ENTREPRENEURIAL INNOVATION AND ORGANIZATIONAL CULTURE, A CASE STUDY BASED ON SRI LANKAN SMALL AND MEDIUM SCALE GIFT AND DECORATIVE-WARE SECTOR

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INTRODUCTION

The Gift and Decorative-ware Industry is a substantially important industry component in both urban and rural economies of Sri Lanka. Most of the firms engaged in this sector are small and medium by scale; nevertheless they employ a large workforce of 230,000 direct and indirect employees. Industries range from simple cottage type operations to full- fledged factories with state-of-the-art technology. Most of the production facilities in rural areas are micro-level and are not far from being self-employed backyard operations; most are considered as informal sector activities. In the rural economy, it is said to be the second important economic sector after agro-based industries. As a general rule, the Giftware Sector is low capital intensive and highly skill based with no need for sophisticated technologies. For the very same reasons, the entry barriers to the industry are low and therefore continued innovation is a must for withstanding the increasing competition in the market place. Sri Lanka's cultural heritage and skilled craftsmanship has been passed down through the ages and has had a great influence on Sri Lankan giftware. The craftsmen mostly use locally available raw materials such as wood, clay, reed, bamboo, coconut fiber, cane, brass, and handloom fabric for the production. Giftware products for export include wooden items such as educational toys, utility items, i.e., wooden gift and packaging materials, household accessories, such as chopping boards, knife blocks and bathroom accessories, clay ornaments, such as terra cotta pots and vases and porcelain

ornamental items. Availability of natural raw materials in abundance and presence of easily trainable workforce are deemed to be the key positive factors for the Sri Lankan Giftware industry. Meanwhile, studies have revealed that the main constraints of the industry are: lack of new designs, high production costs, low productivity, lack of sufficient research and development, lack of new technology infusion, marketing problems and labor shortage, etc. This clearly signifies the urgent need for the industry to accelerate innovation activities which are essential for addressing the above constraints.

The primary focus of this paper is to explore the influence of organizational culture, particularly dominant culture types, on innovativeness of the firm. Academic researchers suggest the presence of a relationship; however few empirical studies exist to support these claims. Exploration of this relationship within the domain of export-oriented gift and decorative ware industry should yield useful insight for the firms themselves as well as policy makers and Business Service Organizations (BSOs). Thus the objectives of this study are:

1. To broaden the understanding of organizational innovation within export-oriented gift and decorative-ware manufacturing firms.
2. To enhance the understanding of organizational culture types within export-oriented gift and decorative-ware manufacturing firms.
3. To advance the understanding of how organizational culture influences organizational innovation.
4. To contribute to the ability of organizational innovation researchers to better understand the past history associated with innovation organizations.

CONCEPTUALIZATION

The theoretical framework guiding this study evolves from two fields of organizational inquiry: organizational culture and organizational innovation. Before constructing the overall study framework, these two key areas must be well investigated.

Organizational Culture

Organizational Culture (OC) is used to describe the shared beliefs, perceptions, and expectations of individuals in organizations. The concept of OC received attention in the recent past as management scholars explored how and why the America failed to compete with Japan and emerging China and India, as economic hubs. Johnson (1988) described a cultural web, identifying a number of elements, such as paradigm, control systems, organizational structures, power structures, symbols, stories and myths etc., that can be used to describe or influence OC, where sometimes, these elements may overlap. Power structures may depend on control systems, which may exploit the very rituals that generate stories, which may not be true. The contemporary definition of OC includes what is valued, the dominant leadership style, the language and symbols, the procedures and routines, and the definitions of success that characterizes an organization (Ouchi, 1981; Pascale and Athos, 1982; Deal and Kennedy, 1982; Peters and Waterman, 1982). Generally OC represents the values, underlying assumptions, expectations, collective memories, and definitions present in an organization (Schein, 1992; Cameron & Quinn, 1999). Although over 150 definitions of culture have been identified (Kroeber and Kluckhohn, 1952), the two main disciplinary foundations of OC are sociological (e.g., organizations have cultures) and anthropological (e.g., organizations are cultures). Within each of these disciplines, two different approaches to culture developed a functional approach

(e.g., culture emerges from collective behavior) and a semiotic approach (e.g., culture resides in individual interpretations and cognitions). The primary distinctions are differences between "culture as an attribute" possessed by organizations versus "culture as a symbol" for describing what organizations are. The former approach assumes that researchers and managers can identify differences among organizational cultures, can change cultures, and can empirically measure cultures. The latter perspective assumes that nothing exists in organizations except culture, and one encounters culture anytime one rubs up against any organizational phenomena. Culture is a potential predictor of other organizational outcomes (e.g., effectiveness) in the former perspective, whereas in the latter perspective, it is a concept to be explained, independent of any other phenomenon. Many definitions of culture give primacy to the cognitive components, such as assumptions, beliefs, and values. Others expand the concept to include behaviors and artifacts, leading to a common distinction between the visible and the hidden levels of organizational culture - a distinction basically corresponding to the climate/culture distinction noted above (Kotter and Heskett, 1992). In contrast to the distinction between the visible and hidden levels, some theorists distinguished multiple levels.

Innovation framework

'Innovation' is the most searched key word in the internet after 'sex', and it is now a household word in many journals, books, and other published media and literature (Conway and Steward, 2009; Skarzynski and Gibson, 2008; Hansen and Birkinshaw, 2007; Hargadon, 2003; Gregersen and Christensen, 2009; Koestner and Ryan, 1999; James, 2005; Boudreau and Lakhani, 2009, Tidd et al., 2005; Khalil, 2009). Generally, measuring innovativeness of a firm is a complicated process as it stretches into different dimensions. However, Muller et al. (2003) developed a

framework to understand the innovative capacity within a firm. This goes beyond traditional Oslo Manual based models. By considering the different options that surfaced through the literature survey, the researcher concluded that the framework suggested by Muller et. al is the most appropriate and comprehensive model which is capable of capturing all possible dimensions of innovativeness.

The framework (depicted in Figure 1) combines three views on innovation. These views accommodate a suite of metrics that help assess and develop a company's capacity for innovation.

Figure 1 - Innovation Framework
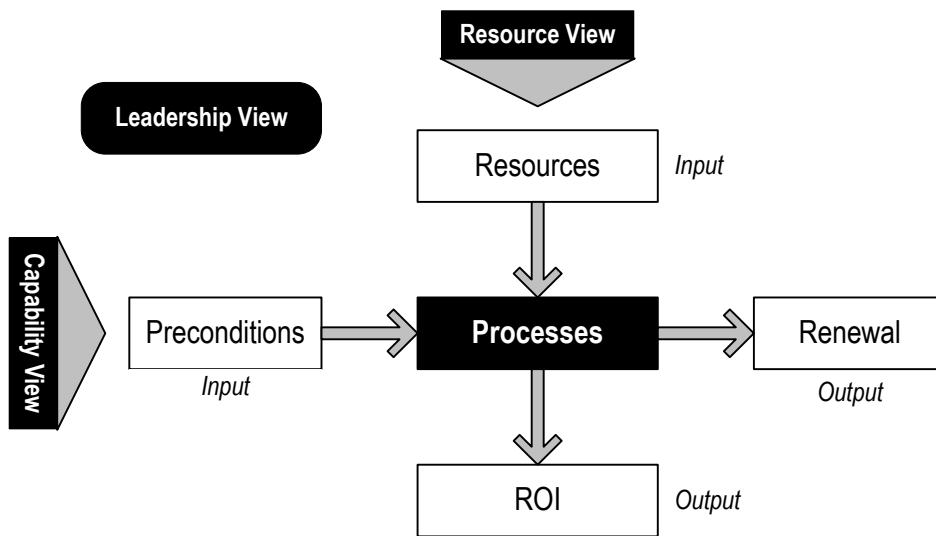
(Adapted from Muller et al.)

