

EMPIRICAL STUDIES ON THE INFLUENCE OF INNOVATION ATMOSPHERE ON INNOVATION ABILITY AND PERFORMANCE OF CULTURE INDUSTRY

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ABSTRACT

Economic Globalization presents new requirements for innovation ability and performance of the Culture Industry as it has brought to the Industry more accesses to further development. This Paper by means of Literature Method and Empirical Analysis Method conducts profound exploration and research on the ties among innovation atmosphere, innovation ability and performance of the Culture Industry through the efforts regarding intensive study on typical enterprises and data analysis of a large number of sample companies. And we arrive at the conclusion that the three factors of measurement for innovation atmosphere of the Culture Industry include Credibility, Freedom and Support, which makes great contribution to the improvement of innovation ability of the Culture Industry. This Paper is characterized by the creative concept that innovation ability of different dimensions will not exert a positive influence on long-term and short-term performance of the Culture Industry all the time base on research results of the Culture Industry. We are confident that this conclusion will lay a favorable theoretical foundation for the followings, such as, how can an enterprise create a satisfying cultural innovation atmosphere, the enhancement of innovation ability of the Culture Industry and the promotion of economic benefits increase and long-term development of the Industry.

KEYWORDS: Culture Industry; Innovation Atmosphere; Innovation Ability; Industry Performance

1. INTRODUCTION

Overall development status of the Culture Industry in China is at a primary stage featuring late starting, exploration phase and cultivation and cannot be comparable with development statuses of other industries in terms of industry scales, asset levels, operating efficiency, operation mode and economic benefits, not to mention getting involved in the competition of international cultural market. The essential reason why the foresaid status of Culture Industry occurs is that industrial atmosphere fails to meet the demands of current industrial development and gradually loses strong cultural atmosphere which encourages innovations, and then innovation ability

on the decline plays a key role in blocking rapid development of the Culture Industry.

Organizational attributes such as rules and processes, technologies and culture have an impact on innovation also in the public sector according to a recent research report (OECD, 2015). Among the building blocks of an innovative culture, Rao & Weintraub (2013) mention namely values, climate, behaviors, resources and processes.

Main points of researches on interrelationship among innovation atmosphere, innovation ability and enterprises' performance held by scholars at home and abroad are shown as follows: Bharadwaj & Menon (2000) think that it is effective to predict innovative behaviors and innovation performance of a work team by judging innovation atmosphere, and there is a positive correlation relationship between individual creativity & organization innovation mechanism support and innovative behaviors & performance. And researches conducted by Isakesen (2001) and European Centre for Innovation Research (2005) show the same idea as well, and organization innovation atmosphere is closely associated with organization innovation behaviors; . Koc (2007) comes up with the idea that organizations to some extent will exert an influence on innovation performance of organizations, whether the organizations have common culture or encourage innovative working practice and behaviors. Wang Yanfei and Zhu Yu, domestic scholars, (2005) make innovation atmosphere defined as consistent cognitive experience formed by organizations members toward innovative features within the organizations, and hold the idea that innovation atmosphere will influence individual attitude, beliefs, motives, values and innovative behaviors, and finally exert an influence on innovation ability and innovation performance of the whole organization. Xue Jing (2006) conducts empirical analysis on factors influencing individual innovation behaviors of members in Innovation Team, and arrives at the conclusion that members' cognition toward innovation atmosphere supported by organization exerts an obvious influence on individual innovation behavior variables. Sun Rui (2008) creates Internal Dimension Scale of Organizational Innovation Atmosphere by virtue of selecting 624

different enterprises in China, and obtains the similar conclusion through efforts regarding the analysis and exploration of their organizational innovation atmosphere differences, innovative behaviors and innovation abilities.

We through analyzing ideas held by scholars at home and abroad will find that studies must focus attention on the key research of Culture Industry's innovation atmosphere and innovation ability which are driving factors of increasing industry performance. Therefore, this Paper takes Shanghai Zhangjiang Hi-Tech Cultural Industry Park as an example, and makes profound discussion and analysis on its innovation atmosphere by the breakthrough point of its current problems based on the analysis of its development status of its culture industry for the purpose of strengthening innovation ability and performance of the Cultural Industry. And discussions focus on a series of key environmental factors influencing innovation ability of the Cultural Industry, such as, freedom, support and credibility for innovation.

