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Editor: Prof. Geoffrey Q.P. SHEN, PhD
Assistant Editor: Mr. Jacky K.H. CHUNG

The Hong Kong Institute of Value Management, P.O. Box No. 1358, G.P.O., Hong Kong.
Tel: (852) 2766 5817, Fax: (852) 2764 5131, URL: <http://www.hkivm.com.hk>

COUNCIL MEMBERS OF THE HONG KONG INSTITUTE OF VALUE MANAGEMENT (HKIVM)

Mr. Tony Wilson

Architectural Services Department
Room 4101, Queensway Government Offices
66 Queensway, Hong Kong
Tel: (852) 2867 3798, Fax: (852) 2524 7981
Email: wilsoar@archsd.gov.hk

Dr. William Vaughan Coffey

Hong Kong Housing Department
12/F, Block 3, HKHAHQ Building
33 Fat Kwong St., Homantin, KLN
Tel: (852) 2129 3554, Fax: (852) 2246 8492
Email: vaughan.coffey@housingauthority.gov.hk

Ms. Shirley C.S. Ho

DLS Management Limited
Room 2101, Leighton Centre,
77 Leighton Road, Hong Kong
Tel: (852) 2830 3689, Fax: (852) 2576 0416
Email: shirleyho@dlshk.com

Prof. Geoffrey Q.P. Shen, PhD

Department of Building & Real Estate
The Hong Kong Polytechnic University
Hung Hom, Kowloon, Hong Kong
Tel: (852) 2766 5817, Fax: (852) 2764 5131
Email: bsqpshen@polyu.edu.hk

Dr. Frederik Pretorius

Department of Real Estate and Construction
The University of Hong Kong
Pokfulam Road, Hong Kong.
Tel: (852) 2859 2128, Fax: (852) 2559 9457
Email: fredpre@hkucc.hku.hk

Mr. David Kai Cheung Yau

Henderson Land Development Co Ltd
75/F, Two International Finance Centre
8 Finance Street, Central, Hong Kong.
Tel: (852) 2908 8865, Fax: (852) 2537 5025
Email: david.yau@hld.com

Dr. Mei-yung Leung

Department of Building and Construction
City University of Hong Kong
Tat Chee Avenue, Kowloon, Hong Kong
Tel. (852) 2788 7142, Fax (852) 2788 7612
Email: bcmei@cityu.edu.hk

Mr. Jacky K.H. Chung

Department of Civil Engineering
The University of Hong Kong
Pokfulam Road, Hong Kong.
Tel: (852) 2859 2665, Fax: (852) 2559 5337
Email: jackychung@hku.hk

Mr. Tony Kwok Keung Wu

Transport Department
41/F, Immigration Tower
7 Gloucester Road, Wanchai, Hong Kong
Tel: (852) 2829 5385, Fax: (852) 2845 7489
Email: tonywu@td.gov.hk

AIMS AND OBJECTIVES OF THE HKIVM

- To create an awareness in the community of the benefits to be derived from the application of Value Management in Hong Kong.
- To encourage the use of the Value Management process by sponsors.
- To establish and maintain standards of Value Management practice in Hong Kong.
- To contribute to the dissemination of the knowledge and skills of Value Management.
- To establish an identity for the Institute within Hong Kong and overseas.
- To encourage research and development of Value Management with particular emphasis on developing new applications of the process.
- To encourage and assist in the education of individuals and organisations in Value Management.
- To establish and maintain a Code of Conduct for Value Management practitioners in Hong Kong.
- To attract membership of the Institute to support these objectives.

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EDITORIAL

Welcome to the 4th issue of The Value Manager in 2006. Inside this issue, we have selected two scientific papers for you. The first one was written by Wang and Lu, which described the need for modularization in the market economy, the real benefits of using modularization in various industries, and how value management is used in the design of modularization. The second paper was written by Milton-Smith, who suggests that the transition from a services marketing to a value chain mindset requires a new way of thinking about strategy. Instead of focusing narrowly upon market conditions and behaviour of competitors, managers need to concentrate much harder on their customers and the customers they seek to create in the future. The design and delivery of an innovative and compelling value chain involves careful creation of an integrated business model, which includes all of the elements to satisfy and exceed customer's expectations, while taking account of the variables that could conspire to undermine it. Hope you can enjoy reading both papers.

Geoffrey Shen

Editor, The Value Manager

VALUE MANAGEMENT IN MODULARIZATION DESIGN

Wang Naijing & Lu Jing
China

INTRODUCTION

Modularization is the need of era, the production of market economy. An enterprise wants to exist and develop in the situation of market economy, it must be good at manage some right thinking methods so that get twice the result. Modularization is a new standardization form, and it is a modern design method. It showed enormous vital force, get remarkable economic benefit in the practice in developed countries.

THE BASIC IDEA OF MODULARIZATION DESIGN

Modularization design is a standardization and unitization design technique. It takes standardization principle as a foundation, and is the new form of standardized. It utilizes some of theories such as the simplification, the unitization, the seriation, the universalization, the modulus and so on synthetically in the standardized principle, so it is the highest form of standardized. The modularization technology carries on the decomposition from the product function and the structure, and carries on the induction, the analysis, the classification with the same or the similar function essential factor after decompose, then focus on the standardization, and make it simplify unitize, form several kinds typical, serialized function unit, so that the function unit standardization, to simplify the constitution of the complex product, reduce repetition work to the similar part in each kind of product, thus will obtain the good product constitution pattern and the huge economic efficiency.

The modularization's matter, the thing or the system combines by the general unit, its basic characteristic may induce as: The constitution way of the product or the system is the combined type structure; the unit Constituted with product or the system is general (standard) the unit. Or a simple formula expression is: modularization = unitization + standardization. The unitization is the

constitution form or the constitution characteristic of the modularization thing (product or system), the combination of different unit may form new product (system) of different function and character, then causes its constitution to present the flexibility, to adapt the demand of market or the user to the diverse; The standardization of constitution unit is the difference between modularization and unitization. The module is general (or standard) unit which has the relatively independent function, and precisely, the standardization of combination cell has brought the good benefit. Therefore, as the entire process of modularization, it must carry on the decomposition to many system-related under the systems engineering principle and methods, and separates same or similar units, exists independently with standard or general unit form, after unification, simplification and model processing. This is the module (series) which obtains by the decomposition. Using the combination principle, adds some all-purpose modules to the individual special-purpose module, organically combines according to the new system request, constitutes the new product (system) with new function. Therefore, the modularization contains two processes: System's "decomposition" and establishment module system. The module's "combination", and establishes the new product system spectrum

In fact, the modularization, this decomposition - combination thought is the most basic rule of modern industry production characteristic: Satisfies the need of diverse with the combined type product structure; The science and technology development is highly splits up and highly synthesizes; The flexible production line is the combination of flexible manufacture unit. The modularization is the theory and method which studies the best decomposition and combination art of system.

THE BASIC DEFINITIONS OF MODULE AND MODULARIZATION

The definition of module

At present, the words of module or modularization have applied in domestic and foreign generally, but there was not conclusion about the two concepts. Many scholars' explanation about "module", "modulation" reflected its basic concept and essence from different side. The author quotes Tong Shizhong's elaboration, and thought that the module was general independent unit which may be combined to the system, has some kind of specific function and interface structure.

From this, we may see: Firstly, the module is the constituent of system. Modules can be combined to the new system, also easy separate, disassemble and the replace from the system. Next, the module is the unit with specific function. It is the systematic constituent, but is not the product which divides to the system arbitrarily. It has the explicit specific function which can exists independent-relatively not attach to other functions, and does not disturb by other functions. Once more, the module is a standard unit. There is the typical nature, the versatility or the compatibility in the modular structure, and often constitute the series. This is the difference between the module and the common part, or it can be said that the module has the attribute of standardized. The module is decomposed with analysis to the similar product function and the structure, and is the typical part which obtained by the simplification and unitization method in the standardization. This typical nature is just the foundation that the module is widespread versatile. The versatility of module usually manifests in the interchangeability and in the compatibility. It realized with the standardization or the universalization of its connection. Finally, there is the connection to component system. The module should have the transmission function, and the structure to compose the system connection (input, output). The goal of design and manufacture module is to combine the system (or product) with it. The system is the ordinal whole, various modules both have the relatively independent

function, and relate mutually. The module component system after the organic synthesis, so this kind of sharing contact surface (union place) is the connection, its effectule eword ord the whole is transmits the function.

The definition of modularization

The modularization is the process that to obtain the best benefit, embarks from the system viewpoint, studies the constitution form of system, establishes the module system with the method of combination-decomposition, and combines the system with modules.

This definition promulgated the meanings of modularization as follows:

One, the objective of modularization is benefit. The modularization is the need of time, is the product of time. The intention and final goal of modular is to satisfy the diverse demand and to adapt intense market competition, realizes the best benefit and quality under the production method of multi- varieties and small batch.

Two, the object of modularization is the constitution of product (or system). The modularization does not studies and solves the design or the constitution question about some isolated product (or system), but solves best constitution form question of some kind (product) system, that is the system combined with the standardized modules. Because the object of modular is a system, thus the utilization of systems engineering principle and methods are the basic principle to develop modularization.

Three, the main method of modularization is the systematic decomposition and combination. The modular product (system) is composed by the standard module. How does the module produce, whether to combine the product (system) effectively, the skill and utilization level of system (product)'s decomposition and combination, are the core question

Four, the goal of modularization is to establish the module system and the object system. There are two goals or products of the modular, those forms the product system of module system and modularization. The establishment of module system is the premise of the modular design implements, forms the

modular product (system) is final home to return to. It is blind to establish the module system if there are not explicit modularization product (system) goals. There is not the modular product (system) if not series module system, and then the modularization only is the empty talk.

Five, the modularization is an active process. The modularization is not an isolated static thing, but is the activity process with goals and organization. There are both the production technology process and the management process of production technology. There are also the formation, the development, the consummation, the maturation and the renewal process in the modular process. The modular process does complete if didn't establish the module system. If establishment module system, but has not been able to use in the product (system), that means it does not generate economic efficiency, so this module system is no-value and insignificantly, the modularization process does not complete. The modularization system should also revises and renewal unceasingly along with the technical development and the market change.

