TEACHING CASE

Fengbin Wang, Zhexiong Tao, Bin Li, Niaoyun Shi

A New Organization's Breaking out of Cocoon：Advantech's Dilemma in Building a "Direct Marketing Force"

Abstract   Focusing on the recognition and resolution of conflicts between newly-created business units and existing ones, this teaching case depicts the reasons, process, and problems in Advantech's creation and management of its direct marketing force (DMF) during the company's changing from a multinational corporation (MNC) to a globally integrated enterprise (GIE). It also describes the designed structure and business processes of DMF, and shows the underlying conflicts among the channel sales force (CSF), key account sales force (KASF) and DMF. Also demonstrated in the case are the methods Advantech adopted to solve the conflicts, including seeking a good combination of the traditional "spider" and "starfish" models, reconciling between centralization and decentralization, creating a crossover-collaboration mechanism among different divisions, and promoting a knowledge sharing system across different regions.

Fengbin Wang (✉)
School of Business, Renmin University of China, Beijing 100872, China
E-mail: wfengbin@ruc.edu.cn

Zhexiong Tao
School of Business, Renmin University of China, Beijing 100872, China
E-mail: taozhexiong@163.com

Bin Li
School of Business, Renmin University of China, Beijing 100872, China
E-mail: binli820427@yahoo.com.cn

Niaoyun Shi
School of Business, Renmin University of China, Beijing 100872, China
E-mail: shnyun@126.com

1   Introduction

By the beginning of 2009, Advantech's direct marketing force (DMF) in the mainland of China had operated for nearly two and a half years. However, due to Chinese customers' distinct consumption behavior and the complex marketing channel relationship, Advantech faced more challenges than his counterparts across the world. The target proportion of regional DMF revenue to regional total revenue is 10%, while the actual ratio is less than 2%. Chi-Nan Tsai, the director of Advantech in China, was clear that customers in North America had accustomed to online shopping, hence DMF went on more smoothly there. By comparison, there were more conflicts among the channel sales force (CSF), key account sales force (KASF) and DMF in Europe at the beginning. However, over the years, DMF had successfully merged with CSF, whereas the relationship among CSF, KASF and DMF in the mainland of China was much less "disharmonious." Besides, Chinese customers were not used to purchasing products through phone or Internet, especially when buying industrial products. Therefore, sales in the mainland of China heavily relied on CSF and KASF.

   Although Tsai faced unique an external environment, he expected that the DMF in China could make a great contribution to Advantech. Moreover, the headquarters of Advantech authorized him to seek out a special and innovative way to change the present situation. Tsai outlined a framework of problem solving: the main problem of DMF development in China was how to defuse the conflicts among CSF, KASF and DMF in fighting for potential customers, and more importantly, how to carry out DMF with "Chinese characteristics" under the guidance of globally unified standards.

2   Background

2.1   A Brief History of Advantech

Founded in 1983, Advantech is a leader in providing trusted innovative embedded and automation products and solutions. Advantech is an innovator in the development and manufacturing of high-quality, high-performance computing

platforms to serve the vertical market. After 20-years' development, Advantech has accumulated rich experience in ePlatform services, and offers comprehensive system integration, hardware, software, customer-centric design services, global logistics support, and an industry-leading front and back office e-business infrastructure. Meanwhile, the company provides complete solutions for a wide array of applications across a diverse range of industries. Positioned as "the global leader of ePlatform services for eWorld solution integrators," Advantech has created leading brands in embedded computer, industrial network computer, tablet computer application, and automation industry. In 2009, the total global revenue of the company reached $4.44 billion. Differentiated by product categories, the proportion of embedded system, network communication platform, industrial computer and intelligent service, global service system, automation and embedded computing core in the company's total revenue in 2009 was 22%, 16%, 15%, 16%, 19% and 12%, respectively; differentiated by regions, the Greater China, Asia and emerging markets, North America, Europe and design manufacturing services (DMS) accounted for total revenue by 35%, 15%, 26%, 14% and 10%, respectively. At present, the company's market share ranks No.1 in the industrial computer field and No.24 in the industrial automation field, worldwide.

Advantech was born in Taipei, a city that possesses excellent "industrial gene" of computer manufacturing and R&D. The company now employs more than 4 000 employees in 18 countries around the world, including 1 300 in Taiwan, 2 000 in the mainland of China (including 500 R&D and business workers), and 600 in other countries or regions. Advantech has set up branches in 7 regions around the world, and its business covers North America, Europe, the mainland of China, Taiwan of China, Japan, Asia Pacific and emerging markets (such as East Europe and South America). It has agents in more than 80 countries and has formed giant marketing and service networks. Advantech has set up branches in Beijing, Shanghai, Chengdu, and Guangzhou since its entry into the mainland market in 1991, and established offices in Shenyang, Xi'an, Wuhan, Chongqing, Shenzhen, and Xinjiang. The company started the "Homeland" strategy in 2007, taking the Greater China as homeland and shaping the global brand of leading manufacturers in "Trusted ePlatform Service." With the implementation of the "homeland" strategy, Advantech set up headquarters of ePlatform (eP) and eAutomation (eA) in Shanghai and Beijing. Presently, the manufacturing bases of the company are located in Taipei and Kunshan, the R&D centers are in Taipei, Shanghai, Beijing, Xi'an and Kunshan, respectively.