2 SAMPLES SELECTION FOR EMPIRICAL STUDY

2.1 Samples Selection

Shanghai Zhangjiang Hi-Tech Cultural Industry Park is chosen to serve as empirical research object in the Paper because the Park has many cultural enterprises in different fields featuring diverse sizes and categories, which contributes to the selection of samples for empirical study.

2.2 Questionnaire Survey Respondents and Relevant Methods

In early March 2013, we carried out formal questionnaire survey, respondents of which were 24 cultural enterprises and companies from Zhangjiang Hi-Tech Cultural Industry Park. We during the survey provided to each company about 20-30 questionnaires and aimed to survey personnel of cultural enterprises those who knows corporate operation, such as,

officers of middle and senior management, staff engaged in technological development, design, art designing & marketing and other personnel under the requirements for higher innovation. We also used email, telephone, entrustment to serve the study as we conducted questionnaire survey in writing.

2.3 Feedback of Questionnaires

As we get back the questionnaires, we delete the invalid ones according to many criteria standards, such as, whether the questionnaire is completed or whether questionnaire has inadvertence and poor answers (the same scores occur to ten or over ten items in a subsequent manner). It takes one month for us to conduct the questionnaire survey, in which time we have provided 600 questionnaires to enterprises located in Shanghai Zhangjiang Hi-Tech Cultural Industry Park and get back 554 questionnaires. And it indicates that the recovery rate is 92.33%, 483 questionnaires thereof are valid and the effective recovery rate is 80.5%.

3. MODELING AND VARIABLE HYPOTHESES

3.1 Basis of Modeling and Variable Hypotheses

The Culture Industry is characterized by special properties different from that of other entity industries, and influenced by innovation atmosphere in a complex manner far from the single influence on other industries. In particular, it strengthens innovation ability of the Cultural Industry and promotes cultural innovation through the efforts in connection with accelerating the creation of innovation mechanism, diffusion mechanism and transformation mechanism so as to achieve the sound, rapid and sustainable development of the big picture of Culture Industry.

3.2 Modeling and Variable Hypotheses Design

This Paper, by reference to pertinent literatures, sets up correlated variables and comes up with a series of hypotheses, as follows in Table 1:

Table 1 Theoretical Model Variables and Hypotheses

Models	Contents of Hypotheses	Induced Variables	Contents of Hypotheses
Model 1	H1: Innovation atmosphere of the Culture Industry exerts a significant positive influence on innovation ability of the Culture Industry	Model 2	H2: Innovation ability of the Culture Industry exerts a significant positive influence on performance of cultural enterprises

H1a: Freedom exerts a significant positive influence on product/service innovation ability of the Culture Industry		H2a: Product/service innovation ability of the Culture Industry exerts a significant positive influence on financial performance of the Culture Industry
H1b: Credibility exerts a significant positive influence on product/service innovation ability of the Culture Industry		H2b: Product/service innovation ability of the Culture Industry exerts a significant positive influence on strategic performance of the Culture Industry
H1c: Support exerts a significant positive influence on product/service innovation ability of the Culture Industry		H2c: Process innovation ability of the Culture Industry exerts a significant positive influence on financial performance of the Culture Industry
H1d: Freedom exerts a significant positive influence on process innovation ability of the Culture Industry		H2d: Process innovation ability of the Culture Industry exerts a significant positive influence on strategic performance of the Culture Industry
H1e: Credibility exerts a significant positive influence on process innovation ability of the Culture Industry		H2e: Organizational innovation ability of the Culture Industry exerts a significant positive influence on financial performance of the Culture Industry
H1f: Support exerts a significant positive influence on process innovation ability of the Culture Industry		H2f: Organizational innovation ability of the Culture Industry exerts a significant positive influence on strategic performance of the Culture Industry
H1g: Freedom exerts a significant positive influence on organizational innovation ability of the Culture Industry		
H1h: Credibility exerts a significant positive influence on organizational innovation ability of the Culture Industry	Moderating Variable 1	H3: Market orientation plays a regulating role in the process where innovation atmosphere of the Culture Industry influences innovation ability
H1i: Support exerts a significant positive influence on organizational innovation ability of the Culture Industry	Moderating Variable 2	H4: Growth orientation plays a regulating role in the process where innovation atmosphere of the Culture Industry influences innovation ability