From this we know, as a thought method, the method of work, the design method and the new standardized form, the modularization is effective way which complies with the diversification, the disperser, the socialization, the internationalization, the information tidal of the current manufacture system. It makes the system simplify, realizes standardization and flexibility to system structure, promotes socialization and the specialization of production, and then achieves the goal of enhancing benefit with optimizing product structure, optimizing production structure, management system and the industrial structure.

The definition of modularization design

Compares with the traditional design method, the modularization design has its own characteristics:

First, modularization design faces to product system. The traditional design faces to some concrete product, or some project, but all aims at some special duty, carries on the design from concrete function, concrete structure of product. The modularization design faces to some kind of product system, then the

neighbouring product system with similar function.

Next, the modularization design is the standardized design. In the traditional product design, although we need to use the related standardized material, even use some all-purpose components, borrows and so on, but overall speaking, it is specific design for the special-purpose. The object of modularization design is versatile, it needs to understand and the utilize standardization theory comprehensively, each kind of module passable uses in each kind of product, it is the part-level all-purpose components.

Once more, the procedure of modularization design is from top to bottom. The procedure of traditional design mainly designs various spare parts according to the product function, then constitutes entire by these parts. Although there are some overall plans and coordinated requests in this process, substantively, it mainly focuses on the functional design, the detailed design, its basic characteristic is from bottom to top, or from particular to collectively. On the contrary, the procedure of modularization design firstly focuses on the product system plan, decomposition and the combination of the product system function and framing the product system macro-model and the series spectrum formulation, or firstly focuses on the outline design but not the detailed design. In other words, there are two stages obviously in modularization design. We enter the detailed design stage after completing the appraisal and decision-making for outline design. The design is "from top to bottom" and "from particular to collectively".

Finally, the modularization design is the combination design. The constitution pattern of traditional product is an integral type. Although there is combination of the parts, its part and combination way is specific. The constitution characteristic of modularization product is a combined type, the combination basic unit - module exists as the independent commodity. We need to consider the coordination, the interchangeability and the combination of system in the design.

THE SORTS OF MODULARIZATION

We classify the modularization according to characteristic of product.

Component-Sharing Modularity (CSM)

In CSM, the identical component uses in many products to realize the scope economy.

CSM make "the large scale production" move back to increase the product series. So that the cost reduces greatly, the R&D for product speeds up. Therefore, although CSM cannot form the various individualations custom-made, it may provide diversiform products and services in low cost.

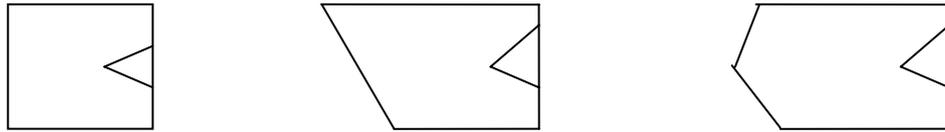


Figure 1: CSM

Component-Swapping Modularity (CSPM)

CSPM is the supplement of CSM. It carries on the combination with the different component

and the same basic product, forms products which the quantity is equal to the component-swapping.

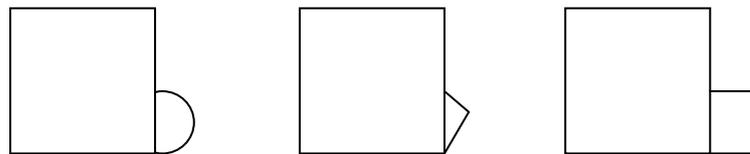


Figure 2: CSPM

CUT-TO-FIT MODULARITY (CTFM)

CTFM is that many components change continuously in the initialization or in the actual limit. Statistically, the requests of many customers to the product performance are continuous but not dispersed. Therefore, we

may produce individuality products with CTFM transformation, make customers not submit to standard specification products and sacrifice the individuality, and then the customer and merchant both obtain the benefit together.

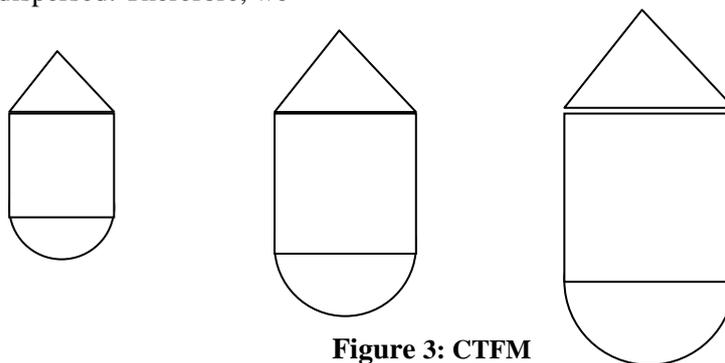


Figure 3: CTFM

Mix Modularity (MM)

The different component mixed together to form the different product.

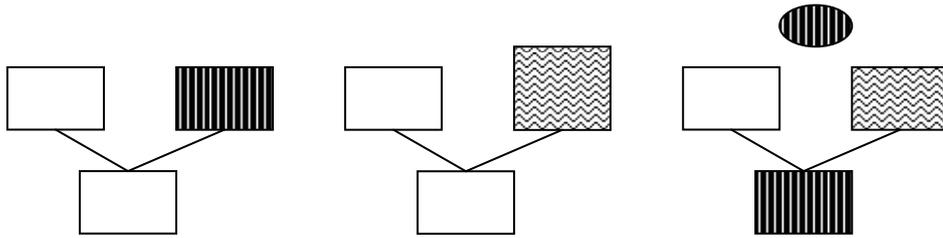


Figure 4: MM

Bus Modularity (BM)

The essence of BM modulation lies in determining the standard structure which can attach many different components. We must firstly determine the product system structure or the service infrastructure (namely BUS) for

each customer, simultaneously, make other parts modularization, and form the component which can insert BUS in the decomposition, if there are standard body which may determine except the structure which may change in product (or service).

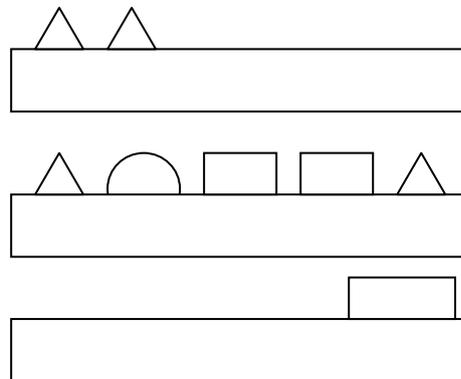


Figure 5: BM

Sectional Modularity (SM)

The SM modularization provides the greatest degree of diversification and custom-made, allows different component type with any quantity to collocate according to any way and

so long as one kind of component can connect with other components with the standard connection. In the 6 kind of modularization type, SM is the steadiest, the most flexible production arrangement, but also it is the most difficult to realize.

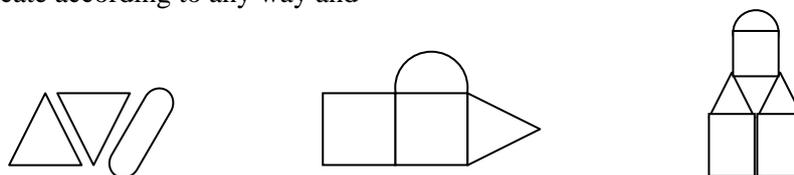


Figure 6: SM

THE COORDINATION OF MODULE FUNCTIONS

The system is a whole which many modules constitute mutually with the specific function and the organic relation. Decomposes the system into modules to design, and then optimize the system with the process of assembly in reason.

Take the function as the decomposition core

The function is the basis to constitute the module. Therefore, how to decompose the system into the modules according to the function becomes the most important question. The module can be constituted by physical function unit, also by the assembly structure of entire (system) or the service function unit. Speaking of the modularization products, it

often manifests for one kind of entity which synthesizes by the modules. Its decomposition

shows as the Figure7:

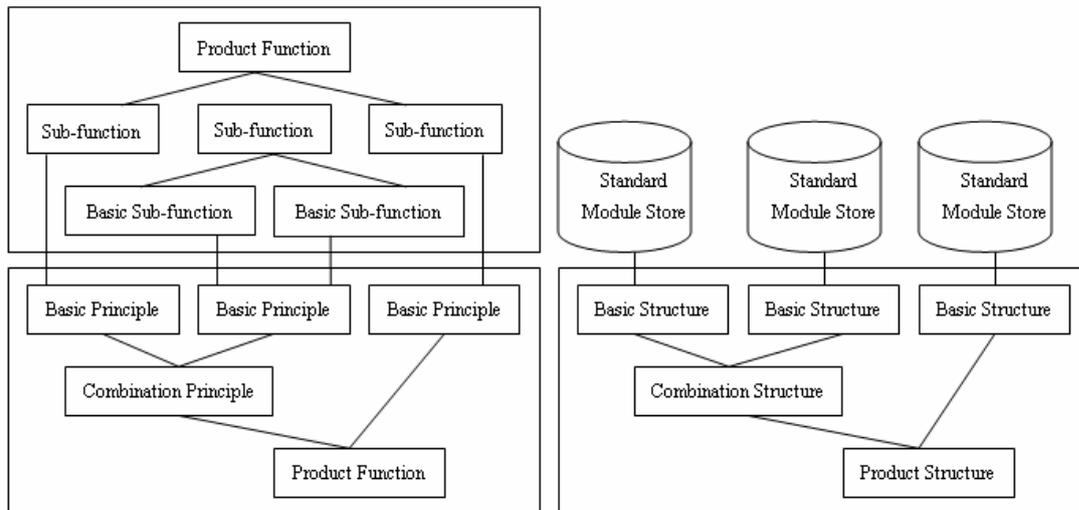


Figure 7: Product Function Partition

Function attributes analysis

The using function of product is the basis which product depends on to exist. Its value takes demand and demand with satisfying as the main symbol. There are three aspects to reflect product function attribute: function

advanced attribute, functional scope and operating performance. We can use three dimensional matrix and modulus grid in the function attribute appraisal, the Figure8 shows as follows:

