

Information Sharing in Collaborative Marketing and Integrated Marketing Communications- Towards a Systemic View

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Abstract

By Internet age arrived, collaborative commerce has completely changed business environment and model. Collaborative Marketing (CM) has continuously growing in a seemingly unabated fashion worldwide. The enterprise competitive condition has completely changed into global competitive environment within supply chain. In addition, this study provides an appreciation of the emergence and content of Integrated Marketing Communications (IMC) that widely used by industry and commerce in the US and UK. Systems intervention is one main stream of systems thinking in England. In order to build a systemic approach of IMC, this research examines systems intervention to see what it can contribute to CM and IMC for enterprises. This study examines how CM can help IMC through identifying key customer knowledge sources, hence, marketing and advertising would be based on a single global campaign, with only minor adjustments for local markets. The aims of this paper are to explore the role of customer knowledge sources within collaborative IMC and develop a conceptual framework to further suggest better solution for IMC collaboration.

Taking beauty enterprise as an example, this research focuses on CKM (Customer Knowledge Management), CM, IMC and systems intervention to design the questionnaire for 120 companies. There were 8 available responses from 60 collaborative partners in Taiwan and 19 available responses from 60 collaborative partners in China (Return rate 22.5%). This paper identifies the difference of knowledge sources, CM, IMC

and systems intervention between Taiwan and China in a leading beauty enterprise and finds out that CM has significant effect on IMC that could be used for IMC planning in the future.

1. Introduction

Although collaboration maximizes the combined competencies of the partners to achieve each partner's strategic goals and to provide solutions to meet customers and stakeholder needs, the processes and procedures of collaboration required for success are a little less clear [12]. Actually, the processes for integrating customer knowledge sources are complicated. The best way to avoid the problem is to define a joint process and implementation plan for collaboration. Actually, it is difficult for enterprises to manage and balance value chain processes and further associate communications. However collaboration provides the functionality to access and utilize the information that is being communicated.

There are a number of specialists who have suggested models of IMC (IMC), including some who set out specific aspects towards achieving successful IMC [10]. The Caywood et al. [1] study introduced a new conceptual debate concerning integrated approaches to marketing communications. It is known that buyers and suppliers have high hopes for utilizing the Internet to streamline trading partner relationships. Recently, Corelissen and Lock [3] have examined IMC as a body of theory and hypothesized its influence upon practice. Low [7] identified factors that are significantly related to the

degree of integration of a company's marketing communications activities. Cornelissen [2] further collated the available evidence on the US and UK marketing communications practices.

Collaboration in IMC with enterprises from similar or competing product sectors may offer significant advantages. For example, collaboration with European firms has been a popular market entry route for Japanese firms. Perks [11] presented four major Euro/ Japanese cases of new product development collaboration. Michael [9] examined whether one hybrid form, the franchise chain, can coordinate elements of the marketing mix.

Lin [8] presented the IMC Model and it provides a framework to review, operationalize and evaluate the process and effectiveness of IMC. Based on this model, we further examine how CM can help IMC, hence, marketing and advertising would be based on a single global campaign, with only minor adjustments for local markets.

By emphasizing on knowledge in the global economy, the collaborative partners start to overlook major customer knowledge. Gibbert et al. [5] think that CKM can provide a significant competitive advantage for companies, but its possible stumbling blocks have to be appreciated. They identified two major stumbling blocks, first the cultural challenge (in terms of re-thinking the role of the customer and the far-reaching implications this has for the mindset of employees within the organization), and second the competency challenge (in terms of the skills and processes needed to take full advantage of participative techniques). There is an important issue existed CM to understand what kinds of customer knowledge sources they can share with each other. So, it would be interesting to find out the answer for collaborative partnerships.