Resource view - Companies must balance optimization (tactical investment in the existing business) and innovation (strategic investment in new businesses). The resource view addresses

the allocation of resources to achieve this balance. The resource <u>inputs</u> are capital, labor, and time. <u>Output</u> is the return on investment in strategic innovation.

Capability view - The capability view assesses the extent to which the company's culture supports the conversion of innovation resources into opportunities for business renewal. The <u>inputs</u> of this capability view are the preconditions for innovation i.e., the extent to which a company's skills, tools, and values are adapted to innovation. <u>Outputs</u> include growth platforms and strategic options.

Leadership view - The leadership view assesses the degree to which a company's leadership supports innovation. As such, it evaluates leaders' involvement in innovation activities, the establishment of formal processes to promote innovation, and dissemination of innovation goals.

Processes - Innovation processes are an additional element of the framework. According to the original model, they comprise organizational structures such as incubators, innovation markets, venture funds, and innovation incentives. However, considering the other factors revealed in the literature survey, the researcher redefined this section to include Idea Generation, Idea Implementation and Motivation/Attitudes of the people.

As Figure 1 suggests, innovation processes interlink the resource view and the capability view. Innovation, at the level of the organization, has been the main focus of a majority of theoretical and empirical studies of innovation. The focus of this study centers on why some organizations adopt a given innovation/s more quickly than others.

Organizational Culture Framework

The competing values framework (Cameron & Quinn, Robert, 1999) was used in constructing an Organization Culture (OC) profile. Through the use of the innovation an OC profile can be drawn by establishing the organization's dominant culture type characteristics. In this respect the overall culture profile of an organization was identified as:

- ▶ **Clan**: an organization that concentrates on internal maintenance with flexibility, concern for people, and sensitivity for customers.

- ▶ **Hierarchy**: an organization that focuses on internal maintenance with a need for stability and control.

- ▶ **Adhocracy**: an organization that concentrates on external positioning with a high degree of flexibility and individuality.

- ▶ **Market**: an organization that focuses on external maintenance with a need for stability and control.

Conceptual Framework for Research Study

An overall conceptual model for the research study was and is given below (Figure 2).

Figure 2 - Conceptual Framework for the study
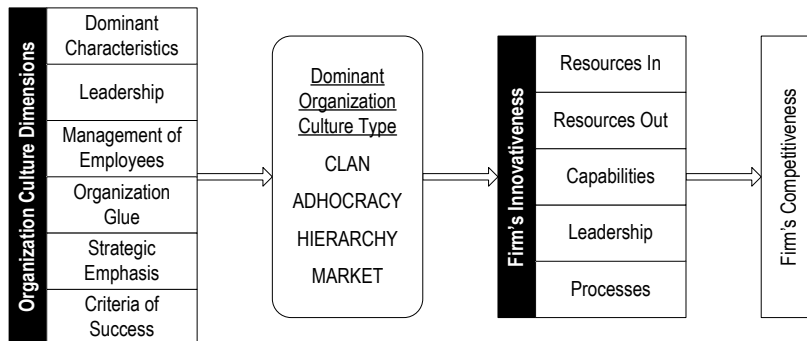
METHODOLOGY

A quantitative empirical research approach is preferred. This is necessary for statistical testing of the hypotheses developed within the study framework, and to be consistent with previous studies for comparison. The design of the questionnaire used for this study was based on questionnaire items used in similar previous studies with the modification done by the researcher in order to match the Sri Lankan context. Specifically, the questionnaire investigated the following:

1. OC: Respondents were asked to indicate the degree of various parameters within the organization to assess its culture type (on a five-point Likert scale).

2. Innovativeness: Respondents asked to indicate certain facts and figures associated with the quantitative metrics that seek to measure their Innovativeness. Certain metrics based on perceptual responses were measured with the statements by assessing the degree to which the respondents say 'absolutely no' or 'absolutely yes' (on a five-point Likert scale).

3. Innovation types: four basic types of innovation were identified (Product, Process, Strategy and Organization). Respondents were asked to indicate the frequency for each type that their

businesses have introduced in the last three years. Also, for each type, they were asked to state the percentage values for the level of innovation (radical/incremental) and degree of newness (new to company/to the local market/to the world).

The questionnaire was posted to a sample of 65 firms in the Gifts and Decorative-ware Industry. The firms were principally selected from the lists of companies available at the Sri Lanka Export Development Board (EDB). These names were cross-checked with the lists available at the Sri Lanka Handicrafts Board (SLHB), National Crafts Council (NCC) and the Sri Lanka National Design Center (SLNDC), which mainly consist of small and medium size companies. The sample was selected in a random manner in order to fulfill unbiasness. However, due care was taken in the selection of companies so as to have proper access to suitable personnel and reasonable response rate.

Sample

The study was based on standard questionnaire survey method and a sample of sixty five firms engaged in the manufacture and/or export of different sectors of giftware. Selected firms were of mixed disciplines, including 15 sub-sectors of gift and decorative-ware [soft toys, wooden toys, candles, ceramic ornaments, ceramic utility-ware, Metal-ware, lace, knitwear, handicrafts, handmade paper and products, glass, home textiles, rattan-ware, gift tea packs, rubber-based ornaments and mineral-based ornaments]. Geographical distribution of these firms covered the seven districts: Colombo, Kurunegala, Galle, Kalutara, Matara, Negombo and Kandy. Firm size ranged from minimum of 10 to 1500 employees. Special care was taken to include only

companies having more than 10 employees as minimum requirement for having a meaningful "Organization Culture".

The names and the contact details of the sampling frame were extracted mainly from the mailing lists of manufacturers/exporters available at the Sri Lanka Export Development Board (EDB). Reference was also made to the mailing lists available at organizations such as Sri Lanka Handicrafts Board, National Craft Council, Industrial Development Board and Sri Lanka National Design Center which revealed that they primarily include micro-enterprises (mostly backyard operations with one to five employees), and individual craftsmen and designers. Thus, the EDB lists proved to be a better source to meet the research sampling criteria. These lists represented a good cross-section of the industry and were most appropriate to the requirements of this study. The EDB has dedicated officers who have been working closely with each sub-category of the giftware industry. They had in-depth understanding of the industry, and capabilities and capacities of individual firms; thus, each officer was consulted prior to the selection of the sample. These consultative discussions were extremely useful in identifying the sample which is best suited with the research criteria, thereby avoiding waste of time and resources with inappropriate firms. A manual review of each institution resulted in the identification or verification of respondents, respondent addresses and other contact details.

In the data collection, a single key informant was used as a proxy for the organization to report on the culture of the organization and opinion-based questions to assess the firm's innovativeness. In most cases, the informant was the Chief Executive Officers/Chief Financial Officers, owner, main partner or the senior executive of the company. Figures and values were

also supposed to be supplied by the same informant with the assistance of the finance department and other relevant officers, where necessary.

The rationale for using these respondents were based on the following:

1. In most of the SME companies in the local context, the owner, main partner or the CEO is the conductor of the entire show. He holds all control and knows the company thoroughly; he mainly influences institutional policy, direction and performance. Therefore, he is the most appropriate informant.

2. In larger companies, the most relevant senior executive with a good education background was identified. Since this exercise has an academic orientation and also contains some management text terms, it was believed a person with better education background could better digest the content of the questionnaire.

Data Collection Methodology

Data collection was carried out over an eight-week period from January 15 to March 15, 2011. The survey was mailed to 65 firms whose contact details were obtained from the above sources. Based on the discussions with EDB officers, it was decided that the questionnaire be both in English and Sinhala medium. The EDB officers advised the researcher which language to be used in communication with each company. A modified version of the tailored design method adopted by Dillman (2000) was employed as the mail survey process. This method consists of key five elements: A respondent-friendly questionnaire, multiple contacts with the questionnaire

recipient, inclusion of stamped return envelopes, personalized correspondence and non-financial token incentive sent with the survey request.