2.2   Advantech's Transformation from MNC to Globally Integrated Enterprise (GIE)

Over the past 20 years, Advantech has actively expanded its global business and gradually grew into an international company. Now, its business covers Europe, America and Asia. The company implemented the decentralized MNC strategy in its early years. However, from 2005 to 2007, its growth slowed down. The leaders summarized the causes including problems of product quality and delivery, the defocus of company investment, the bottleneck of product group (PG)/region business unit (RBU), and the lack of growth driving incentive system. A deeper cause is that the strategy of MNC emphasizes too much on local decentralization, leading to the "over-decentralization" of RBUs. It became clear that the situation was not suitable for Advantech's further development. The company needed to readjust the relationships between global headquarters and regional centers if it wanted to break its development bottleneck.

In 2007, IBM brought out the concept of globally integrated enterprise (GIE) in its process of globalization. IBM deemed that if an enterprise wanted to win in the global competition, it needed to locate the operation functions in the best places to make use of the global resources and skills effectively, by reducing redundant operations and fixed costs (especially back-office functions), setting up global sharing service centers to realizing economies of scale, and improving the flexibility of enterprise decision-making and the speed of market response. Advantech expected to achieve a transformation from MNC to GIE by learning from IBM's GIE strategy. Specifically, the company hoped to make the following breakthroughs:

First, to transform from the MNC's localization to GIE's globalization;

Second, to restructure Advantech's organizations, and to integrate all sales forces through establishing GBU (global business unit);

Third, to change regional head's role from a top-down commander and driver to a host and enabler.[1]

Fourth, to redefine SBU as profit centers, RBU as cost centers, and the newly-established GBU as sales center.

Fifth, to shift the company's strategic focus from traditional profitability to integrated service with high value and high market growth.

Sixth, to reallocate company resources to where they can be used most

---

[1] Host refers to the role of supporting RBU head and HQ head in local development work through localized service.

effectively.

Seventh, to rebuild the company's self-image from the previous "home country" and "foreign" to a new "globally integrated identity."

Advantech expects RBU units to work closely with the corresponding unit(s) of the headquarters, so as to form a many-to-many communication mode after its GIE transformation. Such a communication mode requires horizontal and multidirectional communication among different units, and knowledge sharing and dissemination among different regions.

3 Establishment of DMF

In the process of transforming from MNC to GIE, leaders of Advantech mapped out the direction for the next stage development. The company established a new unit of "DMF" in 2007, hoping this new unit could help Advantech achieve a greater market growth in the new era.

3.1   The Birth of DMF

Mindful of the long tail theory, leaders of Advantech were aware of the fact that the company had invested 80% resources on 20% key account customers in the past, leaving 80% potential general account clients (long tail customers) not well served. Therefore, leaders of the company hoped to provide better services to the general accounts through the establishment of DMF so as to bring up more profit. It was the original intention of founding DMF.

Advantech's clients can be roughly divided into three categories, premier key accounts (PKA), key accounts (KA), and general accounts (GA). More specifically, PKA has a small number (currently the number is around 100 in all giant companies such as GE and Nokia), yet the demand of PKA is huge. Advantech adopts the Design to Order Service Mode (DTOS) to serve PKA. KA includes the system integrators, and value-added services resellers. Orders from KA are handled by CSF and KASF. Although CSF is designed to manage GA orders, it often neglects GA due to the small size of the orders. Consequently, the potential demand of GA is not satisfied.

Advantech has identified the following four types of clients for the DMF to serve: (1) clients in remote areas where they are not suitable for CSF to deal with; (2) clients that are not well served by CSF because of limitations of technological nature; (3) clients that KASF does not have time to handle; (4) clients dormant in the Siebel database for so long that they are ignored by the company. Once DMF

is established, it can take advantage of telephone communication to create sales leads.

The establishment of DMF in Advantech also owed to the effective promotion of two founders, Ke-Zheng Lau and Chun-Sheng Ho. Lau, the chairman of the company, expected that establishing DMF would provide satisfactory service to GA, who was not well taken care of. He also hoped to reduce the high marketing cost of CSF and KASF. As the general manager then in the mainland of China (the current CEO of Advantech), Ho, believed that Advantech needed to make innovations in products, business model and management, and hoped the company's service can maximize coverage for GA by founding DMF.