3.3 Study Guide of Modeling and Variable Hypotheses

This Paper based on current research results takes innovation atmosphere as independent variable which exerts an influence on innovation ability of the Culture Industry and takes innovation ability of the Culture Industry as direct variable influencing its industry performance to create a relational model for the ties between innovation atmosphere and development of the Culture Industry. And it introduces two moderating variables like Market Orientation and Growth Orientation in the direct-path as innovation atmosphere influences innovation

ability of the Culture Industry. The model mainly consists of two sub-models, as follows (Chart 1):

Sub-model 1: It reflects the fact that innovation atmosphere of the Culture Industry by virtue of moderating variable has an influence on innovation ability of the Industry. In addition to the influence, independent variable is innovation atmosphere of the Culture Industry including three dimensions like Freedom, Credibility and Support, and dependent variable is innovation ability of the Culture Industry, and adopts Result-oriented Innovation Ability Measuring Method including three dimensions like product/service innovation ability, process innovation

ability and organizational innovation ability, and meanwhile moderating variable is composed of two dimensions like Market Orientation and Growth Orientation.

Sub-model 2: It reflects the fact that innovation ability of the Culture Industry has a great effect on performance of the Industry. In addition to the influence, independent variable is innovation ability of the Culture Industry including three dimensions like product/service innovation ability, process innovation ability and organizational innovation ability, and dependent variable is performance of the Industry including two dimensions like financial performance and strategic performance after the implementation of innovation by the cultural enterprises.

3.4 Creation and Logical Relations of Relational Model

The model indicates that the logical relations among variables are shown as follows: Each dimension for innovation atmosphere of the Culture Industry exerts a direct influence on each dimensions for innovation ability of the Industry, and at the same time Market Orientation, Growth Orientation and Culture Industry play a moderating role in the process where innovation atmosphere of the Culture Industry influences innovation ability, and dimensions for innovation ability of the Culture Industry has a direct effect on dimensions for performance of the Culture Industry.

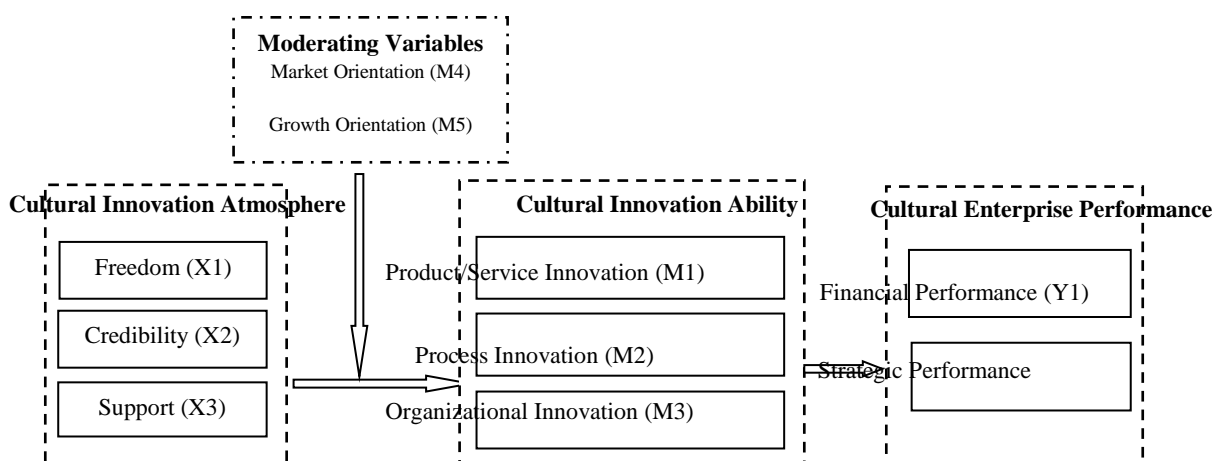


Chart 1 Relational Model about an Influence on Innovation Ability and Performance of the Culture Industry exerted by Innovation Atmosphere

4. DATA PROCESSING AND RESULTS

This Paper focusing on the valid questionnaires retrieved employs statistical analysis software (Edition SPSS 17.0) to conduct specific statistical analysis on the questionnaires, by means of following data processing methods, such as, descriptive statistics, credibility & validity inspection, relevant analysis and regression analysis.