Dillman (2000) suggests that incentives improve overall response rates. Each survey recipient was promised a valuable market research report on international giftware market as a token of appreciation, upon receipt of his/her completed questionnaire. This valuable market research report was offered by the EDB as dissemination of information to this specific sector. An incentive of this nature was most appropriate as most companies are keen to develop export businesses; the researcher also intended to promote goodwill and foster interest in the survey. In accordance with the tailored design method survey, recipients received a packet including a personalized covering letter, a printed questionnaire, a self-addressed/postage paid envelope and the photocopies of the cover pages of promised market reports.

Concurrently, introductory calls were made to each prospective respondent to introduce the researcher and assistants, to explain the objectives of the study and to confirm that the respondent meets the sampling criteria. The main research assistant, is an EDB officer and the main researcher is an independent and recognized academic; this call was important to motivate the people to respond to the questionnaire, thereby increasing the response rate.

As this process was carried out simultaneously, some firms were contacted before the questionnaire reached them and the rest was after. When calling, priority was given to bigger and busier companies as they needed extra push to return the questionnaire. During the telephone conversations, some companies indicated their preference to receive an e-copy (soft copy) of the

questionnaire through email and return them via the same route. Such companies were immediately provided with a soft copy through email. Irrespective of the mode of delivery, at the end of the session, the questionnaires had been delivered to each institution resulting in a total of 65 questionnaires being distributed.

During the initial round of calls, 4.6% (n=3) of the sample was found to be out of business, either due to bankruptcy or migration of owners. One (n=1) contact was found to be the former name of a company already included in the sample. About 10.8% of the companies were (n=7) not contactable with available data and no alternative contact details could be found from any source. About 4.6% of the companies (n=3) indicated their corporate policy restrictions to disclose information or inability to participate in the survey due to busy schedules. Three percent of the companies (n=2) declined due to incompatibility with the research criteria, as they operate mainly with outsourcing. This left the researcher with only 49 (75%) usable contacts for subsequent follow-up.

Each respondent was initially given three (3) weeks to complete and return the questionnaire. Each prospective respondent was given comprehensive introduction about the research, and a description of the research objectives during the telephone conversation. Any doubt or ambiguity with regard to survey questions were cleared with proper explanations, paving the way for maximum possible response rate and accuracy of answers.

As the industry was not familiar with research studies of this nature, the initial response rate was extremely slow and an extensive follow-up was needed to boost up the response rate. Things

started moving only after at least two follow-up calls. All 49 prospective respondents promised to complete the questionnaire and return it soon but many were not received on time. In such instances, an extensive follow-up was undertaken which included follow-up telephone calls, soft e-mail reminder, a replacement e-mail of the questionnaire and a final fifth reminder call. The questionnaires not returned at the end of this process were considered as non-respondents.

Of the 65 surveys mailed, forty two (42) individual responses were returned over the survey period of eight weeks. After thorough review of all 42 surveys, it was revealed that at least 15 needed personal interview of the respondent to clear up the discrepancies due to incomplete data or misapprehension of certain questions. Upon completion, 42 organizational responses were retained and recorded. This exhibits overall response rate of 64.6% which was considered satisfactory, looking at the complex nature of this industry.

Defining the Scope of the Gift and Decorative-ware Industry

The scope of the "gifts and decorative-ware" industry is somewhat difficult to define. Theoretically, any product can be used as a gift and many products have decorative value some way or the other. Gifts and decorative-ware can be made of a wide variety of raw materials, ranging from paper to metal; they can be purely decorative to utility products. Therefore, one can see a clear overlap with products falling under different categories such as household articles, home decoration, toys, art and antiques and garden articles, etc.

In broader terms, the gifts and decorative-ware market can be segmented into the following three categories (CBI, 2000; Unity Marketing, 2008):

► Articles of artistic value: this category contains items that are handmade, original, artistic and exclusive. Usually, the quantities are relatively small; sometimes it concerns unique pieces of which each one is different. Examples - statuettes made of wood, metal or ceramic.

► Articles of decorative value: this category consists of items, which are often adapted to the tastes and requirements of the markets. These articles are sold in large quantities. They may be both handmade and machine-made and are vulnerable to changes in fashion. Examples - picture frames.

► Articles of utilitarian value: items having both decorative and functional value fall into this category. Utility articles are required to meet industrial standards (example - a candleholder should not fall over easily, vases for holding flowers should not leak, porcelain plates should be appropriate for food consumption).

The key attribute in all these product categories is their aesthetic or emotional value. Consumers seem to purchase them mainly because of this feature. Gifts and decorative articles differ from other categories of products by the combination of their use together with the choice of materials they are made of, the method of production, design, utility and distribution method. Although being a motivation for purchase decisions, functionality does not seem to be the main reason for buying these articles, as a wide range of industrial alternatives are available. Usually, the products concerned are of no essential function in a household. For that reason, they are considered luxury or non-essential articles for which the demand is strongly influenced by the emotional character, fashion trends and the purchasing power of the consumer. The basic

criterion for consumers in purchasing these articles is whether they fit into their particular fashionable style, or whether they represent a certain image that may be useful as a gift.

After reviewing several definitions and categorizations by well-known international organizations, the following categories of products could be clearly identified as gifts and decorative-ware:

- Glassware such as: figurines, lamps, candleholders, glasses, bowls, tea-warmers, vases, etc.

- Ceramic-ware such as: statuettes, figurines, paperweights, lamp bases, candleholders, tabletops, etc.

- Wood-ware such as: bowls, plates, carvings, boxes, cutting boards, toys, educational items, kitchen utensils, bookends, etc.

- Candles, perfumed and non-perfumed.

- Artificial flowers and fruits (plastic and non-plastic).

- Metal-ware, such as: statuettes, candle holders, boxes, watering cans, ashtrays, flowerpots, fruit bowls, plates, lamps, vases, Christmas decorations, cages, aviaries, etc.

- Reed and rattan-ware, such as: baskets, cradles, cases, etc.

- Leather-ware, such as: small purses, billfolds, shopping and handbags, belts, etc.

- Textiles, such as: wall hangings, tapestries, dolls, mittens, Christmas and Easter decorations, etc.

- ▶ Bone-ware such as: animal figurines, napkin holders, religious statuettes, necklaces, bangles, etc.

- ▶ Paper-ware such as: papier-mâché, Christmas and Easter decorations and articles made from handmade paper.

- ▶ Organic products such as: natural cosmetics, bath articles, potpourri, value added gift packs of tea/spices, etc.

To make the scope of this research more formal and standard, relevant products are classified in accordance with universally accepted Harmonized System (HS) of coding. A Worldwide Harmonized Commodity Description System was introduced in 1988 by unifying all previous trading classification systems and is the mainstream system used by almost all countries in the world to codify their trade in/out flows.

Research Questions and Hypotheses

From our problem domain of "inadequate competitiveness of local gift and decorative-ware manufacturing firms in the international market", we articulated the idea that competitiveness is significantly driven by the organization's innovativeness, which in turn, has a significant influence on OC. We had to refine this embryonic idea in to specific research questions in order to investigate it empirically. Based on the findings of the literature survey and the objectives of this research study, the following research questions were formulated:

▶ Can a sample of giftware manufacturing firms in Sri Lanka be classified by OC types? What are the most dominant cultural types among them in terms of Clan, Adhocracy, Hierarchy and Market types?

▶ How innovative is the Sri Lankan giftware manufacturing industry and what types of innovations are predominant among the firms?

