (Self-initiated event)	Self-initiated mar- kets to showcase some works (Strong)	Self-initiated Sale activities organized by some tenants (Weak)

10. EVALUATION OF PMQ AND EASY-PACK CREATIVE PRECINCT UNDER THE 3Cs MODEL

In the proposed 3 Cs model, the cluster-community-creativity could be broken down into several parameters for evaluation. For Cluster, there are 17 parameters i.e. *Basic need* (8 parameters), *Specific need* (2 parameters) and *Psychological need* (7 parameters). As the areas for investigation in cluster are relatively explicit and tangible, more parameters are included. For Community, there are 5 parameters i.e. *Structure* (3 parameters) and *Culture* (2 parameters). Similarly, 5 parameters are considered under Creativity i.e. *Novelty* (3 parameters) and *Appropriateness* (2 parameters). The two sites were examined under the 3 Cs model (please refer to the fig 14), the result are summarized as below:

10.1 Easy-Pack Creative Precinct

For the factor Cluster, less than 40% parameters shows good performance. However, Easy–Pack Creative Precinct is strong in both Community and Creativity factors. Especially for the factor Community, all parameters show strong performance in this site. Meanwhile, 80% of the parameters measured for the factor Creativity are considered to be strong.

<u>10.2 PMQ</u>

PMQ performed well in the Cluster factor, which over 70% of parameters shows good performance. On the contrary, the well-equipped cluster does not guarantee positive result in the Community and Creativity areas. There are no parameters for the factor Community considering to be strong. For the factor Creativity, only 20% of measured parameters are considered to be good.

At first glance, the profile of PMQ was better than Easy-Pack Creative Precinct in terms of resources, facilities, environment and location. However, when two cases were examined under the 3Cs model, it clearly showed that PMQ was strong in cluster. For the factor Community, PMQ was weak in both structure and culture aspects. While for the factor Creativity, PMQ could only meet the need of appropriation due to

its nature and operation, but it failed in producing the novelty. On the other hand, the Easy-Pack Creative Precinct situated in the subdivided flat without any financial support, it formed strong community and frequent happenings of creativity.

As Easy-Pack Creative Precinct has a more balanced performance in the 3 Cs model, therefore this site should be more feasible to develop as a sustainable cultural and creative cluster. While PMQ has strong performance in Cluster, but weak performances in both other factors. The 3Cs model estimates that the sustainability of developing cultural and creative cluster for PMQ is not high.

Fig. 15 Evaluation of PMQ and Easy-Pack Creative Precinct under the 3Cs Model							
3 Factors model (No. of parameters in each factor)	Easy-Pack Creative Precinct			РМQ			
	Strong	Weak	Result	Strong	Weak	Result	
Cluster (17)	6 (35%)	11 (65%)	Weak	12 (71%)	5 (29%)	Strong	
Community (5)	5 (100%)	0 (0%)	Strong	0 (0%)	5 (100%)	Weak	
Creativity (5)	4 (80%)	1 (20%)	Strong	1 (20%)	4 (80%)	Weak	

11. ASSESSMENT OF SUBSTANIABILITY

Applicability of the model could be verified by the performance of two cases in terms of stay and the cross over projects resulted. From the proposed model, although PMQ was much stronger in the sense of the spatial quality of cluster, Easy-Pack Creative Precinct was much stainable with strong community and numerous creative works produced. The performance of two cases could be verified by other three factors i.e. dropout rate, operation mode and collaboration.

11.1 Dropout rate

The setup of studio involves lot of resources and effort, once the creative practitioners settle down at the cluster, they seldom move out unless the cluster could not support their sustainable growth. Thus, the dropout rate of tenants indicated if the cluster could meet the needs of creative practitioners in order to retain the stay of creative practitioners. The dropout rate of PMQ was much higher than that of Easy-Pack Creative Precinct; expect for the restaurants/ bars and the short-term pop-up store, the dropout rate of the premise was 19.8% during the research period. Without any financial support from the government, Easy-Pack Creative Precinct is a very stable cluster, there was 11.1% dropout rate during the research period. Attention should always be drawn that there was huge difference in the sample size, i.e. 85 premises in PMQ and 18 premises in Easy-Pack Creative Precinct, the percentage difference mean more significantly than the figure. During the research period, only two unit of tenants of Easy-Pack moved out due to business expansion and better location for business purpose. While the dropout rate of PMQ was comparatively high that many tenants moved out without completing the first contract.