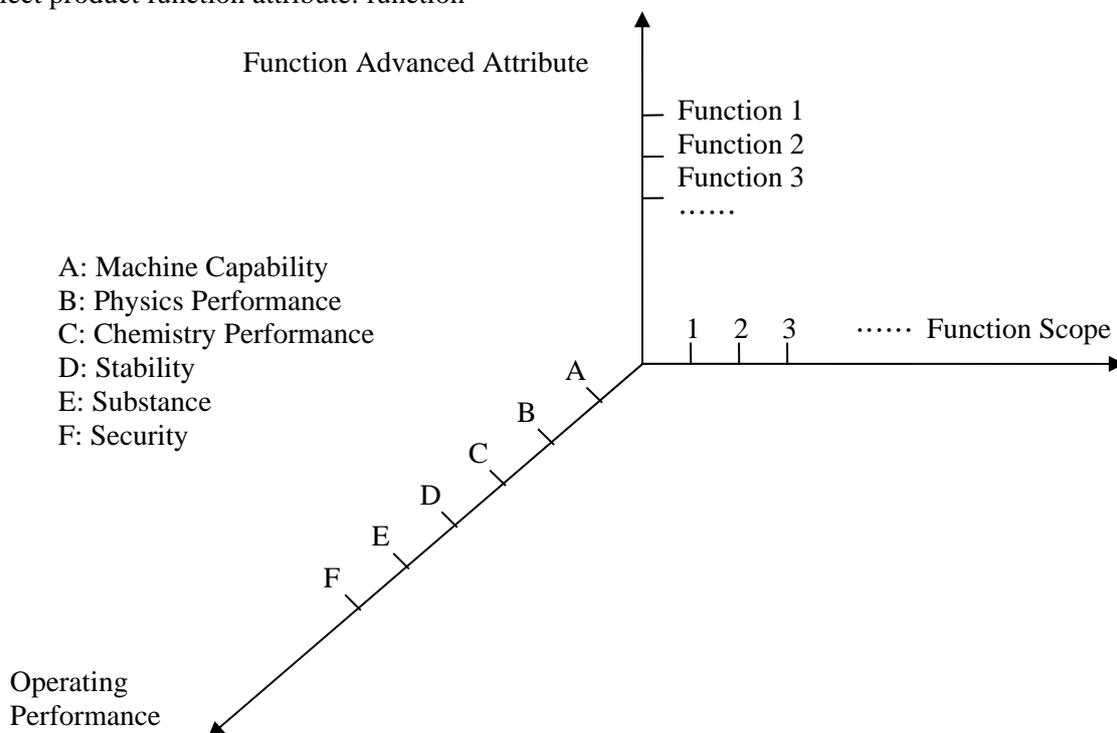


Figure 8: Function Attribute appraisal Chart

Among them, function advanced attribute refers to the utilization of modern high-tech product. It can provide the new function, not only satisfy the people's demands for new and wonderful things, but also solve difficult problem in work or life. It realizes people's desires; enhance quality and efficiency of people's life and work. The functional scope refers to product application scope. It is the important tendency that a thing with multipurpose in modern product design. The operating performance usually refers to the degree of product machine capability, physical performance; chemistry performance; the electrical specification and so on in stable; reliable; durable; high-speed; security and so on. It demonstrates the intrinsic quality level of product.

Definite important degree of function

It enables the new functional system instruct development for new product strongly; provides a more concrete standard for optimizing the product structure (or examining rationality of product design). The commonly methods show as following:

The lowest cost law

This law determines the lowest realization cost of all levels of functions with investigation statistics; technical analysis; the expert estimated and so on, and then measures the lowest realization cost of overall function.

$$\begin{aligned} & \text{function important degree coefficient} \\ & = \text{the lowest cost for this function} / \text{the} \\ & \text{lowest cost for overall} \end{aligned}$$

The mark law

There are many malpractices in determining the function important degree in traditional mark law. The most affect is, not all the marker can understand the important degree concept correctly and consistently, thus grades the disparity. The function important degree is reasonable investment coefficient of function. Therefore, it is neither the essential degree, nor the difficulty, but difficulty (or cost) to realize function essential intensity by the best way. Both Nonessential function and the non-realization-difficulty function do not budget.

In order to enhance the accuracy, the implementation steps are:

- Step1, making the markers understand the concept of function important degree;
- Step2, analyses factors of influencing function important degree, and then producing a group of concrete target and proportion;
- Step3, grading various functions separately, and taking the total score or average score for various functions as its important degree scores;
- Step4, calculating the function the important degree coefficient = the important degree score for this function / the sum of important degree score for each the same position function

Point out that, there are bigger errors in present gauging method. In the practice, we think the present cost is actually reasonable so long as the functions value coefficient is between 0.8 and 2 in the progress of analyzing value.

Take the core technique as the decomposition core

Any product or the system has its own characteristics, and this manifests core technology. The module constitutes by the main function of each level the system. We may define this kind of module bearing core technology as the main module. The module scale formation, the function expansion or integration launch in this main function, and attaches the accessorial module. These main functions are the primary factors which component system. Therefore, it is helpful for decomposing the system into the main module and the accessorial module according to the core technology to optimize and promote the system function.

Take the cost as the decomposition core

Because the user demand frequently is ambiguous and is only the descriptions for related product function; at the same time, as a result of the product technical innovation, there is not so much cost information in the demand design stage. So the product cost analysis method based on the meta-function can carry on the cost appraisal with the product characteristic.

We may classify product demand characteristic into 15 items, those are: energy, material, signal, characteristic, performance, security, man-machine project, manufacture, quality, maintenance, profit, plan, transportation, aesthetics', environment. Moreover, these 15 demands characteristics can derive the sub- category in order to define the general name further.

The product function classification based on the 15 demands characteristics, and each function carries on the further classification according to 15 demands characteristics sub-category until divides for meta-function-----the smallest indiscretable function unit. Regarding to each demand product, all those may establish meta-function cost analysis tree model for the product. The model structure shows like this:

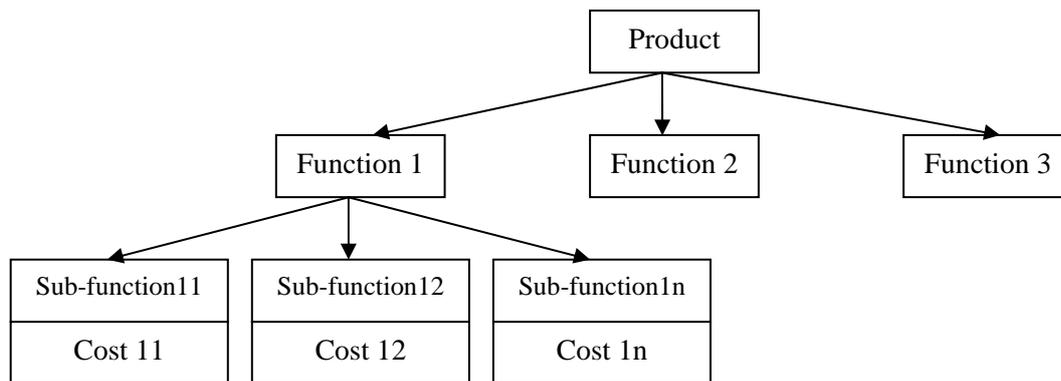


Figure 9: meta-function cost analysis tree model

In Figure 9, the first level function under the root pitch point closely belongs to one kind of 15 functions, and each function may subdivide to sub- function. In the tree, each non- leaf pitch point contains the pitch point of next level function until leaf pitch point. The leaf pitch point is the meta-function. Sub-function11, sub- function 12 and sub- function 1n are the meta-functions. Each meta-function has its own cost value. It may be a concrete value, also a range of variation, and a function formula.

How to determine the cost for each meta-function is a complex project; also is the foundation for entire cost analysis method. It involves the much expert knowledge and the experience knowledge in processing manufacture and other areas. The product cost includes all expenses which occur in the production management process in the enterprise. We need to consider production cost such as product components, parts; modules and so on when determining each meta-function cost. Simultaneously, consider unproductive cost such as energy; management; staff wages and so on. In addition, the manufacturers also undertake a partial of using cost in using process. Whether the meta-function cost analysis method

successes depends on the veracity of meta-function cost. Therefore, the meta-function cost analysis tree needs to be renewed promptly. The analysis tree needs to be supplied, deleted or revised according to the actual situation, such as increasing or changing certain meta-function when processing craft and production cost changes.

The redundancy of module function

The redundancy is the extra attachment ingredient of indispensable constituent which the product includes to complete the stipulation function. To be specific, the redundancy in the module design extends or expands for the module or the product function. And the modules can apply in more scope. Its goal is to enhance the universalized degree of the module, and the basic module can obtain the benefit of the scale production.

Generally speaking, the more redundancy is, the more storage is, and expense increases. On the other hand, the versatility is bigger, the expense such as the design, craft equipment, production preparation drop sharply. Therefore scale and the degree of the redundancy should determine with detailed economic accounting according to the actual situation of the modular object. For example,

how much is the cost for increasing a connection to expand compatibility, and how is the module sale benefit after increasing this connection. Certainly, the redundancy is relative. To some concrete product, it may be redundancy. But there may be not unnecessary constituent part as a whole.

MODULE FUNCTION AND RELIABILITY ANALYSIS

Tandem type modules

According to the modularization thought, the general module and the special-purpose module combine the new product, and then

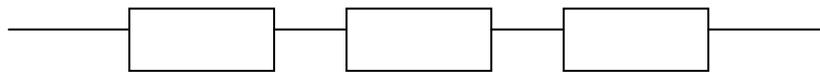


Figure 10: Tandem type structure drawing

The product overall function generally promote after enlarging module function. This needs to carry on the level localization to the new product function, and carry on the module disposition analysis

The function level refers to the realization depth (or degree) of function. The low or high function level is not suitable. If it is low excessively, it can not satisfy the using demands of customers; high excessively, the cost increases, and the product loses the competitive ability. There are three theoretical models to localize function level in different ways and methods. In practice, the enterprise should act according to the different products the characteristics.

The most profit model

Take function level f as the independent variable, the production cost of enterprise product $C(f)$ and product price $P(f)$ grow along with the growth of function level, but the two grow in different speed. Suppose B as product the profit, then $B(f) = P(f) - C(f)$, takes $B(f) = B_{max}$, the best function level f_B .

The smallest cost model.

To the user, product using cost $C_1(f)$ drops and purchase cost $C_2(f)$ rises along with

general module function and special-purpose module function combine the new product function. We can combine the module with certain promotion function and the original module in together, and the module function superimposition, and then a product function realizes the function enlargement compared with original sole module. The function enlargement is that this kind of product expands the function scope compared with the original product or increases the original function dynamics, the function of the new product enlargement, and forms the multi-purpose products. We may use the tandem type structure drawing to indicate that, the Figure 10 shows like this:

enhancing the function level. The two costs change reversely causes there is the minimum value in total cost $C(f)$. When $C(f) = C_1(f) + C_2(f) = C_{min}$, corresponding, f_C is the function level.