▶ Is there a significant correlation between dominant culture type and metrics of innovativeness of giftware manufacturing firms?

▶ What are the most dominant cultural dimensions that need to be strengthened in the giftware manufacturing firms in order to enhance their innovative activities?

Based on these research questions the following hypothesis build:

▶ **Hypothesis 1 (H1)**: Within a sample of giftware manufacturing firms in Sri Lanka, there will be a clear difference in the mean scores assigned to the OC types based on Competing Values Framework (i.e. Clan, Hierarchy, Adhocracy and Market).

▶ **Hypothesis 2 (H2)**: Majority of the Sri Lankan giftware firms tends to have highest mean score for the culture type Hierarchy.

▶ **Hypothesis 3 (H3)**: Sri Lankan giftware firms tend to focus more on product innovations than on process, strategy and structural innovations.

- ▶ **Hypothesis 4 (H4)**: Sri Lankan giftware firms tend to focus more on incremental innovations than on radical innovations.

- ▶ **Hypothesis 5 (H5)**: There is a significant relationship between dominant OC types and the degree of innovativeness within a sample of giftware manufacturing firms in Sri Lanka.

- ▶ **Hypothesis 6 (H6)**: The dominant culture types will have a relationship with the type of innovation activities performed within the firm.

- ▶ **Hypothesis 7 (H7):** Adhocracy is the single most important culture type to determine the frequency of innovative activities of the firm.

- ▶ **Hypothesis 8 (H8):** External positioning is the most important dimension in the OC to determine the frequency of innovative activities of the firm.

Characteristics of the Sample

The group of firms in the sample was diverse in terms of legal status, number of employees, raw material base and functionality of products. Figure 3 illustrates the structure of the sample in terms of the above characteristics.

As depicted in Figure 3, the wide majority of the firms belongs to the category of private limited liability companies (n=27, 67%). Proprietorship and partnership companies had equal contribution of 14% (n=6 each) while public limited companies were limited to 2 (5%).

Figure 3 – Structure of the Respondent Firms by Legal Status

Pvt Ltd, 67%

Proprietor, 14%

Pub Ltd, 5%

Partnership, 14%
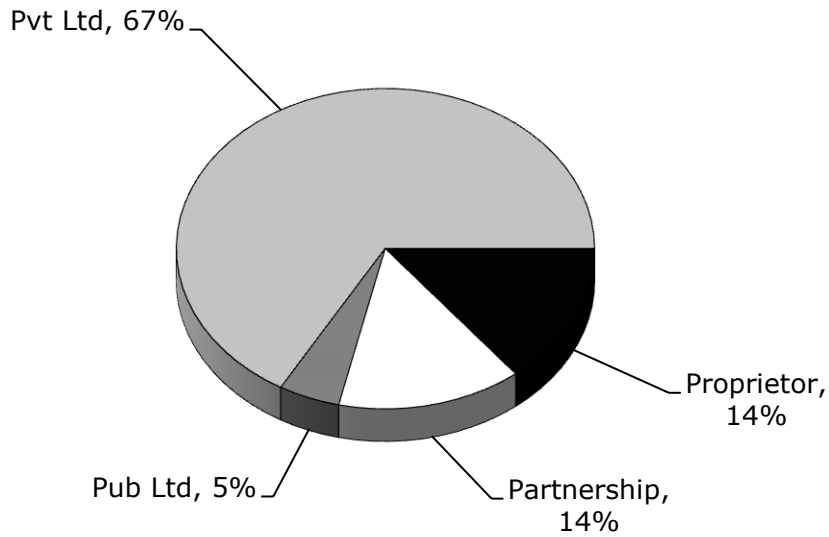
The firm distribution with respect to number of employees illustrates in the Figure 4. In terms of number of employees, "10-25 employees" category dominates with 15 companies having a contribution of 36% to the total. This is followed by "20-50" and "100-500" categories with equal contribution of 24% and "25-50" and "more than 500" categories with 10% and 7% contribution respectively.

Figure 4 - Structure of the Respondent Firms by the Number of Employees

(25-50), 24%

(50-100), 9%

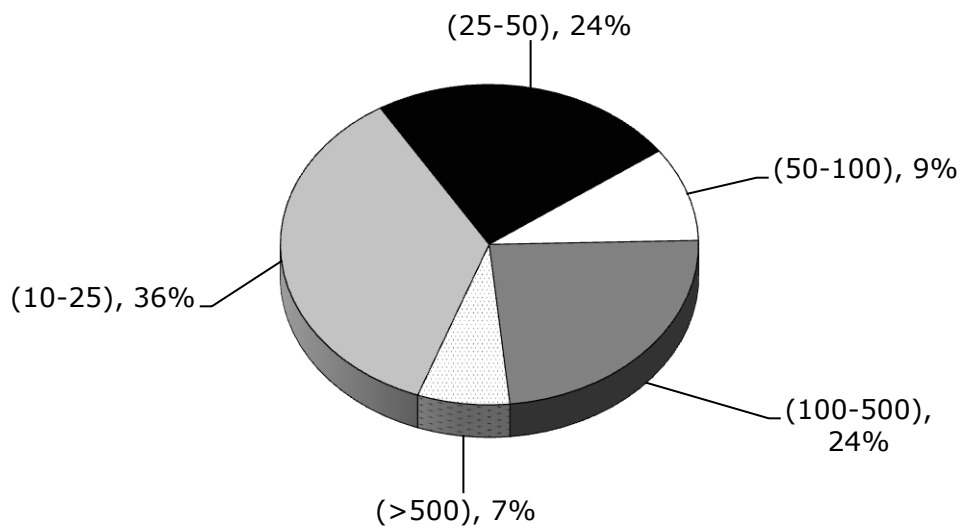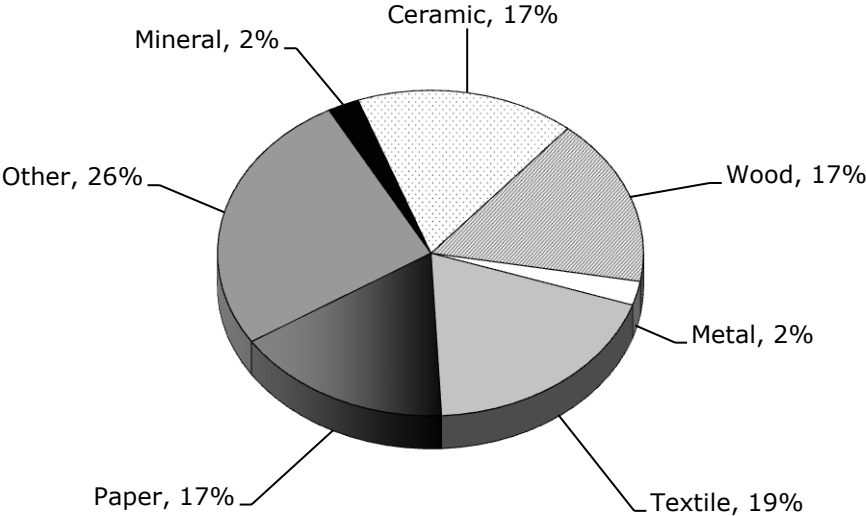(10-25), 36%

(100-500), 24%

(>500), 7%

Figure 5 exhibits the distribution of the firms among various raw material categories. Except for mineral and metal categories, others are quite close to each other in number of companies.

Figure 5 - Structure of the Respondent Firms by Raw Material Base

Ceramic, 17%
Mineral, 2%
Other, 26%
Wood, 17%
Metal, 2%
Paper, 17%
Textile, 19%

As illustrated in Figure 6, more than 50% of the firms are engaged in the manufacture of utility-ware. The second largest category is Toys which represents nearly one third of the sample. As a general tendency in the international market, consumers prefer giftware with some utility value rather than artifacts with pure decorative value.