This paper is not only focusing on organizational process improvement of IMC and CM, but also trying to tackle the issues in the dimensions of organizational

design, organizational culture and organizational politics. These four dimensions [4] must be considered in order to help to achieve the ideal dynamically balanced organization for IMC and CM. Schultz and Kitchen [13] do not believe IMC is a theory but believe the general idea of integration, processes, and systems thinking must prevail in the 21st century. However, in order to build an effective systemic approach and to avoid introducing other weaknesses, it is now necessary to carry out an in-depth consideration of systems intervention and make the IMC and CM model even more effective.

The aims of this paper are:

1. Develop a conceptual framework that identifies the customer knowledge sources and further finds out systems intervention for CM and IMC.
2. Identify the difference of knowledge sources, CM, IMC and systems intervention between Taiwan and China in a leading beauty enterprise.
3. Find out the key knowledge sources for CM and IMC.
4. Use systems intervention to choose suitable method for CM and IMC strategies.
5. See how CM can help IMC.

2. Theoretical Background

Although collaboration maximizes the combined competencies of the partners to achieve each partner's strategic goals and to provide solutions to meet customers and stakeholder needs, the processes and procedures of collaboration required for success are a little less clear (Rabin, 2002). The best way to avoid the problem is to define a joint process and implementation plan for collaboration. Actually, it is difficult for enterprises to manage and balance value chain processes and further associate communications. However collaboration provides the functionality to access and utilize the information that is being communicated. For example, collaboration with European firms has been a popular

market entry route for Japanese firms. Perks (2000) presented four major Euro/ Japanese cases of new product development collaboration. Michael (2002) examined whether one hybrid form, the franchise chain, can coordinate elements of the marketing mix.

IMC research had its beginnings with the Medill School of Journalism at Northwestern University (Duncan and Moriarty, 1997). American Association of Advertising Agencies (4As) (1989) defined IMC is a concept of marketing communications planning that recognizes the added value of a comprehensive plan that evaluates the strategic roles of a variety of communication disciplines- general advertising, direct response, sales promotion, and public relation- and combines these disciplines to provide clarity, consistency, and maximum communication impact [1]. The combination of marketing and public relations communications disciplines has a number of labels. In the late 1980s, advertising agencies attempted to co-opt the concept by calling it 'the new advertising' (Hume, 1991), but other labels were also suggested: 'the new PR' (Harris, 1991), 'integrated marketing' (Wilcox, Ault and Agee, 1992), 'integrated corporate communications' (name of a master's program at Duke University), or 'integrated marketing communications' (Schultz, Tannenbaum, and Lauterborn, 1993). Recently, Reid et al. (2001) have employed Duncan and Moriarty's (1997) Integrated Marketing Audit to examine key communications issues and demonstrated that a higher level of integration is associated with better brand-related performance. Schultz and Bailey (2000) have defined a new approach for the 21st century marketplace because the new electronic communication and marketing alternatives and opportunities explored the alternatives available to communications around the world. Bush and Bush (2000) have proposed that the explosive growth of the Internet has the potential to change agency-advertiser relationships and blur the functions performed by each.

This paper carries out a comparison of current IMC approaches using six aspects: awareness integration, unified image, database integration, customer-based integration, stakeholders-based integration, and evaluation integration.

Since the 1930s, there have been three competing models of management in organization theory- the traditional approaches, human relations theory, and systems theory. However, with the recognition of the deficiencies of both the traditional approaches and human relations theory, the systems theory has now grown to a position of prominence in management theory. Flood and Jackson (1991) mentioned: "Systems thinking developed, therefore, as an alternative to mechanistic thinking, and proved itself more satisfactory for explaining not only complex biological but also social phenomena." Systems thinking draws a blue print to tackle the main issues of IMC and help to build a systemic approach of IMC. Some approaches in systems thinking could be used to improve IMC program such as Total Systems Intervention (TSI), system of evaluation methodologies, triple loop learning and critical appreciation. TSI is presented by Flood and Jackson (1991), which provides direction to systems practitioners wishing to choose relate and choose between methodologies in a theoretically informed manner. TSI's principles and philosophy can enhance IMC approach to set up effective communication in organizations. Flood (1995) identified that unless all four key dimensions of organization (organizational process, organizational design, organizational culture and organizational politics) are taken into account, i.e., a whole system view is developed, then problem solving is bound to be ineffective. Thus, TSI provides principles, processes and methods for problem solving which enable effective intervention in these four dimensions of organization to bring about improvement, which should help IC problem solving.