11.2 Operation mode

The brand new studio-cum-shop concept was one of the selling points of PMQ, as the site not only provides work places for creative practitioners, but also the volatilization of products. With the good location, visitors for the district were normally the middle/upper class or design-lovers who could afford the design product. However, such concept and the open door policy were too much overwhelmed. Except the short term popup store and restaurants, the studio-cum-shop operation could be found in 28.4% unit where a small proportion was reserved for creative work. However, 56.8% of units were purely for retail purpose that no working area but cashiers could be found in premises. Only 14.7 % of units were purely design studio, which did not have any cashier, and most of them were architecture firms or design service companies. It was inevitable to have some modification or change of business, however, the change was actually turning the studio into a shop. It could be also obviously that many creative practitioners regarded the space was a 'shop' rather than studio. In the interviews, the interviewees mentioned the difficulties in executing the policies. In order to fulfil the 'open door policy', the creative practitioners could do nothing but hire part time sales to keep the shop open. Also, the interviewees also expressed that they were not sure if the one who taking care of the shops was the designers or sales. It is not possible to create contexts for building up social networks among the creative practitioners and facilitating the creative works. While in Easy-Pack Creative Precinct, all creative practitioners kept on the original track of creative works and continuous their work in a sustainable manner.

Fig.16 Premise without	Fig.17 Premise with both	Fig. 18 Premise with working
working area	working area and shop	area only

11.3 New form or collaboration of creative works

As stated clearly in the press release of the PMQ management Co. Ltd, (10/12/2012), that PMQ encouraged the stay of local designers at PMQ in order to have collaboration with fellow designers (p. 2). However, there were little collaboration recorded in PMQ and the interviewees could only recall the self-initiated joint sale by the boutique at 4/F and the display of consigned products of each other at their own shops. On the contrary, creative practitioners at Easy-Pack Creative Precinct worked closely with other tenants, there were different levels and forms of collaboration between tenants in cluster including organizing joint workshops , participating design projects and joint exhibitions , three groups of participants who works as music label, product design and leather workshop form a new group for creation. Also, there are different mix and more than two parties involved (Fig. 19). The new form of collaboration revealed the synergy produced in the cluster. It is not only the purpose of cluster but it also evidenced the sustainable growth of the creative practitioners.

Nature of Work	Date	Project	Description	Number of unit(s) Involved
Commercial ac- tivity Creative work	10/10/2015 03/10/2015 31/08/2015	Weekend Pantry	Two product designers, one leather workshop and a musician form the group Weekend Pantry to produce the Handmade dessert and snacks for different weekend events held in/outside the site	3
Commercial ac- tivity Creative work	28/01/2015	Music Critique workshop	One leather workshop, two product designers and online music maga- zine organized music critique workshop	4
Commercial ac- tivity	06/2013	Lee UNION- ALLS 100th An- niversary x Easy- Pack Union	The fashion brand Lee invited 10 creative groups of Easy-Pack to design the new denim outfit for celebrating the 100th anniversary of Lee Union-Alls. The woks showcased at the Lee flagship store.	10
Creative work	04/2013	Days of Being exhibition	A group exhibition with 12 crea- tive units displaying their works at HAJI Gallery (a)	12

Creative work	10/2012	Detour 2012	Participation in the production of	5
			the Detour programme	

12. CONCLUSION

This paper had generated a 3Cs model for a sustainable cultural and creative cluster. Three aspects of sustainability had verified the applicability of model. Obviously, the result showed that even Easy-Pack Creative Precinct did not have good profile in terms of quality of cluster; however, it has better performance in the factors of community and creativity. While PMQ is very strong in the quality of cluster, both community and creativity are weak. Therefore, Easy-Pack Creative Precinct is more sustainable then PMQ when measured by the 3Cs model. Such result could be verified and supported by other external evidences. The high dropout rate of tenants, losing the original track and lack of collaboration illustrated the problems of PMQ as well as the importance in considering the 3Cs model in building up a sustainable cluster.

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