Figure 6 - Structure of the Respondent Firms by the Functionality of Products
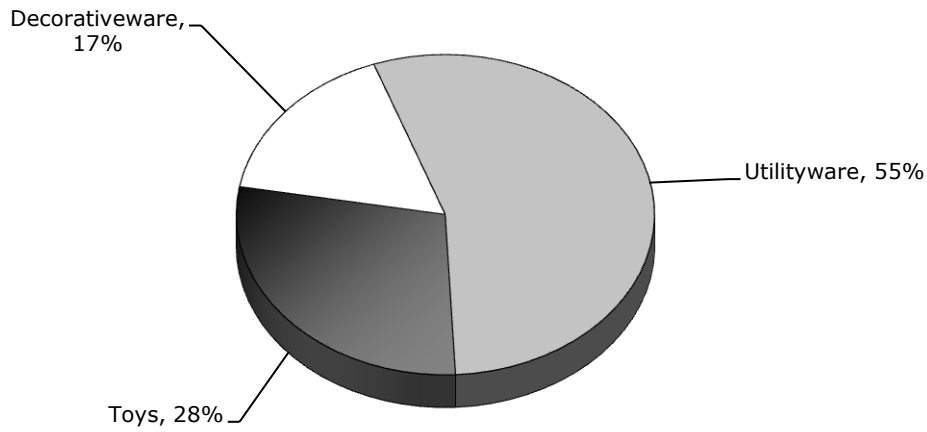
Descriptive statistical analyses were conducted for the other sample characteristics and are summarized in Table 1.

Table 1 - Descriptive statistics of Sample characteristics

	N	Min	Max	Mean	Std. Deviation
Local Equity (%)	42	50.0	100.0	98.571	7.831
Firm's Age (Years)	42	2	37	13.86	8.23
No of years exported	41	0	33	11.66	8.39
No of Employees	42	10	1500	159.57	313.81
Annual Turnover (Rs. Millions)	38	0.5	3000.0	362.466	765.571

Source: Structured Questionnaire Survey

Descriptive Statistics of Organizational Culture and Innovativeness

In this study, primary emphasis was placed on classifying firms by their dominant culture type (i.e. clan, hierarchy, adhocracy and market). Firms reporting identical scores on two or more dominant culture types were assigned the designation of "not dominant". Thus, five (5) classifications of dominant culture types were identified and reported. Descriptive analysis of dominant OC type among 42 firms in the sample is illustrated in Table 2 and Figure 7.

Twenty (n=20) institutions reflected a dominant culture type of Clan representing nearly half of the total population. The next culture type having second highest frequency was Adhocracy (n=9). Of the remaining companies, seven (7) reflected a dominant culture type of Market and three (3) companies in each category reflected Hierarchy and No Dominant. It is interesting to note that Adhocracy and Market cultures have comparatively stronger representation in the Sri Lankan context.

Table 2- Dominant Organizational Culture Types

Dominant Culture Type	# of Firms	Percentage %	Comparison study
Clan	20	47.6	50.3
Adhocracy	9	21.4	7.4
Market	7	16.7	13.7
Hierarchy	3	7.1	7.0
No dominant	3	7.1	21.6

Source: Structured Questionnaire Survey

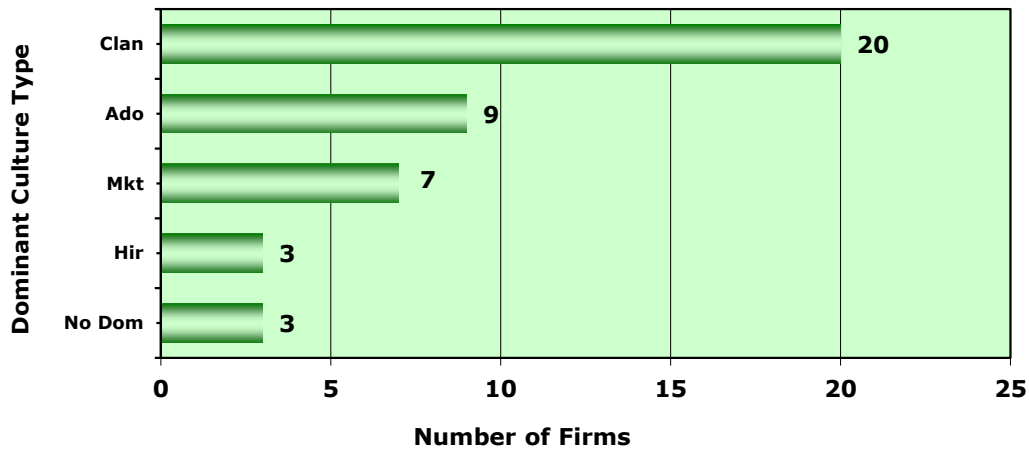*Figure 7 - Graphical Representation of the Dominant Culture Types*

Table 3 reports the descriptive statistical analyses for each culture type. The mean scores for the culture types ranged from 3.49 to 4.02, suggesting that the respondents, as a group, believe each culture type to be at least moderately descriptive of their organization. Among the four culture types, the mean score for the Clan type (mean = 4.02) was the highest followed by Adhocracy (mean 3.63), Market (mean = 3.52) and Hierarchy (mean = 3.49) respectively.

Table 3 - Mean Scores of Culture type for overall Giftware Industry

Culture Type	Mean	% Mean	Rank	Range	SD
Clan	4.02	27.42%	1	1.0 - 5.0	.7029
Adhocracy	3.63	24.75%	2	1.0 - 5.0	.9242
Market	3.52	24.04%	3	1.0 - 5.0	.9786
Hierarchy	3.49	23.78%	4	1.0 - 5.0	.8440

Source: Structured Questionnaire Survey

Figure 8 shows a graphical representation of the overall culture profile of the Sri Lanka Giftware Industry. The mean scores obtained in each of the four culture types are plotted in a radar chart using the competing values framework axis and quadrants. Figure 8 shows slightly low mean

scores in the Hierarchy and Market culture quadrants and higher mean scores in the Clan and Adhocracy quadrants. This demonstrates the overall inclination of the Sri Lankan giftware industry towards Organic Processes, placing more emphasis on internal flexibility and spontaneity.

Figure 8 - Graphical Representation of the Highest Mean Scores in the Four Culture Types for Giftware Industry
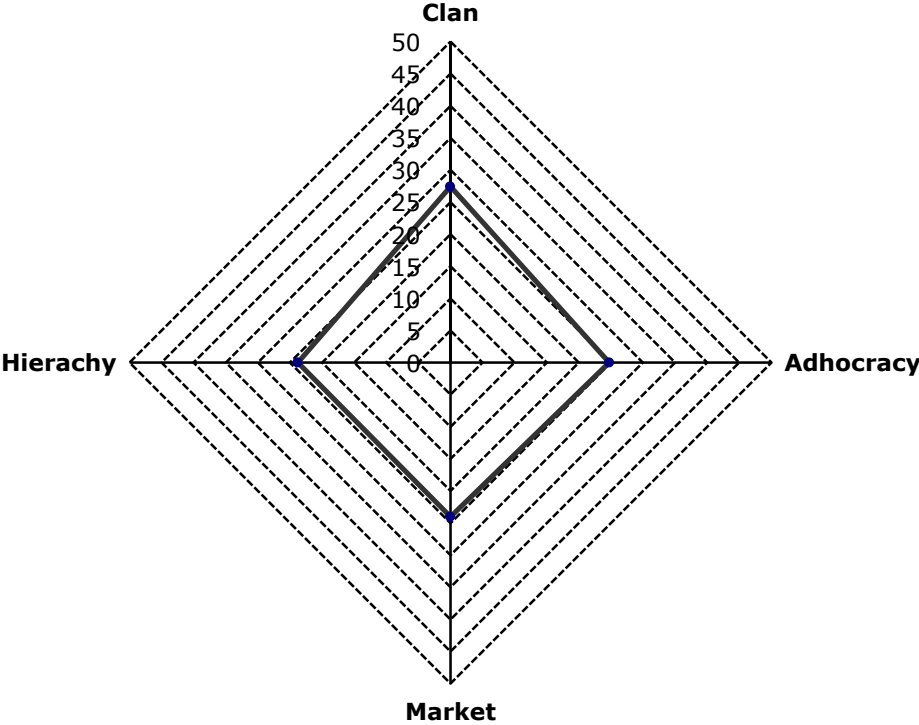
Descriptive Statistics on Innovativeness

Descriptive analyses were carried out for frequency of different types of organizational innovations, innovation level (radical/incremental) and the degree of newness in each category.