The most demand model.

User's using demands and economic capacity are the important attributes which restrict the market demand. The using demands decide that the function level can not be lower than the minimum. Otherwise it is difficult to achieve the use effect. The economic capacity decides that the function level can not be higher than the maximal limiting. Otherwise it will lose markets because of the excessively high price. The maximum function level which enables the market demand most between the two limiting values is the function level we want.

Parallel connection structure of modules

In order to enhance the product (or system) the reliability, its function level reliability is higher if providing more spare modules. We use parallel connection structure drawing to express that. The Figure 11 shows as following:

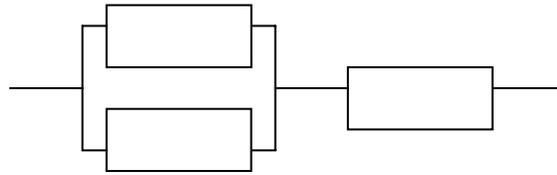


Figure 11: Parallel connection structure drawing

Certainly, the system reliable level enhances along with the enlargement of module level, the scale and the quantity, but cost also

promotes. How to balance between the reliability and the cost is very important.

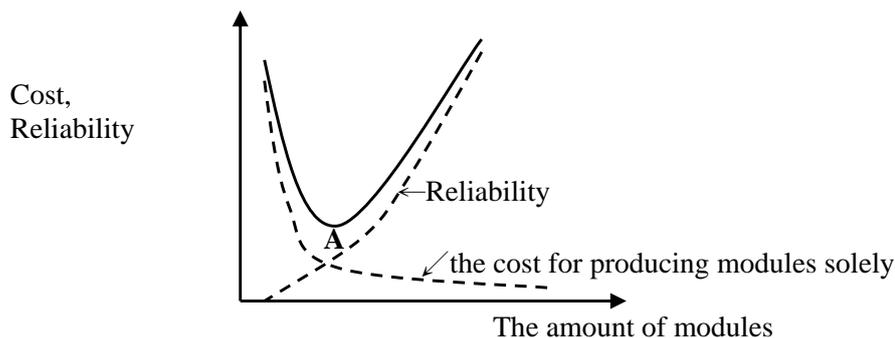


Figure 12: Cost and reliability relation chart

Considering on the module scale, the less the modules the better. Because the less the modules the easier to process, and the smaller the cost is. Focuses on the system, the system will be more reliable along with the parallel modules increase. Thus the cost and the reliability are the contradictory. The effective solution is to find the balance point A between the cost and the reliability. At this spot, the system can realize reliable level, but the cost can be controlled in a lower scope.

The point A may be obtained by market investigation. First, design questionnaire survey, and mainly inspect the reliable demand of the customers to the system (or product). Next, analyze the information fed back, and find one or several essential modules with reliable level. Once more, analyze the cost of essential module. Finally, combine system. This method is also suitable for the tandem type structure, and balance between the function and the cost.

UPGRADE OF SYSTEM FUNCTION

The module replacement is replacing one functional module with another functional module. Ordinarily, the product function will

promote after replacing one module with another more advanced functional module.

The function promotion is that the function of similar new module extends along the original function direction with the research and the trial manufacturing. This retains and expands the original function, and surpasses the original function. It is better for the modularization structure to introduce the new technology promptly into the module, transforms the corresponding module by the new technology and substitutes for the obsolete module in technology or structure, forms the new product in the condition of unchanging other modules, and makes the product maintains advance, take the leader in the market competition.

TAG

As the thought method, the work method, the modularization is a new design method and new standardized form which appears in the conversion process from the industry society to information society and knowledge economy time, and there is huge technology and economic value in it. As the appraisal tool for module system, value engineering

principle is promising in reducing product the design cycle, enhancing the product performance and reliability. It provides the new design method and the new way for the information time to adapt the new industrial revolution.

REFERENCES

- Aoki, M. (1986). "Horizontal and Vertical Information Structure of the Firm", *American Economic Review*, 76, 971-983.
- Aoki, M. (1999). "Information and Governmence in the Silicon Valley Model", www-econ.stanford.edu/faculty/workp/swp99028.html. Published in X. Vives. (ed.), *Corporate Governance: Theoretical and Empirical Perspectives*, 2000, Cambridge, UK: Cambridge University Press, 169-195.
- Aoki, M. (2001). *Toward a Comparative Institutional Analysis*, MIT Press.
- Aoki, M. and H. Takizawa (2002). "Information, Incentives, and Option Value in the Silicon Valley", www.rieti.go.jp/cgi-bin/publications.
- Alexander, C. (1964). *Notes on the synthesis of Form*. Cambridge, Mass: Harvard University press.
- Andrew Kusiak. (1998). *Integrated Product and Process Design: A Modularity Perspective*. *Journal of Engineering Design*.
- Arora, A., A. Gambar della and A. Rullani, (1998). "Division of Labour and the Locus of Inventive Activity", *Journal of Management and Governance*, 123-140.
- Baldwin, C. Y., and K. B. Clark (1997). "Managing in an Age of Modularity." *Harvard Business Review*.
- Baldwin, C. Y., and K. B. Clark (2000). *Design Rules: The Power of Modularity*, vol.1, Cambridge, MA: MIT Press.
- Baldwin, C. Y., and K. B. Clark (2002). *The Option Value of Modularity in Design*, Working Paper.
- B. Joseph Pinell. (1992). *Mass Customization: The New Frontier in Business Competition*. Harvard Business School Press.
- Brusoni, S. (2003). "Authority in the Age of Modularity", *SPRU Electronic Working Paper Series*, No.101, The Freeman Centre, University of Sussex.
- Chen CLP. (1994). *Neural computation for planning AND/OR precedence constraint robot assembly sequences*. In: *Proceedings of International Joint Conference on Neural Networks*, Como, Italy, 127-142
- Chesbrough, H. W. (2003). "Towards a Dynamics of Modularity. A Cyclical Model of Technical Advance", in: Prencipe, A. Davies and M.Hobday, eds, *The Business of Systems Integration*. Oxford: Oxford University Press.
- Chesbrough, H. W. (2003). *Open Innovation: The New Imperative For Creating and Profiting From Technology*. Harvard Business School Press, Boston, Massachusetts
- Dvid Hand, Heikki Mannila, Padhraic Smyth. (2003). *Principles of Data Mining* China Machine Press,
- Ernst, D. and G. Martin. (2004). "Co-Evolution of Technical Modularity and Organizational Integration-the Case of " System-on-Chip "Design", manuscript, East-West-Center, Honolulu.
- Ernst, D. (2005), "Limits to modularity- A review of the literature and evidence from chip design", *Industry & Innovation*, (Autumn) : 1-27.
- Fey D. (1990). *Uncertainty in Microeconomics*, Oxford, Martin Robertson.
- Garud, Raghu, Arun Kumaraswamy, and Richard Langlois, eds. (2003). *Management in the Modular Age: Architectures, Network and Organizations*, Malden, Mass: Blackwell.
- Langlois, R. N., and P. L. Robertson (1992). "Network and Innovation in a Modular System: Lessons from the Microcomputer and Stereo Component Industries." *Research Policy* 21: 297-313.
- Langlois, R. N. (1997). "Cognition and Capabilities Seized and Missed in the History of the Computer Industry," in *Technological Innovation: Oversights and Foresights*, eds. R. Garud, P. Nayyar, Z. Sharpira. New York: Cambridge University Press.

- Melissa A. Schilling and H. Kevin Steensma. (2001). The use of modular organizational forms: An industry-level analysis. *Academy of Management Journal*.
- Moris, C. R., and Ferguson. C. H. (1993). How Architecture Wins Technology Wars. *Harvard Business Review*.
- Nlatthijs, J. J. Woltem. (1999). The Business of Modularity and the Modularity of Business, TRAIL Research School, Delft.
- Pitipong Veerakamolmal. (1999). Design and Analysis of Disassembly and Remanufacturing Systems in the Electronics Industry, Northeastern University, USA.
- R. Marshall, P. G. Leancy, and P. Botterell. (1998). Enhanced Product Realization through Modular Design: An Example of Product/Process Integration. *Journal of Integrated Design and Process Technology*.
- Rohit, B, Pankaj. C. (1993). Models for Multi-plant Coordination, *European Journal of Operational Research*.
- Simon, H. A. (1962). The Architecture of Complexity. *Proceeding of the American Philosophical*, 106, 467-482
- Starr, M. K. (1965). Modular production: A new concept. *Harvard Business Review*. Nov.-Dec.
- Sturgeon, T. (2002). "Modular Production Networks: a New American Model of Industrial Organization", *Industrial and Corporate Change*, vol.11, Issue3, 451-496.
- Sturgeon, T. (2002). "What Really Goes on in Silicon Valley? Special Clustering and Dispersal in Modular Production Networks", *Economic Geography*, April, vol3.
- Thomas S. Bateman, and Scott A. Snell. (2002). *Management*. Higher Education Press.
- Ulrich, K. T., and K. Tung (1991). "Fundamentals of Product Modularity", in *Proceedings of the 1991 ASME Winter Symposium on Issues in Design/Manufacturing Integration*, Atlanta.
- Ulrich, K. T. (1995). "Fundamentals of Product Modularity." *Management of Design: Engineering and Management Perspectives*, Boston: Kluwer Academic Publishers, 219-231.

CREATING VALUE THROUGH THE STRATEGIC MANAGEMENT OF SERVICES

John Milton-Smith
Australia

THE DEVELOPMENT OF A NEW INTEGRATED STRATEGIC MANAGEMENT APPROACH

With customers becoming the main strategic priority for management, it is increasingly apparent that the next management challenge lies in determining the types of *processes*, *competencies* and *skills* that are needed to acquire and retain them. While a more limited notion of business strategy and service quality had already emerged by the mid 1990s, it soon became apparent that there was a need to develop an integrated management framework. It obviously had to capture the pivotal role of senior management in conceptualising and implementing a customer-centred business model. Unfortunately, in practice many of the transformational concepts were interpreted by senior management as involving a hierarchical transmission approach, through which values and behaviour designed at the top are dispersed down through an organisation. Instead, managers need to pay more attention to issues of culture, with a view to building commitment and cooperation around the business model, and then to set in place strategies to empower and support employees to manage the critical interfaces with customers.