Organizational process means 'rules about efficiency

of flows and control over flows' and aims to achieve efficiency in terms of no unnecessary waste of time or resources (Flood and Romm, 1996). Flood (1995a) recommended Quality Management and Business Process Reengineering to make the processes more efficient. Organizational design concentrates on 'rules about effectiveness of functions and their organization' and here effectiveness refers to achieving chosen tasks of functions (Flood and Romm, 1996). Flood (1995) recommended using the Viable System Model (VSM) which brings together five main management functions (operations, co-ordination, control, intelligence, and policy) and organizes them according to a carefully worked-out series of information flows. Organizational culture means 'mediation of behavior in terms of people's relationship to social rules and practices' (Flood, 1995). This is recognition that different people need different things, understand things differently and respond to things in different ways. Flood (1995) has found that debating methodologies such as Testing Polarized Viewpoints, Exploring and Choosing Designs, and Exploring and Making Decisions could help to resolve the human problems of organizational culture and organizational misunderstanding. Organizational politics means 'power and potency to influence the flow of events' (Flood, 1995a). It is important to understand who holds power, and how this power can be used to serve certain interests. Flood (1995) points out that Critically Evaluating Designs and Decisions could help managers to think about whose interests are being served in design work and decision making.

Basically, if the organizations can look at their IMC approach through these four dimensions of organizations, they satisfy TSI's philosophy. If all four key dimensions of organizations are fully taken into account, then effective IMC approach can be achieved. Gould, Lerman and Grein (1999) indicated the importance of globally integrated marketing communications and adopt three

emergent themes: 'the evolving nature of the globalization process, its contingency element and its cultural dimensions of client and agency.' Be considered seriously, issues of IMC can be tackled and communications can be effectively integrated under the four dimensions of organizations. Lin (2000, 2001) developed a new integrated communications model which uses a systemic view for assessing the applicability of IMC. Furthermore, systems thinking and the pluralist approach from the Center for Systems Studies at the University of Hull (U.K.) can enhance the IMC approaches [8].

Gibbert et al. (2002) have presented the concept of Customer Knowledge Management (CKM) that refers to the management of knowledge from customers, i.e., knowledge resident in customers. Moreover, five styles of CKM were also proposed and illustrated by way of corporate examples. Park et al. (2001) have focused on knowledge refinement that is a necessary process to obtain and maintain current knowledge in the domain of interest. Shaw et al. (2001) have presented a systematic methodology that uses data mining and knowledge management techniques to manage the marketing knowledge and support marketing decisions. Lesser et al. (2000) have identified four approaches (customer knowledge development dialogues, facilitating the capture of knowledge relevant data, demonstrating enterprise leadership commitment to customer knowledge) that can expand the availability and use of customer knowledge. Lin and Su (2003) mentioned a systemic integrated communications model which can help enterprises identify the potential issues of CRM. Tiwana [14] provided knowledge sources and categories such as markets, competitions, customers, orders, contracts, products and services, customer complaint and best practices. Basically, knowledge about these sources and categories must be integrated into a knowledge-enabled CRM strategy.

3. Research Design and Method

3.1 Research Framework

This paper aims to explore the relationship among customer knowledge sources, CM, IMC and systems intervention. The conceptual model is displayed in Figure 1. The problems of organizational process, design, culture and politics in each aspect of IMC must first be identified. These problems will be reflected to the three modes in order to get the best solution in a systemic view. Tiwana (2000) provided knowledge source and categories such as markets, competitions, customers, orders, contracts, products and services, customer complaint and best practices. The conceptual model is displayed in Figure 1.