4.1 Data Processing

Data analysis results demonstrate that preliminary conceptual model and most of the hypotheses are supported by data in the research, while a few hypotheses are refused. Verification results are shown in Table 2:

Table 2 Verified Results of Hypotheses

Hypotheses Levels	Contents of Hypotheses	Whether Hypotheses are Verified or not
Hypothesis H1	Innovation atmosphere of the Culture Industry exerts a significant positive influence on innovation ability of the Culture Industry	Part
H1a	Freedom exerts a significant positive influence on product/service	No

		innovation ability of the Culture Industry	
	H1b	Credibility exerts a significant positive influence on product/service innovation ability of the Culture Industry	Yes
	H1c	Support exerts a significant positive influence on product/service innovation ability of the Culture Industry	Yes
	H1d	Freedom exerts a significant positive influence on process innovation ability of the Culture Industry	No
	H1e	Credibility exerts a significant positive influence on process innovation ability of the Culture Industry	Yes
	H1f	Support exerts a significant positive influence on process innovation ability of the Culture Industry	Yes
	H1g	Freedom exerts a significant positive influence on organizational innovation ability of the Culture Industry	No
	H1h	Credibility exerts a significant positive influence on organizational innovation ability of the Culture Industry	Yes
	H1i	Support exerts a significant positive influence on organizational innovation ability of the Culture Industry	Yes
Hypothesis H2		Innovation ability of the Culture Industry exerts a significant positive influence on performance of cultural enterprises	Part
	H2a	Product/service innovation ability of the Culture Industry exerts a significant positive influence on financial performance	No
	H2b	Products/service innovation ability of the Culture Industry exerts a significant positive influence on strategic performance	Yes
	H2c	Process innovation ability of the Culture Industry exerts a significant positive influence on financial performance	Yes
	H2d	Process innovation ability of the Culture Industry exerts a significant positive influence on strategic performance	No
	H2e	Organizational innovation ability of the Culture Industry exerts a significant positive influence on financial performance	No
	H2f	Organizational innovation ability of the Culture Industry exerts a significant positive influence on strategic performance	Yes
Hypothesis H3		Market orientation plays a regulating role in the process where innovation atmosphere of the Culture Industry influences creative ability	Part
Hypothesis H4		Growth orientation plays a regulating role in the process where innovation atmosphere of the Culture Industry influences creative ability	Part

This research according to factor analysis results respectively deletes one questionnaire question on factors in connection with Credibility and Freedom for innovation atmosphere of the Culture Industry, while this research according to relevant analysis and regression analysis results finds the fact that freedom factor for innovation atmosphere of the Culture Industry has no positive obvious effect on innovation ability of the Industry, the two dimensions like product/service innovation and organizational innovation for innovation ability of the Culture Industry exert no positive and obvious influence on

short-term financial performance of the Industry, and process innovation dimension has no positive obvious influence on long-term strategic performance. In Addition, verification results of other postulations are coincide with the hypotheses basically because all the results indicate positive obvious influence.

4.2 Results

Data Analysis Results of Empirical Model, as follows:

Data Analysis Result I: Innovation atmosphere of the Culture Industry is composed of three factors like Credibility, Freedom & Support, innovation ability of the Industry consists of three dimensions including product/service innovation ability, process innovation ability and organizational innovation ability, and performance of cultural enterprises is divided into financial performance and strategic performance.

Data Analysis Result II: Credibility and support in the three factors for innovation atmosphere of the Culture Industry exert positive obvious effect on innovation ability of the Culture Industry, while freedom has no obvious positive influence on innovation ability of the Industry. According to analysis results obtained from major regression effect, Support plays a greater role than Credibility in influencing product/service innovation ability and organizational innovation ability, while Credibility plays a greater role than Support in influencing process innovation ability.

Data Analysis Result III: Short-term financial performance and long-term strategic performance of culture industry innovation are influenced by innovation ability of different dimensions respectively, and moreover financial performance is influenced by process innovation ability in an obvious and positive manner, and strategic performance is influenced by product/service innovation ability and organizational innovation ability in an obvious and positive manner.

Data Analysis Results IV: Emphasis is attached to clients by Culture Industry, that is, whether Culture Industry is market-oriented and plays obvious positive moderating role in the ties where Support for innovation atmosphere of Culture Industry influences product/service innovation ability. And emphasis is attached to study & growth by Culture Industry, namely, whether Culture Industry is growth-oriented and plays positive obvious moderating role in the ties where Support influences process innovation ability and organizational innovation ability.