By the mid 1990s it had become apparent that traditional strategies such as: the analysis of discrete industry profiles; the diversification of the business portfolio; the pursuit of vertical and horizontal integration; and, attempts to achieve optimum economies of scale and scope, were by themselves insufficient to bring about a sustainable competitive advantage. The case for a new integrated model was underpinned by the conceptual logic that unless both management and employees, and especially front-line staff, are intimately involved in all the quality development and delivery processes, there is a real danger that proposed changes may only contribute to confusion and indifference. This lack of clarity about role and purpose may, in

turn, contribute further to the risk that employees feel manipulated, and hence only 'go through the motions' of demonstrating commitment to quality and service goals. This growing awareness makes it obvious that the old strategy logic no longer applied.

Gradually the emphasis shifted away from establishing competitive advantage in particular industries towards the challenge of creating and then branding, a unique market 'space' (Hamel & Prahalad, 1994; Moore, 1996). The spectacular success of companies such as Wal-Mart highlighted just how inadequate the old strategy concepts were. Indeed, Wal-Mart's success resulted in the following question being asked – 'What industry is Wal-Mart in? Is it retailing, wholesaling, information services, logistics, or is it in all four?' (Moore, 1996, pp. 167-188) Recognition of the more complex nature of this type of business led to a further refinement of the new 'Strategic Management' paradigm. This complexity underlined the need to replace the increasingly anachronistic word 'industry' with the notion of a 'business ecosystem'. "The term circumscribes the microeconomics of intense coevolution coalescing around innovative ideas. Business ecosystems span a variety of industries" (Moore, 1996, pp. 19-20). It is important to recognise that, although still widely used, the word 'industry' has become an extremely imprecise term. Sometimes it refers to business collectively (i.e. 'a representative appointed from industry'), on other occasions it is applied to a particular sector of the economy (i.e. 'manufacturing industry') and then again it is used for more specialized areas of activity (i.e., 'the automotive industry', 'the healthcare industry').

The more complex, interdependent and dynamic principles that guide healthy ecological systems are useful for interpreting the 'organic' business ecosystem, which characterises the services industry. Major components include the following

stakeholders: suppliers, interest groups, employee unions, government policy and regulatory bodies, shareholders, community, customers and competitors, indicates the heterogeneous and interactive nature of the diverse 'life forms' in the business ecosystem. A strategic concept closely related to the 'business ecosystem' is the 'opportunity environment' which, is described as the "...space of business possibility characterized by unmet customer needs, unharnessed technologies, potential regulatory openings, prominent investors, and many other untapped resources" (Moore, 1996, p. 16, 32).

With the shift in the business focus away from a preoccupation with competitors towards creating and serving loyal customers, the field of strategic management has evolved as a concept to clearly express long-term commitment to the design and implementation of a business model specifically aimed at capturing a market opportunity. Acknowledgement of the value of an integrated framework moves the strategy debate beyond a short-term search for market niches and service product differentiation. Instead, the integrated approach emphasises the need for continuous innovation and the special nature of relationships which underpin the characteristics and qualities of a successful corporate brand. Thus, during the late-1990s it became increasingly apparent that an organisation's most valuable asset was the way in which the corporate brand symbolically embodied and conveyed customer values.

In taking a more strategic approach to services management, no one element is more important than branding. As markets become more crowded, competitive and complex, the value of a strong, clear corporate brand increases. A powerful brand gives a company, product or service a personality of its own which transcends its components. If the brand is built upon a firm base of core values, which are carefully protected and projected, it can survive and flourish. The outstanding brands of the 1920s, such as Colgate and Kodak, are still market leaders to-day. However, it is apparent that branding has been neglected by companies in the services industries. With services the challenge is to brand the invisible elements and ensure that their tangible

manifestations keep faith, as Shell, Disney and CNN have tried to do.

Despite the success of these corporate examples, there appears to have been a long tradition in many services industries of relying almost totally on technical or professional expertise, assuming that a good reputation will result and ensure continuing success. Indeed, in some professional areas, elitist codes of conduct and conservative traditions prohibited advertising altogether and never came to grips with the role of brand management. The strategic management challenge of reconciling tangible and intangible branding elements has been evident in the widespread critical media attention faced by Shell over recent years as the company struggled to reconcile its publicly stated 'triple bottom line' sustainability and corporate responsibility objectives with negative developing nation environmental and public affairs issues (Nigeria) and, more recently, unethical corporate leadership coupled with high remuneration.

These ideas link to the dramatically changing nature of the business environment under the influences of globalisation. In particular, they highlight the integrated ways in which the impact of political, economic, legal, technological, competitive and societal change frame services industry strategic business realities. In addition, they highlight the importance of stakeholder management. Hence, it is apparent that a more integrated and complex strategic management approach based around matching diverse customer expectations and quality service delivery is now required.

Why management failed to respond to the new services industry challenges.

The management discipline has clearly been very slow to reflect the growth, importance and distinctive challenges of the services industry. There are four major reasons for this:

- Most management writers have taken manufacturing industries as their frame of reference. The management of manufacturing industries has been culturally dominated by the reductive and mechanistic scientific logic of classic hierarchical management systems. Accordingly, the focus has

generally been on an organisational perspective, concentrating on strategies, functions, roles and behaviours that influence overall corporate performance, rather than on the value chain which serves the needs and expectations of customers, and other key stakeholders.

- The intangible, invisible and difficult-to-define nature of service industries has meant that they have been easily taken-for-granted. The major growth of the so-called 'service economy' has been relatively recent and reflects the rise in demand for personal and domestic services, the exponential spread of information technology, the increasing power of consumers and the increasing trend for companies to focus on their core business activities, while outsourcing their non-core functions. The management discipline is still coming to terms with the wider implications of these complex human resource and stakeholder management issues.
- Management is a relatively new academic discipline, compared with the 'learned professions' such as medicine, law, engineering and public administration. These high status professional occupations have traditionally enjoyed a high level of self-regulation and autonomy and, as a result, adopted a superior and condescending view of those non-professionals engaged in commerce and trade. For example, it was considered to be inappropriate, indeed *unprofessional*, for a professional practice to overtly advertise its services or to 'tout' for clients, or to be 'managed' like a business. A clear distinction was drawn between the *clients* of a professional practice and the *customers* of a business. This long-standing elitism has culturally framed and inhibited discourse on the management of the services industry.
- The non-professional services 'boom' of the past forty years coincided with the rise of marketing as a separate business discipline. By definition, marketing is concerned with the creation and servicing of 'markets' i.e.,

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campaigns conducted by banks, telecommunications companies and credit card providers. Very few services companies have developed the capability of consistently providing service based on identifying customer needs *and* regularly exceeding their expectations. Instead of pursuing this customer-focused approach to quality services delivery, for many companies the concept of service excellence has become a platitude. Even today, service providers continue to equate service with the delivery of 'more' or, worse still, the illusion of 'more'. As the survey (Milton-Smith) results discussed later reveal, it is disappointing that, in an era when it has become conventional wisdom to regard service as the key to business success, very few consumers are able to nominate more than one or two organisations, if any, as being excellent service providers from their own experience.

In response to the pressure to be customer focused, one currently popular approach is Customer Relationship Marketing (CRM). In practice the emphasis has been more on targeted marketing than on relationship building and management. Moreover, when applied as a marketing strategy, this approach can easily be interpreted as the ultimate invasion of privacy, in that its ultimate aim is to achieve a sense of 'customer intimacy' (Peppers and Rogers, 1999, pp. 6-14). Justifying the value of CRM, a prominent financial planner recently stated that financial planning is now less about 'product' and more about 'intimacy'. He explained that customers want 'intimacy' as a result of the trusting personal relationship that comes with 'the enterprise culture of a local small business person' so that they can feel confident about the wider 'institutional support' for the financial services product (Cooper, 2004).

The notion of 'customer intimacy' can be a useful philosophy for building quality customer relationships, but in practice it is applied without sensitivity, sufficient background research, or a well-integrated approach to satisfying the customer needs. In other words, a poor services product superficially wrapped in a veneer of intimacy will not deliver lasting results. Aggressive telemarketing campaigns promoting additional credit cards or pre-approved credit card limit

increases are obvious examples. It is apparent that there is a continuing gap between the assumptions of service providers and the expectations of their customers. With growing customer knowledge about quality products and services, more people know that they want, but feel frustrated that they do not receive unobtrusive seamless-web services. Despite massive investment in CRM by retail banks around the world, there is strong evidence that cross-selling and profit per-customer has not increased. Once again, the failure is largely due to poor management: ...The banks business units continued to be organised around specific products and customer segments hindering the integrated management of overall customer relationships (Farrell, 2003, p. 112).

By contrast, some market leaders such as Coca-Cola, Starbucks and IKEA have already demonstrated that the key to winning and retaining customers is to build brands that reflect the needs, priorities and values of their targeted market segments. This can only be achieved through the disciplined and integrated management of all the important relationships with the organisation's major stakeholders. As a consequence of this mindset, marketing comes to be seen as more of a whole-of-company philosophy rather than as a specialised business function (Forsyth, 2003; Lee, 2004). Indeed, some marketing specialists argue that the more traditional notions of marketing have become redundant. Together, these new insights indicate that the time has come to reconceptualise the business model and to design it from the 'outside-in' rather than, as in the past, from the 'inside-out'. In other words, the new business model should be designed in response to specific consumer needs and environmental realities rather than the old business model based on senior management's narrowly preconceived assumptions about customers and products. Such a model could more effectively identify and strategically respond to new business opportunities by developing a mutually interactive relationship with customers.