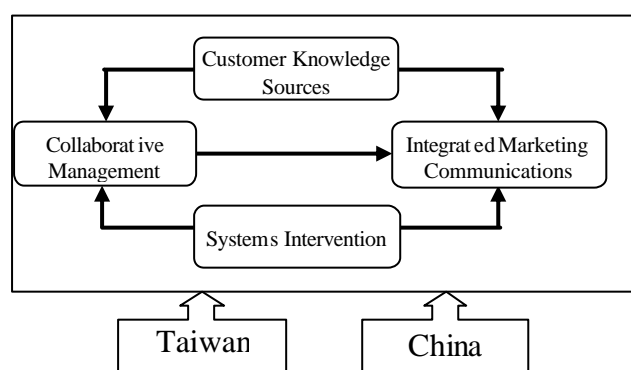


Figure 1. Research framework

3.2 Research Hypothesis

This paper aims to explore the relationship among customer knowledge sources, CM, IMC and systems intervention. Further to explore the effect of the dimensions of customer knowledge sources and systems intervention on the dimensions of CM and IMC. According to the purpose of the research and the literature surveyed, the hypothesis is identified as follows.

H₁₁: There is significant difference between Taiwan and China in the dimension of customer knowledge sources.

H₁₂: There is significant difference between Taiwan and China in the dimension of CM.

H₁₃: There is significant difference between Taiwan and China in the dimension of IMC.

H₁₄: There is significant difference between Taiwan and China in the dimension of systems intervention.

3.3 Sampling

There were 8 available responses from 60 collaborative partners in Taiwan and 19 available responses from 60 collaborative partners in China (Return rate 22.5%).

4. Research Findings and Discussion

4.1 Descriptive Statistics Analysis

As shown in Table 1, in the dimension of customer knowledge sources, the mean of market information is higher than the other factors. So it seems that market information plays the most important role in this dimension. In the dimension of CM, the mean of collaborative relationships is higher than the other factors. So it seems that collaborative relationships plays the most important role in this dimension.

As shown in Table 2, in the dimension of IMC, the mean of customer-based integration is higher than the other factors. So it seems that customer-based integration plays the most important role in this dimension. In the dimension of IMC, the mean of organizational processes is higher than the other factors. So it seems that organizational processes plays the most important role in this dimension.

Table 1. The mean of customer knowledge sources and CM

Customer Knowledge Sources		CM	
Factor	Mean	Factor	Mean
Market Information	4.443	Collaborative Relationships	4.145
Competition Information	4.128	Core Capability	4.012
Customer Information	3.898	Customer Focus	3.92
Order Information	3.66	Legal and Financial Facilitators	4.018

Product and Service Information	4.123	Business Systems	3.954
Customer Complaint Information	4.167	Common Views	3.948
Best Practice Information	4.045	Attitude	3.953

Table 2. The mean of IMC and systems intervention

IMC		Systems Intervention	
Factor	Mean	Factor	Mean
Awareness Integration	4.134	Organizational Culture	3.977
Image Integration	4.054	Organizational Politics	4.083
Database Integration	3.958	Organizational Design	4.174
Customer-based Integration	4.149	Organizational Processes	4.284
Stakeholders-based Integration	4.094		
Evaluation Integration	3.973		

4.2 Reliability Analysis

The analysis of scale reliability was performed using Item to total correlation, Cronbach's alpha coefficient and the cluster effects among variables. In the dimension of customer knowledge source, the value of Cronbach's alpha of the factor of market information, customer information, order information, product and service information, customer complaint information and best practice information are all great than 0.6. In the dimension of CM, the value of Cronbach's alpha of the core capability is less than 0.6 so we cancel this factor and the value of Cronbach's alpha of the others factors are greater than 0.75. In the dimension of IMC, the value of Cronbach's alpha of the factors of awareness integration, database integration, customer-based integration, stakeholder-based integration and evaluation

integration are greater than 0.65. In the dimension of systems intervention, the value of Cronbach's alpha of the factor of organizational culture, organizational politics, organizational design and organizational process are 0.7248, 0.6975, 0.75 and 0.7609 respectively, those values are greater than 0.6.