5. DATA ANALYSIS AND DISCUSSION

Data analysis indicates that: Cultural enterprises with the same innovation support become more market-oriented and attaches more importance to consumers needs, which contributes to more favorable access to the increase of potential value in terms of products and services to meet the need of market, namely, enterprises will obtain greater product/service innovation ability, without regard to changes occurring to other conditions. Similarly, if cultural enterprises become more growth-oriented and

attaches more importance to cultivation of staff learning abilities and application of values gained from study and improvement, they will be able to spend less time on finding out customers needs, make products supply and service delivery fast & efficient, reduce raw materials and energy consumption in offering products and services, and achieve cost reduction, namely process innovation ability of enterprises becomes stronger. And meanwhile, the enterprises will enjoy more reasonable organization structure design, higher operation efficiency and greater flexibility of services for different service targets, namely organizational innovation ability of the enterprises becomes stronger. Based on studies from scholars at home and abroad, for example, Ekvall, etc. (1996) and Scott G Isaksen, etc. (2001) came up with the conclusion that Credibility, Freedom and Support of innovation atmosphere exert positive obvious influence on industry innovation respectively as they conducted researches related to influence on industry innovation by innovation atmosphere in non-cultural industries like manufacturing industry and so on. This Paper with reference to research conclusions of the Culture Industry is slightly different from others in terms of Freedom. The reason why the difference occurs is that non-cultural industries like manufacturing industry, etc. attaches more importance to result orientation relatively, and on the one hand the industries often evaluate management and operation of enterprises by virtue of output of products, quality and other complete status of each index, on the other hand employees try their best to achieve the expected results by means of different kinds of methods and approaches, and hence Freedom factor of innovation atmosphere will have a positive significant influence on innovation ability of non-cultural industries. While Culture Industry that provides intellectual products and services puts more emphases on process orientation relatively, value of cultural products for the most part is a kind of spiritual enjoyment obtained from consumer spending. Therefore Freedom factor of innovation atmosphere will have no obvious positive effect on innovation ability of Culture Industry. However, what this Paper does not deny is that Freedom factor for innovation atmosphere of Culture Industry may exert an indistinctively positive influence on innovation ability of the Culture Industry. And it requires further verifying study based on analysis of specific cases.

6. CONCLUSION AND INSPIRATION

Credibility, Freedom and Support are the three major benchmark factors for innovation atmosphere of the Culture Industry, influencing the improvement of innovation ability of the Culture Industry

significantly. According to functions of the three factors, Credibility and Support will exert an obvious positive influence on innovation abilities of staff. When innovation atmosphere has an effect on product/service innovation ability or organizational innovation ability, Support plays a greater influencing role than Credibility according to the achievement of regression effect analysis, while Credibility plays a greater influencing role than Support as innovation atmosphere influences process innovation ability upon which Freedom has no positive influence on innovation ability. However what this Paper does not deny is that Freedom in innovation atmosphere may have a positive influence on innovation ability of the Culture Industry significantly. And it requires further verifying study based on concrete analysis of specific cases.

Innovation ability of the Culture Industry is composed of three factors like product/service innovation ability, process innovation ability and organization innovation ability. And performance of the Industry includes financial performance and strategic performance which are influenced by different innovation ability factors respectively. Product/service innovation ability and organizational innovation ability among the three factors have an obvious effect on mid-term and long-term strategic performance of the Culture Industry significantly, while process innovation ability exerts an obvious influence on short-term strategic performance of the Industry significantly without any obvious and positive influence on the mid-term and long-term strategic performance thereof.

Financial performance of culture industry innovation may indicate changes occurring to performance and compare changes occurring in shorter term. Process innovation ability plays a role in products manufacturing and services delivery, etc. and has an effect on consumers directly because it achieves innovation ability during manufacturing products and contributes to sales expansion and revenues increase. However, innovated process is, to some extent, time-based, remains unchanged for a long time and then loses nature of innovation, so it in the long run will lose competitiveness gradually after a period of time of application until its elimination.

It will facilitate the ties between innovation atmosphere and innovation ability of the Culture Industry in a certain way if the Culture Industry becomes market-demand oriented and attaches more emphases to whether it satisfies customers' demands. And it also has some positive influence on improving

the ties between innovation atmosphere and innovation ability of the Culture Industry if the Culture Industry is growth-oriented and whether it puts more emphases on study and growth or not.

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