THREE KEY SERVICE LEADERSHIP CHALLENGES

Stimulating business model innovation in service industries

The remarkable success of budget airlines such as Virgin and Ryanair, furnishing retailers such as IKEA and fast-growing coffee shop chains, such as Starbucks, reflect the triumph of leadership vision, foresight and creativity over traditional marketing push and persuasion. In each case, new mass markets were invented around clusters of customers ignored or poorly served by existing service providers (Burgelman, 2002). The launch of Starbucks in Paris early in 2004 underlines the point. Paris is a city with no shortage of cafes, bars and restaurants. Yet, even in a city which deeply resents the so-called invasion of American culture, the 'coca-colonization' of the world as some French critics have portrayed it, a city where the café is claimed to have been invented, the no-frills and casual Starbucks experience appeals to many young people much more than the traditional Parisian café with its formal waiters, slower service and higher prices (Kaminski, 2004). Like the budget airlines, Starbucks gives the customer choice and control, as well as an element of fun, and the opportunity to express individuality and personal preference. It is a phenomenon which powerfully demonstrates the advantage of business model innovation at a strategic level as opposed to a tactical market positioning approach which accepts the 'taken-for-granted' limitations of the existing competitive environment (Arndt, 2004, p. 66).

One of the most significant examples of the shift to a more strategic, customer-focussed management model is to be found in what has been traditionally described as 'the airline industry'. Increasingly, airlines are entering into partnerships to offer customers an extensive range of integrated value packages, including highly targeted and communicated campaigns, which incorporate a diverse range of travel, tourism and transportation experiences. In addition, they frequently provide exclusive opportunities to purchase merchandise, therapeutic services and privileged access to special events.

The rapid growth of the 'no-frills' airline segment highlights this shift from service marketing to serving the customer and giving the customer the freedom and flexibility to determine what represents 'value'. Here customers have the option of choosing

minimal service. As competition in this segment intensifies, value innovation increases, e.g., Ryanair, the European 'no-frills' market leader, has recently introduced a further round of even more extreme cost and price cuts. These measures include dispensing with seat pockets, which will produce savings both in equipment and cleaning budgets. Other initiatives include the replacement of reclining seats and the removal of window blinds. The latest economy drive comes on top of a 'no-frills' format based upon the abolition of free food and drink, the elimination of seat bookings, a requirement that passengers walk from air terminals to their aircraft, and landing at airports that are often remote from the passenger's final destination. Ryanair has even been criticised for not providing wheelchairs for disabled passengers (Taylor & Raja, 2004).

The simultaneous growth of budget airlines and business class travel is no contradiction. It demonstrates the modern consumer's demand for maximum options, flexibility, convenience and quality of life. On some occasions a passenger will pay a large premium in order to experience the luxury and pampering of business class; on other occasions the same passenger will surf the net for hours locating the cheapest fare in order to attend a specific event such as a sporting fixture or family gathering (Mackintosh, 2004). In virtually all countries, and despite racial and cultural differences, a middle class lifestyle involves many choices and trade-offs in satisfying perceived needs, individual aspirations and the desire for personal well-being. As consumers become more affluent, highly educated and demanding, they place greater emphasis upon spiritual and emotional fulfilment, or, as Maslow (1968) put it, their 'higher order needs', and the desire 'to have it all'.

The ubiquity of terms, like 'lifestyle', 'image', 'personal growth', 'self-expression', 'network' and 'quality time' underlines the desire by consumers all over the world to define, develop and project themselves and to connect with a variety of practitioners, products, providers and partners that help them to achieve this. The quest for personal meaning and identity is a journey with both internal and external dimensions and these aspects are intertwined and inseparable. A

person may choose or not choose a particular car because of how or where it is made, or because of its design, as opposed to functional criteria; in part the decision may be shaped by strong personal values and preferences, but it may also be motivated by a desire to make a statement about social status or personal style to others.

It is becoming clear that the aura of a brand – whether it relates to a product, a service or, indeed, a country – has profound implications for a consumer's 'higher order needs' and for successful business model innovation. Brand values, over and above the functional merits of the product, have great significance for people who, for example, care deeply about ethical integrity, saving the environment or rectifying social injustice.

The old classification system of dividing the economy into two neat and separate categories, goods and services, while convenient for economists and government statisticians, bears little relationship to the economy of the new consumer and the lifestyle that middle classes and aspiring middle classes around the world are demanding. With the arrival of the 'new consumerism' and the narcissistic shopper, the reality of the marketplace has been transformed. Invisible appeal, invisible benefits and invisible added value have created a completely new economic dimension, management perspective and marketing challenge. When choices are strongly influenced by a need for self-expression, a need for self-indulgence, a need for self-fulfilment or a need to keep faith with one's own ethical beliefs, then clearly managers must reconceptualise the products and services they are offering as multi-faceted value propositions. The consumer who is seeking simultaneously to satisfy both lower and higher order needs will almost certainly demand a package of benefits, a comprehensive 'solution' including both physical and emotional aspects. Only in this way can the remarkable global success of brands such as Nokia, Rolex, Virgin, Haagen-Dazs, Harley-Davidson, Vespa and The Body Shop be fully understood.

The blurring of the boundaries between goods and services is highlighted by the spectacular expansion of new industries concerned with

the enhancement of personal health, fitness and well-being. In the United States, for example, it is estimated that consumers spend in excess of US\$19 billion annually on dietary supplements (Kerk, 2004). Similarly, there has been a rapid proliferation of weight-loss programs and diet plans in almost every developed country. Furthermore, in 2002 it was reported that the American market for manicures, waxing and steam treatment had tripled within three years. Indeed, in the past decade the spa phenomenon has swept the world. The concept of the spa is to provide a luxurious, full service package of pampering and revitalization, often including the expert guidance of doctors, nutritionists, physiotherapists and exercise physiologists (Keates, 2004). Apart from specialized 'wellness centres', many hotels provide variations on the spa theme as well. A further extension of this trend is the growing demand for personal development and team-building and is reflected in so-called 'corporate survival courses', 'boot camps' and 'adventure ranches'. Invariably, integrated with these programs, are a unique cosmetics range and a guru's formula for living a healthier, happier, more fulfilling life. Linked to, and increasingly the final destination of the same market, is the booming cosmetic surgery industry, which is the clearest possible confirmation of just how significant 'higher order needs' have become in modern society (*The Economist*, 2004, 7th February).

Building a Front-Line Service Culture

In most organisations the front line of service delivery is a long way from the top. Traditional chain-of-command hierarchies send a clear message to both staff and customers. This top-down management approach invariably produces a culture in which those at the bottom of the pyramid have the least important jobs and the lowest status. Accordingly, reflecting this top-down culture, people on the front line are often poorly paid, have little influence on decision-making and receive minimal training. Despite brief flirtations with passing management fads such as quality circles, empowerment techniques and incentive schemes, the underlying corporate culture of the great majority of organisations continues to reinforce

bureaucratic systems and compartmentalised responsibility.

With the significant economic and political power invested in hierarchical management systems, old management mind-sets die hard and senior managem

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service culture to develop, top executives need to find strategic and practical ways to model and demonstrate service values. In all sorts of practical and visible ways, they must show that when there are competing priorities and pressures, the customer always does indeed take precedence (Albrecht & Zemke, 1985; Albrecht & Bradford, 1990).

Creating a Learning Organization

Among the major implications of this change is the need for managers to create 'learning organisations' (Senge, 1992). A learning organisation is one that invests in the capacity to gather, interpret and act upon strategic information in order to create innovative new sources of customer value. Hence, the notion of learning for an integrated services management strategy involves all of the areas connected to the value chain. Infosys is an example of a successful company with a complex business ecosystem that has developed and branded a business model designed to take advantage of, and sustain its limitless business possibilities. A Bangalore-based software designer and IT consultancy, Infosys has become a world leader by providing superior, cost effective customer service. Its clients include 60 of the *Fortune 500* companies, including Citigroup, Cisco and Nordstrom. In the latter case, the client actually employs 90 Infosys programmers – 15 in Seattle and 75 in Bangalore. The company's particular capacity to build partnerships and to work intimately with its clients helps Infosys to differentiate itself and its service products from its competitors (Milton-Smith, 2003, p. 554).

At the other end of the value chain, senior Infosys management creates 'thought leadership groups', which provide the impetus for the innovation required to design, deliver and deploy specific solutions to particular clients. There is wide participation and multidisciplinary professional collaboration in these leadership groups as managers, consultants and technical specialists all work together. In so doing, the group's teacher and learner roles tend to shift interchangeably, transferring ideas, incorporating new development frameworks while, at the same time, liaising closely with alliance partners, supplier networks and partnerships. Hence, in a very practical sense, Infosys *is* a learning

organisation. With this corporate emphasis on collaboration and learning, the main reason for its remarkable success is due more to the overarching way it manages its business model and service processes, rather than its core expertise in IT or marketing.

As the Infosys example demonstrates that leading services industry companies need to have the capacity to anticipate, identify and respond to emerging trends and changing demands. As learning organizations, they need very sensitive antennae. The only way to achieve this capability is to be extremely open to, and interactive with the operating environment, working closely with all stakeholders and especially customers and suppliers. Clearly, this approach has major implications for organizational structure. The combination of cutting edge knowledge, world-class resources and competencies, and the highest level of adaptability in serving customers require an organization that is loose and tight, nuclear and networked, efficient and effective. The focal point of the learning organisation is its brain: "Build the company around the software, and build the software around the customer (Imparato & Harari, 1994, p. 75) Bureaucratic fortresses, like some of the advertising agencies, universities, banks and hospitals around the world – simply to cite some of the more obvious examples – have continued to survive only because of their monopoly position, the passivity of their customers or the perceived cost of switching. However, the remarkable success of, for example, the China-Europe International Business School (CEIBS) in Shanghai, China, is an ominous warning to complacent incumbents of the devastating impact which a new, strategically-managed service provider can have.

Within a decade of its establishment, CEIBS has become China's top business school and one of the highest ranked business schools in the Asia-Pacific region. It is an excellent example of a strategically managed learning organization. Unlike many other business schools which have shackled themselves to tenured second-rate staff, mediocre fee-paying students and an undifferentiated curriculum, CEIBS took the high road from the beginning. It has targeted the future business leaders of China and foreign graduates who are likely to

be doing business with them. Offering only a few highly-branded flagship programmes, CEIBS operates with a small nucleus of full-time staff and a distinguished network of visiting international professors. Heavy emphasis is placed upon strategic partnerships with leading MNCs and other world-class business schools. As a result CEIBS enjoys a level of prestige which is totally disproportionate to its size, resources and length of operation. It is a highly successful business model (<http://www.ceibs.edu>).