As noted earlier, this study employed a conceptualization of organizational innovation into Product, Process, Organizational and Strategy innovation. This organizational innovation can be further classified into two groups: radical and incremental, based on the time span of the process. Furthermore, the researcher intended to estimate the overall degree of newness of those innovations by sorting them into three different groups: "New to the company", "New to the local industry" and "New to the world". Table 4 provides the descriptive analyses conducted on three of those sub-scales. The category "New to the company" was not recorded as it is obviously 100% for any company in case of innovations.

Table 4 - Innovation types summary

Innovation Type	Average Frequency		Level of Innovation		Degree of newness	
	# Of occurrence	Percentage	Radical	Incremental	New to Local Industry	New to the World
Product	63.86	83.16%	44.36%	55.64%	61.86%	29.84%
Process	5.33	6.95%	34.52%	65.48%	49.81%	15.20%
Organization	1.67	2.17%	52.05%	47.95%	22.50%	2.50%
Strategy	5.93	7.72%	41.25%	58.75%	48.57%	13.52%
Total	76.79	100.00%	43.05%	56.95%	45.69%	15.27%

Source: Structured Questionnaire Survey

Out of all innovation types, product innovations recorded the highest average frequency of 68.86 for the industry which accounts for 83.16% of total number of innovations. Strategy and Process innovations show the next highest values of 5.93 and 5.33 respectively, while organizational innovations show the lowest frequency. Specific frequencies for each sub-type together with

percentage values are summarized in Table 4. It is interesting to note that the average frequency of product innovations is more than four times of the combined frequencies of the other three subgroups.

As a major single dependent variable, the number of times that all four types of innovation were implemented during the three-year period was aggregated to obtain the total frequency of organizational innovation. The assessment indicated that the mean frequency of total organizational innovation was 76.79 for the industry in general.

In terms of level of innovation, incremental innovations represent higher percentage (56.95%) in total number of organization innovations as well as in all sub-categories separately, except in organization innovations. This implies the relatively longer time span for organizational changes and slow execution of such innovations by the Sri Lankan giftware firms.

In terms of degree of newness, nearly half of all the innovations are new to the local industry, while only a 15.27% is entirely new to the world. Compared to other types, product innovations show fairly high percentages in both categories. However, there is no hard evidence to authenticate these figures as in many cases companies do not possess patents or licenses for such innovations, due to high costs involved.

ANOVA Analysis and Testing of Hypotheses

Testing of the hypotheses was mainly performed through a series of one-way analyses of variance (ANOVA). Eight hypotheses were built for this study - two dedicated to the classification of dominant culture type, two others dedicated to the classification of innovation

types and the rest (4) dedicated to the relationship between dominant culture type and the organizational innovativeness.

Hypothesis 1 speculated that there will be a difference in the mean scores assigned to the four culture types of clan, hierarchy, adhocracy and market, within a sample of giftware manufacturing firms in Sri Lanka. The ANOVA test of these data produced the results, which are given in Table 5. With a sufficiently large F value of 8.753, analytical data suggests that there is a statistically significant difference between the groups at the 0.05 level.

Table 5 - One way ANOVA for mean scores assigned to the Four Culture Types

Organization Culture Type	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	437.029	3	145.676	8.753	.000
Within Groups	2729.442	164	16.643		
Total	3166.471	167			

Source: Structured Questionnaire Survey

The above results clearly show that average scores for the different culture types of clan, hierarchy, adhocracy and market, are not the same. Therefore, the Hypothesis 1 is validated. This finding is in line with the findings of the similar studies (Cameron, 1986; Cameron and Quinn, 1999) done previously in other country contexts to investigate whether organizations can be classified by their dominant operating values.

Hypotheses 2 posited that majority of the Sri Lankan Giftware firms tend to have highest mean score for the culture type Hierarchy. However, as shown in Table 5, the clan culture was reported as the most dominant type among Sri Lankan giftware firms, with a majority of 47.6% (n=20). Additionally, a post-hoc analysis carried out using Turkey's Honestly Significant Difference (HSD) reported a statistically significant difference between the mean score of clan culture with all other types. Therefore the <u>Hypothesis 2 is not supported</u> by the research data.

Hypotheses 3 suggests that Sri Lankan giftware firms tend to focus more on product innovations while **Hypothesis 4** signifies that they tend to focus more on incremental innovations vis-à-vis other types. As shown in the Table 6, product innovations and radical innovations show a clear highest mean score. Particularly, product innovations show a four-fold higher value as against the combined value of all other types. Therefore the <u>Hypotheses 3 and 4 are validated</u>.

Through the **Hypotheses 5** and **6**, it was posited that a relationship existed between dominant OC type and innovative activities. Hypothesis 5 examined the influence of dominant OC type on the metrics of the firm's innovativeness, while hypothesis 6 examined the influence of dominant culture type on the frequency of four types of innovations.

As shown in the Table 6, average scores of only two metrics namely <u>Resources Out</u> and <u>Capabilities</u> show statistically significant difference among the five dominant culture types (e.g., clan, hierarchy, market, adhocracy and no dominant) while the other three metrics appeared to have no significant difference. Therefore, the <u>Hypothesis 5 is only partially validated</u>.

Table 6 - One way ANOVA analysis for dominant culture types on the metrics of Organizational Innovativeness

		Sum of Squares	df	Mean Square	F	Sig
Resources In	Between Groups	410.604	4	102.651	.293	.881
	Within Groups	12615.528	36	350.431		
	Total	13026.131	40			
Resources Out	Between Groups	196358.218	4	49089.554	10.655	.000
	Within Groups	170470.854	37	4607.320		
	Total	366829.071	41			
Capabilities	Between Groups	30532.531	4	7633.133	3.041	.029
	Within Groups	90374.608	36	2510.406		
	Total	120907.139	40			
Leadership	Between Groups	1101.725	4	275.431	.352	.841
	Within Groups	28138.263	36	781.618		
	Total	29239.988	40			
Process	Between Groups	8944.432	4	2236.108	1.803	.150
	Within Groups	44655.088	36	1240.419		
	Total	53599.520	40			

Source: Structured Questionnaire Survey

Results of the ANOVA analysis conducted in order to test the Hypothesis 6 are shown in Table 7. The average scores for four innovation types, product, process, organization and strategy, are clearly not similar for the five dominant culture types. It was also noted that the most significant

difference is recorded for the product innovations while process and strategy innovations also reported acceptably significant differences at 0.05-level. However, organization innovations failed to exhibit any significant difference among dominant culture types. Since product innovations contribute more than 80% of the total, a clear difference in the total innovations among different culture types could also be noted. Therefore the Hypothesis 6 is validated, confirming that the dominant culture type has a definite impact on the frequency of innovation types.