4.3 The difference between Taiwan and China

This research adopts t test to examine the difference between Taiwan and China regarding the dimension of customer knowledge sources, CM, IMC and systems intervention. The result of the analysis is shown as Table 3. Although there is no significant difference in both customer knowledge sources and CM dimensions, there is significant difference with the factors of awareness integration and evaluation integration in both IMC and systems intervention dimensions. So, findings provide no support for H11 and H12 and also provide partial support for H13 and H14.

Taiwan's collaborative partnerships focus on marketing information and product and service information for customer knowledge sources; collaborative relationships and legal and financial facilitators for CM; awareness integration and customer-based integration for IMC and need the solution about organizational design to get CM relationship improved. China's collaborative partnerships focus on marketing information and customer complaint information for customer knowledge sources; collaborative relationships and common views for CM; customer-based integration and stakeholders-based integration for IMC and need the solution about organizational processes to get collaborative marketing relationship improved.

Table 3. The different analysis of every dimension between Taiwan and China

Dimension		Mean Taiwan	Mean China	T-value	P-value	Significant difference
Customer Knowledge Sources	Market information	4.656	4.224	1.803	0.084	No
	Customer information	3.875	3.921	-0.192	0.85	No
	Order information	3.438	3.882	-1.578	0.127	No
	Product and service information	4.219	4.026	0.919	0.367	No
	Customer complaint information	4.188	4.145	0.19	0.851	No
	Best practice information	4.125	3.965	0.647	0.524	No
CM	Collaborative Relationships	4.4	4.053	1.696	0.102	No
	Customer Focus	3.75	3.887	-0.678	0.504	No
	Legal and Financial Facilitators	4.025	4.011	0.067	0.947	No
	Business Systems	3.917	3.991	-0.354	0.726	No
	Common views	3.875	4.021	-0.661	0.515	No
	Attitude	3.906	4	-0.4	0.693	No
IMC	Awareness Integration	4.333	3.825	3.266	0.003**	Yes
	Database Integration	4.125	3.79	1.363	0.185	No
	Customer-based Integration	4.333	3.965	1.725	0.097	No
	Stakeholders-based Integration	4.188	4	0.951	0.351	No
	Evaluation Integration	4.208	3.737	2.304	0.03*	Yes
Systems intervention	Organizational culture	4.042	3.912	0.52	0.608	No
	Organizational politics	4.044	4.123	-0.287	0.777	No
	Organizational design	4.417	3.93	2.262	0.033*	Yes
	organizational processes	4.375	4.193	0.84	0.409	No

* P<0.05; ** P<0.01; *** P<0.001

4.4 The regression analysis of the effects of customer knowledge sources and systems intervention on CM

As shown in Table 4, the dimension of customer knowledge sources has significant difference in the factors of collaborative relationships, customer focus, business systems, common views and attitude. The dimension of systems invention also has significant difference in the factors of legal & financial relationships, common views and attitude.

According to statistic outcome in the dimension of

customer knowledge sources, the factors of marketing information and product and service information directly affect collaborative relationships, the factor of customer information directly affects customer focus and the factor of order information directly affects business system, common views and attitude.

In the dimension of systems intervention, the factors of organization culture and organization design directly affect legal & financial relationships and the factor of organization process directly affects business systems, common views and attitude.

Table 4. The analysis of regression of the effects of customer knowledge and systems intervention on CM

Model	CM					
	Collaborative	Customer	Legal & financial	Business	Common	Attitude

	relationships	focus	relationships	systems	views	
Market information	0.54***					
Customer information		0.507**				
Order information				0.42**	0.356*	0.513***
Product and service information	0.423**					
Organization culture			0.449*			
Organization design			0.397*			
Organization process				0.583***	0.555**	0.504***
R ²	0.753	0.257	0.584	0.726	0.605	0.739
F value	36.572	8.667	16.868	31.718	18.391	33.944
P value	0.000***	0.007**	0.000***	0.000***	0.000***	0.000***

* P<0.05; ** P<0.01; *** P<0.001

4.5 The regression analysis of the effects of customer knowledge sources and systems intervention on IMC

As shown in Table 5, the dimension of customer knowledge sources has significant difference in the factors of database integration, customer-based integration, stakeholders-based integration and evaluation integration. Besides, the dimension of systems intervention has significant difference in the factors of awareness integration, database integration, customer-based integration and stakeholders-based integration.