THE GOODS-SERVICES CONTINUUM AS A VALUE CHAIN: IMPLICATIONS FOR THE LEADERSHIP AGENDA

From the long-term perspective, a consumer-based approach demands integrated strategic management, rather than marketing campaigns. For example, recognition of the growing importance of brand values and customer relationships has meant that business power has progressively flowed downstream to specialist retail channels, the points at which customers actually engage with alternative brand choices and make purchasing decisions. One important consequence of this corporate power shift is a trend away from big budget advertising campaigns and more emphasis on point-of-sale merchandising and relationship-building activities.

In response to a more customer-focused approach, it is now common practice for companies with a strong corporate brand identity to establish and service their own boutiques *inside* large department stores. Cosmetics, fashion and other luxury goods companies are leaders in this practice. These industries recognize the interwoven goods and services characteristics of their products, and the importance of building and sustaining direct service relationships with their customers. Hence, highly trained company consultants with both a deep product knowledge and understanding of the needs of their customer-base will provide customers with personalised advice. Customers receive free demonstrations, invitations to fashion shows, exclusive previews of products, email or mailed brochure newsletters of new product releases, and bargain sale previews. In addition, to further fulfil 'lifestyle' consumer

identity segments companies sponsor Charity fund raising events, community arts projects and various competitive and community-based sporting events. The men's and women's fashion clothing and accessory company 'Country Road', outdoor sports goods and fashion company Salomon, and cosmetics and fashion brand Chanel are examples of 'lifestyle brands focused on specific and very different consumer segments. The strategy is to build close and long-lasting customer relationships, not just based on the sale of quality products, but through the development of personal trust and brand loyalty, which results from a deep qualitative understanding of the consumer's needs.

From a strategic management point of view, the critical success factors relate mainly to the management of the value chain, maintaining control over outsourced functions and the motivation and empowerment of front-line staff who have face-to-face contact with customers, as opposed to the more remote nature of traditional marketing strategies and advertising campaigns. The major priorities for staff development include building competencies that relate to espousing brand values, interpersonal communication and deep knowledge of product attributes and applications. Staff interactions with customers are based on a positive, personal experience and not just a mechanical transaction. Intrinsic and extrinsic service and product benefits are equally important. They include perceived product quality, the ability to offer new and innovative sources of value, self-esteem and reinforcement of personal identity and satisfaction from interaction with sales personnel.

Apart from establishing privilege clubs, alumni groups, loyalty programs and financial incentives, giving customers the opportunity to 'buy into' the business model can be an excellent strategy for building a long-term relationship based upon the solid foundation of shared values and a sense of mutual engagement. Whether it is mixing one's own fragrance at The Body Shop, exploring and matching furnishing options at IKEA, trying new products at Chanel, or Estee Lauder, or discussing coffee preferences with the *baristas* at Starbucks, customers increasingly make service decisions that enhance their

lifestyle and reflect their individuality. In designing the value chain, the ability to build a relationship based on deep understanding of the customer's individual needs and preferences requires a combination of organizational capabilities, especially in the areas of innovation, HRM, and frontline customer service competencies, with emphasis upon interpersonal communication and customer relations. This means that:

- The organisation has a well developed philosophy that, if staff are not serving a customer directly, they should be serving (supporting) people who are. Unless the segmented thinking and priorities of the various functional departments of organisations are integrated, seamless service delivery is virtually impossible. This challenge is reflected in the complaint of a newly-arrived overseas student in Perth who complained that 'it took me days to enrol and pay my fees; after getting confusing and conflicting course information from various departments, I finally went to the Library and found a handbook and sorted it out myself' (Focus group participant).
- The organisation's operational service strategy is so well established that customer needs determine the design of the organisation and the deployment of resources. Accordingly, the organisation is configured from the outside in, rather than, as is traditionally the case, from the inside out. IKEA and Amazon.com are excellent examples of this design principle.
- The organisation employs a collaborative, multi-disciplinary approach to customer service that is facilitated by clear individual and collective accountability strategies for promoting overall quality service performance. This management approach entails service partnerships between line and support staff, especially involving R&D, production, marketing and service delivery personnel.
- The service directives and guidelines from senior management are reinforced by HRM policies and practices which ensure that every individual employee is given, not just accountability for customer service, but is also granted the necessary empowerment, training and essential resources to do the job.
- The organisation's front-line staff is motivated and empowered to identify and address the full range of customer concerns. Even if they cannot provide all the answers and solve all the problems, staff will take ownership of the customer's needs and avoid 'passing the buck'. This means the staff must have very good listening and response skills, along with the capacity to take initiatives to respond to customer needs and concerns.
- The organisation takes special care and shows sensitivity in the way that it connects with callers and customers, although it ensures that they are made to feel welcome and special. Greeting is an important skill. Just as customers complain about being ignored, so they often dislike the overt familiarity practised by some telemarketers, car salespersons and check-out staff. A too familiar and chatty communication style that attempts to short-circuit longer and more measured approaches to consumer interaction may be interpreted as being presumptuous and/or intrusive, and therefore, may give offence.
- The organisation emphasises the critical importance of communications and interactions with customers. For example, the evolving marketing strategies of Coca Cola are designed to respond to the changing lifestyle, trends and fashions of its target markets through the effective use of values-laden slogans. Whether it's 'Things Go Better With Coke', 'It's The Real Thing', 'Look Up America', 'Coke Is It', 'Can't Beat The Feeling' or 'Always Coca-Cola', the ability of the brand to communicate with its loyal customers goes far beyond conventional marketing practice and is based on deep qualitative-based research into changing consumer needs, values and lifestyles. The organisation not only gives its

customers what they ask for but, far more importantly, continually invents new sources of value to surprise and delight them, and often in ways which the customers themselves would probably never have even thought of. Coca-Cola is the classic example of a timeless brand built around a simple product, which allows for only very limited product innovation. From time-to-time new offerings like 'Vanilla Coke' will emerge. However, the continuing appeal of Coca-Cola lies in the special relationship that successive generations feel that they have with the brand. This has been achieved by skilfully managing the communication and reinforcement of brand values.

- The organization ensures that the outsourcing of service functions does not undermine brand values and is, therefore, not just dictated by cost considerations. Rather, outsourced functions are carefully integrated into a 'seamless web' of customer service competencies to avoid delays, 'buck passing' and double-handling. Given that so many companies and customers are unhappy with the results of outsourcing, much more emphasis needs to be given to developing core competency in value chain coordination, with particular reference to HRM issues and system design.

The management challenges posed by outsourcing should not be underestimated (Kotabe, 1992, p.98). As global markets continue to grow and global brands proliferate, so also does competition accelerate and cost pressure intensify, strengthening the logic for outsourcing, not only of production activities, but also increasingly of low-end service functions. Managing and standardizing the quality of global production systems is difficult enough, but managing the complexities of outsourcing services around the world is even more formidable. The trend to locate call centres in lower cost countries provides an excellent illustration of the outsourcing challenge and the degree of difficulty is magnified by the need to work across different time zones.

Every potential obstacle to effective communication comes into play.

Without the benefit of face-to-face contact, and in the absence of facial expressions and physical gestures, there is a great scope for misunderstanding and loss of goodwill. Language, speech patterns and cultural differences can inhibit the ability to transfer information and solve problems on the telephone. Apart from accent and pronunciation, tone of voice, use of idioms and even the style of conversational banter can greatly influence a call centre operative's ability to satisfy a foreign customer. Accordingly, service providers in the Philippines or India, for example, need a high level of technical knowledge, diagnostic skill and contextual awareness, as well as the ability to communicate effectively with customers from a diverse range of cultural contexts and educational backgrounds. These requirements have major implications for HRM policy and practice, and especially for recruitment criteria, job design, training programmes and career path development.

SERVICE REPUTATION SURVEY

Despite the emphasis on customer service contained in many corporate mission statements, very few organizations have succeeded in establishing a reputation for it. Indeed, it would appear that these remain a huge opportunity to gain competitive advantage in this area. A recent survey conducted by Milton-Smith in Perth, Western Australia, Singapore, Hong Kong and Lyon, France, indicates that most consumers have difficulty nominating more than one excellent service provider, based on their own personal experience.

Between September 2002 and April 2005 Milton-Smith randomly surveyed 196 adults in Perth, 149 in Singapore, 178 in Hong Kong and 86 in Lyon, France. Participants were invited to list examples of outstanding service without restriction, including home services, professional services, business services, public services, manufactured products etc. Milton-Smith also conducted a number of focus groups to explore views about service providers in greater depth. Of the survey respondents, 23% in Singapore, 12% in Hong Kong, 18% in Perth and 15% in Lyon failed to

nominate any organization in response to the question: 'Can you think of any organizations which, in your experience, have always given you excellent service?' Very few public sector institutions were named. Fifty-six percent (56%) of all respondents could nominate only one consistently excellent service provider over a minimum two-to-three-year period. It was noteworthy that barely 5% nominated four or more organizations. There would, therefore, appear to be significant room for organizations to develop competitive advantage around customer service in the future.

The majority of the service providers nominated in both surveys were relatively small, local organizations (58%). They included retail shops, car dealers, hairdressers, dentists, mobile phone distributors, tax agents and freight forwarders. This pattern was particularly evident in the Lyon responses. The very wide cross-section of industries and firms nominated reinforces the view that service is a very personal experience and that there can be a large gap between the provider's perception of the service delivered and the customer's perception of the service actually received.

The most frequently cited large organisations in Singapore were Singapore Airlines, The Ritz Carlton Hotel, Federal Express, Robinsons (a department store) and DBS Bank. In Perth the clear winners were Skippers (a local new and used car dealership mainly specialising in Mitsubishi, Hyundai and Volkswagen) and Singapore Airlines, followed by, IKEA, the Hyatt Hotel and the RAC (road service club). Banks featured prominently in the Hong Kong survey with Hang Seng Bank and HSBC receiving multiple mentions. The two most popular large service providers nominated in the French survey were Carrefour and IKEA. It is noteworthy that, according to some Singaporean respondents, the reason why Singapore Airlines was not nominated more frequently was due to a widespread local perception that ground staff and cabin crew discriminated *against* Asian passengers, and gave preferential treatment to 'Westerners'.