Table 7 - One way ANOVA analysis for dominant culture types on Innovation types

		Sum of Squares	df	Mean Square	F	Sig.
PROD	Between Groups	136609.994	4	34152.499	7.994	.000
	Within Groups	158077.149	37	4272.355		
	Total	294687.143	41			
PROCESS	Between Groups	1396.260	4	349.065	4.250	.006
	Within Groups	3039.074	37	82.137		
	Total	4435.333	41			
ORG	Between Groups	24.467	4	6.117	1.443	.239
	Within Groups	156.867	37	4.240		
	Total	181.333	41			
STRATEGY	Between Groups	1832.740	4	458.185	4.584	.004
	Within Groups	3698.045	37	99.947		
	Total	5530.786	41			
TOTAL	Between Groups	196358.218	4	49089.554	10.655	.000
	Within Groups	170470.854	37	4607.320		
	Total	366829.071	41			

Source: Structured Questionnaire Survey

Since ANOVA itself does not indicate where differences exist, a descriptive ANOVA procedure was carried out and the results are shown in Table 8. Organizations having Adhocracy as the dominant culture type, recorded the highest frequency for total innovation (190.62) as well as for each innovation type separately. This is followed by second highest value (137.71) for Market type and comparatively low scores for Clan (25.6) and Hierarchy (37.25). The above results support the Hypothesis 7, which suggests that Adhocracy is the single most important culture type to determine innovation performance.

Table 8 - Descriptive results of the One way ANOVA analysis for dominant culture types on different Innovation types

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
PRODUT	Clan	20	21.2500	16.9018	3.7794	13.3397	29.1603
	Adhocracy	8	152.1250	126.0912	44.5800	46.7101	257.5399
	Market	7	125.1429	81.4359	30.7799	49.8272	200.4585
	Hierarchy	4	28.5000	15.8008	7.9004	3.3573	53.6427
	No Dominant	3	16.6667	20.2073	11.6667	-33.5309	66.8643
	Total	42	63.8571	84.7791	13.0817	37.4381	90.2762
PROCESS	Clan	20	1.6000	1.8468	.4129	.7357	2.4643
	Adhocracy	8	17.0000	19.9213	7.0432	.3454	33.6546
	Market	7	3.8571	2.0354	.7693	1.9747	5.7396
	Hierarchy	4	4.7500	5.9090	2.9545	-4.6526	14.1526
	No Dominant	3	3.3333	5.7735	3.3333	-11.0088	17.6755
	Total	42	5.3333	10.4009	1.6049	2.0922	8.5745

|							
ORG	Clan	20	1.2000	1.5079	.3372	.4943	1.9057
	Adhocracy	8	2.5000	2.1381	.7559	.7125	4.2875
	Market	7	2.0000	1.5275	.5774	.5873	3.4127
	Hierarchy	4	.5000	.5774	.2887	-.4187	1.4187
	No Dominant	3	3.3333	5.7735	3.3333	-11.0088	17.6755
	Total	42	1.6667	2.1030	.3245	1.0113	2.3220
STRATEGY	Clan	20	1.5500	2.7621	.6176	.2573	2.8427
	Adhocracy	8	19.0000	21.4343	7.5782	1.0805	36.9195
	Market	7	6.7143	6.5756	2.4853	.6329	12.7957
	Hierarchy	4	3.5000	4.5092	2.2546	-3.6752	10.6752
	No Dominant	3	1.6667	2.8868	1.6667	-5.5044	8.8378
	Total	42	5.9286	11.6145	1.7922	2.3092	9.5479
TOTAL	Clan	20	25.6000	18.7964	4.2030	16.8030	34.3970
	Adhocracy	8	190.6250	132.9296	46.9977	79.4931	301.7569
	Market	7	137.7143	78.5827	29.7015	65.0374	210.3911
	Hierarchy	4	37.2500	14.3149	7.1575	14.4718	60.0282
	No Dominant	3	25.0000	34.6410	20.0000	-61.0531	111.0531
	Total	42	76.7857	94.5888	14.5954	47.3098	106.2617

Source: Structured Questionnaire Survey

Hypothesis 8 suggests that external positioning is the most important dimension in the OC to determine the firm's innovation performance. Under the concept of the Competing Values Framework (CVF), external positioning is determined by the operating values of both Adhocracy

and Market culture types. According to our results, these two culture types are the reporters of highest values of innovation performance; as such the Hypothesis 8 is also validated.

The above descriptive results of the ANOVA analysis for total innovation frequency are graphically illustrated in Figure 8 for better visual representation.

Figure 8 - Graphical representation of mean highest score of total innovations for different dominant culture types
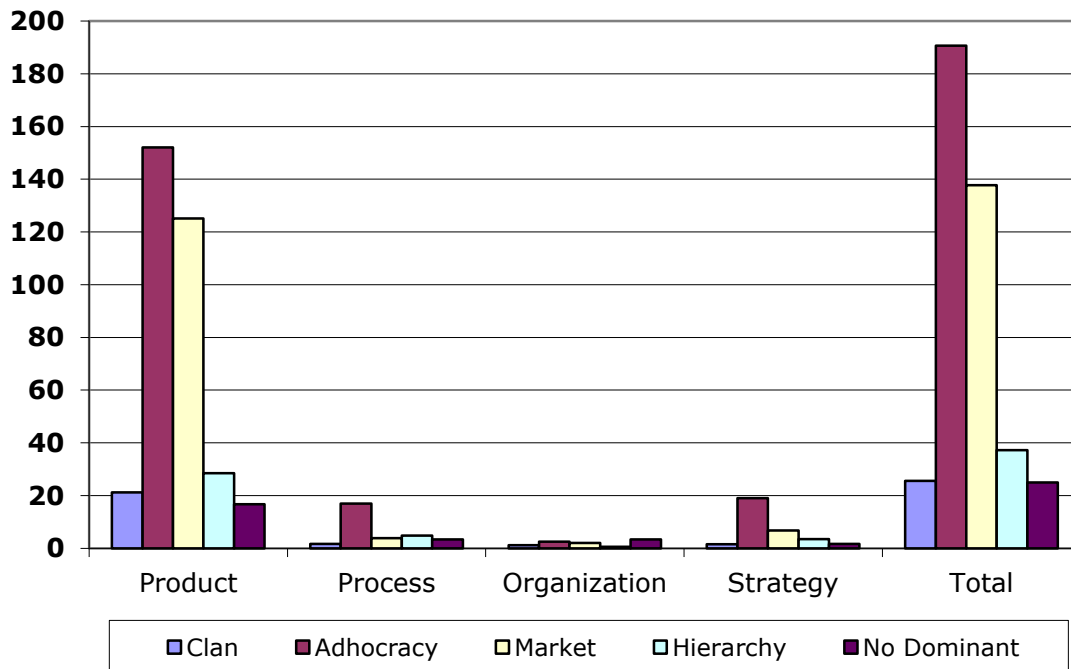
On the whole, findings of the study support the logic provided by the Competing Values Framework, which suggests that the adhocracy culture type emphasizes operating values for innovation (Cameron and Quinn, 1999). Second, the mean frequency of total innovation for institutions reporting market as the dominant culture type is significantly different from the mean frequencies for those reporting dominant culture types of hierarchy and clan. The literature on

OC type supports this finding, suggesting that the adhocracy and market culture types share similar operating values. So, it would be expected that the market culture type might be associated with higher innovation. Since the clan and hierarchy culture types share the operating value for internal focus, it was not surprising that these cultures had lower mean scores on innovation than the other culture types. The different ANOVA results obtained for the organizational type of innovations could be attributed to the fact that those are more internally oriented than externally oriented.