In the dimension of customer knowledge sources, the factor of customer information affects database integration, the factor of order information affects customer-based integration, the factor of customer complaint information affects stakeholders-based integration and the factor of product and service information affects customer-based integration and evaluation integration.

In the dimension of systems intervention, the factor

of organization culture affects customer-based integration, the factor of organization leadership affects database integration and stakeholders-based integration, the factor of organization design affects awareness integration, database integration and stakeholders-based integration and the factor of organization process affects database integration.

4.6 The regression analysis of the effects of CM on IMC

As shown in Table 6, the dimension of CM has significant difference in the factors of customer-based integration, stakeholders-based integration and evaluation integration. In the dimension of CM, the factor of legal & financial relationship affects customer-based integration, stakeholders-based integration and evaluation integration; the factor of common views affects evaluation integration and the factor of attitude affects stakeholder-based integration.

Table 5. The analysis of regression of the effects of customer knowledge sources and systems intervention on IMC

Model	IMC				
	Awareness	Database	Customer-based	Stakeholders-based	Evaluation

	integration	integration	integration	integration	integration
Customer information		0.323**			
Order information			-0.349*		
Product and service information			0.544**		0.622**
Best practice information				0.27*	
Organization culture			0.543**		
Organization leadership		0.465***		0.484**	
Organization design	0.439*	0.979***		0.377**	
Organization process		-0.698**			
R ²	0.193	0.817	0.63	0.722	0.386
F value	5.972	24.531	13.066	19.899	15.737
P value	0.022*	0.000***	0.000***	0.000***	0.001**

* P<0.05; ** P<0.01; *** P<0.001

Table 6. The analysis of regression of the effects of CM on IMC

Model	IMC				
	Awareness integration	Database integration	Customer-based integration	Stakeholders-based integration	Evaluation integration
Collaborative relationships	0.223	0.18	0.253	0.169	0.222
Customer focus	0.302	0.081	-0.052	-0.096	-0.156
Legal & financial relationships	0.494	0.647	0.796**	0.795**	0.853**
Business systems	-0.072	0.236	-0.511	-0.325	-0.044
Common views	-0.111	-0.553	-0.184	-0.637	-1.089*
Attitudes	-0.339	0.038	0.355	0.822*	0.568
R ²	0.317	0.363	0.562	0.631	0.471
F value	1.546	1.896	4.272	5.511	2.97
P value	0.215	0.131	0.006**	0.001**	0.031*

* P<0.05; ** P<0.01; *** P<0.001

5. Conclusion

The findings of this research are as follows:

1. Although there is no significant difference in both customer knowledge sources and CM dimensions between Taiwan and China, there is significant difference with the factors of awareness integration and evaluation integration in both IMC and systems intervention dimensions.
2. Collaborative partners consider that more market information, and product and service information
3. In IMC dimension, gathering customer information can build collaboration and trust relation between collaborative partners. Solving methods of organizational culture and organizational design can help to clarify with the legal and financial relation between collaborative partners. In addition, gathering order information and the solving methods of organizational process will help to build up business IT system, common view and positive attitude.

and solving methods of organizational design, organizational politics and organizational process will help to database integration. Gathering order, product and service information and solving methods of organizational culture will help to customer integration. In addition, gathering best practice information and solving methods of organizational design and organizational politics will help to stakeholders-based integration.

4. CM has significant effect on IMC that could be used for IMC planning in the future.

Moreover, this study presented a conceptual model of Collaborative-CKM to see how CM can help IMC implementation. The result of the research could be consulted by the other industry to create their Collaborative-CKM framework and IMC implementation.

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