The findings of the focus group discussions in Australia, Singapore and France revealed that there is a major opportunity for organisations

in most industries to build a competitive edge by better managing service delivery from the customer's perspective. Just as service providers often fail to deliver the service their customers expect, just as often they provide service their customers don't want. For example, a number of Perth participants critically commented on restaurants where the waiters are excessively solicitous. "Why is it that, when you're in the middle of your first mouthful, a waiter will suddenly pounce and ask if everything is okay?" complained one regular restaurant patron. Similarly, almost all focus group participants noted the annoying propensity of banks, telecommunications companies, and charities to conduct their market research and telemarketing at dinnertime. There was a general view that additional attention, additional benefits, and additional or bonus products, rarely translate into overall added value for the customer, and almost always result in increased costs and higher prices.

By contrast, other participants in the focus groups commented upon the remarkable success of companies such as Starbucks (Singapore), IKEA, Virgin (Perth), Officeworks (Perth), and Carrefour (Lyon). Each of these companies was praised for giving the customer a high degree of flexibility and choice in determining the required level of service. Observations suggested that not only is some so-called service excessive and unwanted, but frequently customers prefer to choose their own level of service. A basic flaw in the way CRM is practiced is the apparent assumption that companies can and should control the relationship. This is clearly a mistake and flies in the face of mounting evidence that customers now expect a relationship where they are in control. As the success of Amazon.com, IKEA, Starbucks and Virgin has shown, customers want the freedom to customise the service they receive.

Despite the widespread belief that CRM is the key to developing and securing business success (Peppers & Rogers, 1997), this research suggested that in many cases customers do not necessarily want an intense relationship with their service providers. Furthermore, they do not want the inconsistencies of extreme bursts of effusive

attention punctuated by periods of mediocre or inconsistent service provision. Depending upon the context, the notion that less service may actually represent more value to the customer provides an important clue in rethinking the service paradigm. The implication is that managers need to have a deeper understanding of the needs of their potential customers. An obvious problem with the application of CRM so far is that the providers attempt to control and dominate the relationship.

The sentiment emerging from the study focus groups is that the CRM approach is often resented by consumers. More particularly, they want a professional relationship rather than an intimate relationship with a services provider. Accordingly, the application of CRM to achieve more sustainable and long-term quality customer relationships requires an integrated management strategy, rather than just marketing. It aims to create a relationship based on a very delicate, but well supported balance. Among the descriptors emerging from the group discussions, which offer a useful guide to managers committed to service quality, are 'efficiency', 'flexibility', 'responsiveness', 'being consistent', 'friendly', 'meeting expectations', 'recognising my loyalty', 'making it a pleasant experience', 'remembering my needs and preferences', and 'always providing good value for money'.

By looking at service from the customer's rather than the provider's perspective, it becomes apparent that the traditional economist's distinction between 'goods' and 'services' becomes somewhat artificial. From a customer's point of view, every commercial transaction involves a more or less attractive package of benefits with both tangible and intangible elements and which are subject to highly individual customer priorities and preferences. Thus, for example, the mobile phone is not just a phone. It is designed, sold and used as an extremely flexible and convenient tool for maintaining relationships, communicating information, building networks and contributing to personal security in emergencies. However, it is not just a telephone. It has other intangible elements associated with its use.

A superannuation scheme is frequently conceived as a 'product' tailored to the savings, retirement, estate planning and 'peace-of-mind' needs of particular clients. It is much more than an investment account. When a mobile phone or superannuation scheme fulfils its promise, along with the customer's wider service provision expectations, it is because the product and the service functions are working synergistically, and creating what the customer perceives as ongoing added value. A service only becomes a service at the point of delivery to the customer. It is a perception which is fragile, emotional and very personal, as the experience of bank customers frequently confirmed during the focus group discussions.

CONCLUSION

The transition from a services marketing to a value chain mindset requires a new way of thinking about strategy. Instead of focusing narrowly upon market conditions and behaviour of competitors, managers need to concentrate much harder on their customers and the customers they seek to create in the future. The design and delivery of an innovative and compelling value chain, and translating it into a viable business model, goes far beyond pushing an aggressive marketing plan on confused and bombarded consumers. Instead, it involves the careful creation of an integrated business model, which includes all of the elements that combine to satisfy and exceed customer's expectations, while taking account of the variables that could conspire to undermine it.

Without the critical core competencies, continuous coordination and a corporate culture committed to serving the customer's needs and priorities, the business model is just a theory or a concept. Without the capability of learning from insights into past experience, knowledge about current trends and foresight as to where the future is heading, managers will lack the essential ingredients for reviewing, refreshing and reinventing the value chain. Without the leverage and warrant of a powerful brand that captures and communicates the values and benefits that its stakeholders expect, an organisation will fail to fulfil its true potential.

REFERENCES

- Albrecht, K & Bradford, L 1990, *The Service Advantage*, Dow Jones – Irwin: Illinois.
- Albrecht, K. & Zemke, R. 1985, *Service America: Doing Business in the New Economy*, Dow Jones – Irwin: Illinois.
- Atlantic Media Company, 2003, AAF survey of industry leaders on advertising trends, American Advertising Federation: Washington.
- Branson, R. 2002, *Losing my virginity: How I survived, had fun and made a fortune doing business my way*. Three Rivers Press: New York
- 1999, *The autobiography*. Longman Cheshire: London
- Burgelman, R. 2002, 'Strategy is Destiny', New York: The Free Press.
- Cooper, C. 2004 '[It's all about the] service', *Management today*, February, pp. 12-18.
- Cusumano, M. & Markides, C. 2001, *Strategic Thinking for the Next Economy*, San Francisco: Jossey-Bass.
- De Wit B., & Meyer, R. 2004, *Strategy: Process, Content, Context*, 3rd edn., London: Thomson Learning.
- Dilenschneider, R. 1992, *A Briefing for Leaders*, New York: Harper Collins.
- Editorial, 2004, 'Snake Oil', *The Economist*, 7th February, p.59
- Editorial, 2003, 'Tourism here "hurt by poor service"', *The Straits Times* (Singapore), 13th November.
- Farrell, D. 2003, 'The real new economy', *Harvard Business Review*, October
- Forsyth, R. (2003), 'Why marketing isn't working any more – a definitive answer' *crm-forum*, <http://www.crm-forum.com>, 13th June
- Gregory, J. 2004, *The best of branding*. McGraw-hill: New York
- Hamel, G and Prahalad, C. 1994, 'Competing for the future', Boston: Harvard Business School Press.
- Imparato, N. & Harari, O. 1994, *Jumping the curve*, Jossey-Bass: San Francisco
- Jacobs, R. 2004, 'The empire writes back', *Financial Times*, 19- 20th Junes, w3
- Kaminski, M 2004, 'Starbucks in Paris', *The Asian Wall Street Journal*, 30th January-1st February, p.11.
- Keates, N. 2004, 'Spas get Niche Treatment', *The Asian Wall Street Journal*, 13-15 February, p.8.
- Kerk, C. 2004, 'Spa Speak', *Weekend Business Times* (Singapore), 14-15 February, p.16.
- Kotabe, M. 1992. *Global sourcing strategy*, Quorum Books: New York
- Leavitt, H. 1986, *Corporate Pathfinders*, Dow Jones-Irwin: Homewood, Illinois.
- Lee, J. 2004, 'Getting the Customer to Love Brands', *The Sydney Morning Herald*, 6 May, pp.25.
- Lee, A. 2004, 'Ryanair to Give New Meaning to "No-Frills Experience"', *The Straits Times*, 16th February, p. 6.
- McDonald, M. and Cavisgil, T. (eds.) 1990, *The international marketing digest*.
- Mackintosh, J. 2004, 'Carry your Own bags, but sit in a Leather Seat', *Financial Times*, 16th February, p.17.
- Maslow, A. H. 1968. *Toward a psychology of being* 2nd ed. Princeton, N.J.: Van Nostrand.
- Miles, I. 2003, 'Services Innovation: Coming of Age in the Knowledge-Based Economy' in B.Dankbaar (ed), *Innovation Management in the Knowledge Economy*, London: Imperial College Press, pp. 59-81.
- Milton-Smith, J. 2003, 'From knowledge management to learning culture', *The international journal of knowledge, culture and change management*, vol. 3, pp. 551-567
- Moore, J.1996, *Death of competition: Leadership and strategy in the age of business ecosystems*. Diane Pub. Co.: New York
- Mouthshut.com, Personal Finance: <http://www.mouthshut.com/readreview/3038-1.html>
- Peppers, D. and Rogers, M. (1999), 'The One to One Manager, Real-World Lessons in Customer Relationship Management', New York: Random House.

- Porter, M. 1980, *Competitive strategy: Techniques for analysing industries and competitors*, New York: The Free Press.
- 1985, *Competitive advantage: Creating and sustaining superior performance*. The Free Press: New York
- 1990, *The Competitive Advantage of Nations*, New York: The Free Press.
- Roberts, J. 1998, *Multinational business service firms*, Ashgate Publishing: Aldershot (Hants.,England)
- Ruth, S. 2004, 'Investors Feel Deceived by Financial Plans', *The Asian Wall Street Journal*, 10th February, p. 5.
- Senge, P. 1992, 'The Fifth Discipline: The Art and Practice of the Learning Organization', Sydney: Random House.
- Simons, C. 2004 'One-Stop shop', *Far Eastern Economic Review*, July, pp.64-66
- Standard-Chartered.com, Overview: <http://www.standardchartered.com/global/home/aboutus.html>, 30th July 2004.
- The Economist, 2004. 7th August.
- Taylor, M. & Raja, K. D. 2004, 'Redefining Customer Service', *The Asian Banker* issue 44, pp. 42-44.
- Temporal, P. 2000, *Branding in Asia*, Singapore: John Wiley
- Viljoen, K. & Dann, S. 2003, *Strategic Management*, 4th edn, Pearson Education: Frenchs Forest
- Warren, K. 2002, *Competitive Strategy Dynamics*, Chichester: John Wiley.



HKIVM NEWS



- 2-3 November 2006, the Inaugural Asia Pacific Value Convention was successfully held in Hong Kong Convention & Exhibition Centre, with more than 120 delegates participated. This conference was jointly organized by the Hong Kong Institute of Value Management, Institute of Value Management Australia, Hong Kong Architectural Services Department and City University of Hong Kong. Please visit http://www.hkivm.com.hk/conference/8th_conference/index.htm or contact the Conference Secretary at conference@hkivm.com.hk for further information.
- 13 December 2006, The HKIVM 11th Annual General Meeting and Christmas Lunch was organised in the Hong Kong Club. The President and Treasurer of the Institute have given their annual reports during the meeting, and both reports were supported by the participants.