CONCLUSIONS AND RECOMMENDATIONS

Evidently, this research is an initial attempt in the Sri Lankan context for a systematic study on the gift and decorative-ware industry, its innovativeness and possible relationships with the OC. Nevertheless, this study is only the starting point in developing an understanding of cultural and innovation issues for Sri Lankan organizations. Indisputably, this study provides a valuable set of new notions and tools for future research. Findings of the study, in broader terms, are consistent with the previous empirical investigations made in different contexts. As one of very few studies done in the field, this paper makes an important contribution to the research literature by its exclusive examination of the relationship between OC and Innovativeness, in particular, and organizational effectiveness, in general, in Sri Lanka.

The key conclusions and recommendations made in the research study can be summarized as follows:

- ▶ Our analysis suggests that the Sri Lankan gift and decorative-ware firms could be classified by the dominant cultural types among them, based on the CVF model.

▶ We find that, among the firms, Clan is the most dominant culture type followed by Adhocracy, Market and Hierarchy. Also, in the overall culture profile of the industry, Clan recorded the highest mean score. This demonstrates the overall inclination of the industry towards people-oriented operating values, such as cohesiveness, participation, teamwork, loyalty, commitment, morale, etc., rather than being oriented externally. It is to be noted that contemporary strategic management practices warrants more proactive approach in order to withstand the violently competitive business environment today. It further prescribes adapting business practices in the light of one's internal strengths and weaknesses and also opportunities and threats of the external environment. In the present context, the window of opportunity is short-lived. Invasion of the international market by countries like China and India with gigantic economies of scale in production has made the battle in low cost markets virtually impossible. As a result, new ideas, new strategies, new processes, and new practices are in extremely high demand. Fast changing trends and short product life cycles in the market have pressurized manufacturers for continuous innovation in line with the changes taking place in the external environment.

▶ The participating firms reported highest average frequency of product innovations which is few times larger than the combined value of other innovations. This also warrants greater attention. Developing new products is comparatively easy. But new strategies and processes always carve a niche in the market. Generally product innovations enhance value addition while organization and process innovations encourage productivity, efficiency and sometimes total rewriting of rules, resulting in high quality goods produced at very low costs.

- Incremental innovations are predominant over radical innovations. It is to be noted that radical innovations are rather important in the present context, as the window of opportunity remains open for very short period of time.

- In terms of the degree of newness, 45.69% of the total innovations are new to the industry, while only 15.27% is new to the whole world. In the context of booming information and communication technology, e-commerce practices and mobility of people, geographical boundaries of global market are disappearing, creating one massive single market. Hence, the "new to the local market" no longer has significant value. Being "new to the world" is therefore a critical factor in the winning formula.

- Innovation performance of the Sri Lankan gift and decorative-ware manufacturing firms is associated with their dominant OC type. Adhocracy is affiliated with higher innovation performance than the other dominant culture types. A statistically significant difference was yielded between the mean scores on product, strategy and process innovations for each of the dominant culture types. However, the dominant culture type of Adhocracy is associated with higher levels of innovation for all innovation types followed by Market type.

- The prospect of innovation implementation is associated with the characteristics of the Adhocracy and Market culture types, implying that external positioning with the operating values of competition and differentiation is important for a company to perform innovatively.

▶ Based on the results, it could be advocated that Adhocracy and Market are the key cultural dimensions that need to be strengthened within the giftware manufacturing firms in Sri Lanka in order to enhance their innovativeness.

As a final remark, it is emphasized that the above recommendations are made in the light of the firm's innovativeness which is only one aspect of the big picture of a business operation. Other culture traits may have different significant roles in determining other facets of the organization. Administrators should therefore be extremely careful in keeping the right mix of culture characteristics in order to optimize the overall operation and performance of the firm to maximize the innovation spirit.

References

Boudreau. K and Lakhani. K (2009) How to Manage Outside Innovation, MIT Sloan
    Management Review 50, No. 4, PP. 69-76.

Central Bureau of Industries: CBI (2000) *EU Strategic Marketing Guide 2000 - Gift and
Decorative Articles Vol. I and II.* Rotterdam, CBI.

Cameron. K and Quinn. E (1999) *Diagnosing and Changing Organizational Culture:
    Based on the Competing Values Framework.* Reading MA, Addison-Wesley Publishing
    Co.

Conway. S and Steward. F (2009) Managing and Shaping Innovation, Oxford: Oxford
    University Press.

Christensen. M (1997) *The Innovator's Dilemma*. Boston: Harvard Business School
    Press.

Deal. T and Allan. A (1982) Corporate Cultures: The Rites and Rituals of Corporate Life.
    Reading, MA: Addison-Wesley Publishing Co.

Dillman. D (2000) *Mail and Internet Surveys: The Tailored Design Method.* 2nd ed. New
    York: John Wiley & Sons.

Dyer. J, Gregersen. H and Christensen. C (2009) The Innovator's DNA, Harvard
    Business Review 87, No. 12, pp. 60-67.

Deci, E Koestner. R and Ryan. R (1999) A Meta-Analytic Review of Experiments

Hansen. M and Birkinshaw. J (2007) The Innovation Value Chain, Harvard Business
    Review 85, No. 6, pp. 121-130.

Hargadon. A (2003) "How Breakthroughs Happen: The Surprising Truth About How
    Companies Innovate, Boston: Harvard Business Press.

James H (2005) Why Did You Do That? An Economic Examination of the Effect of
    Extrinsic Compensation on Intrinsic Motivation and Performance, Journal of Economic
    Psychology 26, No. 4, pp. 549-566.

Johnson . G (1988) Rethinking Incrementalism, Strategic Management Journal, Vol. 9, No. 1,
    pp. 75-91.

Khalil. T (2009) Management of Technology, The Key to Competitiveness and wealth
    Creation, Tata McGraw-Hill: India.

Kanter, RM (1988) 'When a Thousand Flowers Bloom: Structural, Collective, and Social
Conditions for Innovation in Organization'. *Research in Organizational Behavior,* Vol.
10, pp. 169-211.

King. N (1990) 'Innovation at work: the research literature'. In M. West and J. Farr (Eds.)
Innovation and creativity at work, pp 15-61, New York, John Wiley and Sons.
Kotter. J and Heskett. J (1992) *Corporate culture and performance.* New York: The
Free Press.

Kroeber. A and Kluckhohn. C (1952) Culture: A Critical Review of Concepts and
Definitions. New York: Vintage Books.

Muller. A, Välikangas. L and Merlyn. P (2003) *Metrics for Innovation How Companies
Can Develop a Suite of Innovation Metrics to Combat Decay* Retrieved Feb 16, 2005,
from www.woodsideinstitute.org.

Ouchi. W (1981) *Theory Z: How American Business Can Meet the Japanese Challenge.*
Reading MA: Addison-Wesley Publishing Co.

Peters. T and Waterman. R (1982) *In Search of Excellence: Lessons from America's Best
Run Companies*. New York, Harper and Row.

Pascale. R and Anthony. A (1982) The Art of Japanese Management: Applications for
American Executives. New York: Simon & Schuster.

Schein, E. (1992) *Organizational culture and leadership (2nd Ed.).* San Francisco:
Jossey- Bass.

Skarzynski. P and Gibson. R (2008) Innovation to the Core: A Blueprint for
Transforming the Way Your Company Innovates, Boston: Harvard Business Press.

Tidd. J, Bessant. J and Pavitt. K (2005) Managing Innovation, Integrating Technological,
Market and Organizational Change, 3rd Ed., Wiley Student Edition: India.

Unity Marketing (2008) The Gifts & Decorative Accents Report 2008: Who Buys Gifts and
Home Decorative Accents, What They Buy and Why They Buy,
http://www.unitymarketingonline.com/cms_gifting/gifting/GDA_2007.php, Retrieved 17 Nov.
2010.

Yeung, A, Brockbank, J and Ulrich, D (1991) 'Organizational culture and human
resources practices: An empirical assessment'. In Woodman, RW & Pasmore WA (Eds.)
Research in organizational change and development, pp. 59-82, London, JAI Press.