In fact, the company set up a "call center" in 2000 with three to four operators standing by to answer the 800-number calls. To response to clients rapidly, operators were required to transfer the customer information to CSF/KASF timely. However, three problems emerged: first, solutions to client problems were not timely because the busy operators failed to contact CSF/KASF timely; second, the operators sometimes transferred an client of one salesman to another by mistake, which would cause conflicts; third, customers often called the salesmen directly rather than contacted the call center, making it difficult for operators to collect customers information. Under such circumstances, DMF appeared as a better solution by combining the call center and online chat together.

At the beginning of 2006, Advantech planned to change the situation that no special sales organization is dealing with customers in the long tail. Yu Wong, current brand marketing director of Advantech, was appointed to establish DMF. Wong and her supervisor, compared three types of practices: online stores in North America, call centers in the mainland of China, and telesales in Taiwan. Based on the strengths of these three practices, management of Advantech decided to hold a "Leap Camp" in May for all regional general managers. All of the attendants participated in the brainstorm type of discussion for four days on the creation of DMF, organization structure, workflow, responsibilities distribution, and cooperation mechanisms with other units. Lastly, they made a decision and officially announced DMF's establishment.

It caught Advantech's attention that IBM's "ibm.com" business operation model was unique and effective. As a result, Advantech planned to introduce IBM's global sales and process control system. In the first half of 2008, Advantech contacted IBM, and IBM sent consultants to Advantech to help establish DMF. Meanwhile, Advantech added a new function—customer relationship development (CRD) to the original DMF system.

The purposes of Advantech's establishment of DMF are to boost online trading

and attract potential customers. The roles and specific working targets of DMF are shown in Fig. 1.
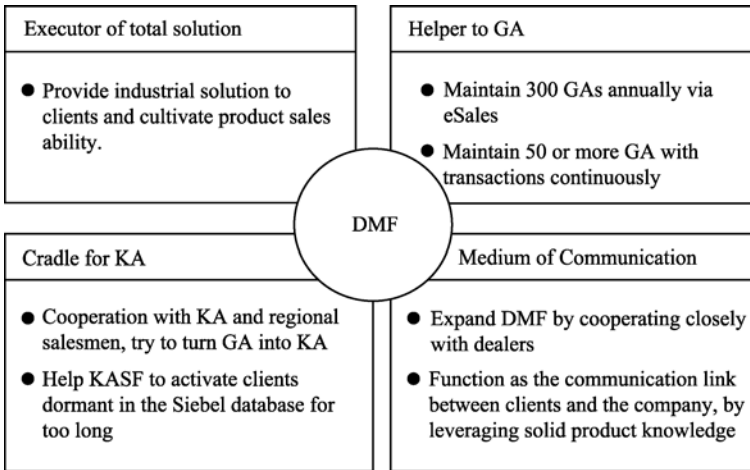
Executor of total solution	Helper to GA
● Provide industrial solution to clients and cultivate product sales ability.	● Maintain 300 GAs annually via eSales ● Maintain 50 or more GA with transactions continuously
Cradle for KA	Medium of Communication
● Cooperation with KA and regional salesmen, try to turn GA into KA ● Help KASF to activate clients dormant in the Siebel database for too long	● Expand DMF by cooperating closely with dealers ● Function as the communication link between clients and the company, by leveraging solid product knowledge

Fig. 1   Role Definition and Job Goals of DMF

3.2   Organizational Structure of DMF

Following the GIE strategy, Advantech established DMF headquarters and regional DMFs. DMF headquarters consists of eBusiness, marketing and sharing service centers. Four regional DMFs were established, namely America/Austria, Europe, Asia/ Emerging markets, and the Greater China. Specifically, DMF in the mainland of China is composed of four teams: Marketing planners, customer care representatives (CCR), customer relationship development (CRD) team and online sales team (eSales). Among these parts, CCR is a China-specific division, which gives pre-sales products counsel to customers, while in other countries and regions, this job is usually done by a sales division. After receiving IBM consultants' suggestions, management of Advantech realized that DMF shall do more than just waiting for potential customer calls. Hence they decided to add a CRD team to contact potential clients via phones, and then transfer any sales leads to other business units. As one employee put aptly with an analogy in soccer, the job of CRD is to "assist but not shoot."

3.3   DMF's Business Processes

According to the new business operation plan designed by the IBM consultants,

the business procedure of DMF can be divided into three stages (as shown in Fig. 2), including marketing planning, pre-sales coverage and sales.

(1) Marketing planning covers analyzing competitors, identifying the prospective customers segment, integrating regional markets, seeking opportunities, and discussing the segmentation of regional market with RBU directors, RBU sales managers and DMF regional directors. Marketing planners also work with CRD managers to collect information about customers, select potential customers based on customer information, make a prospective customer list, and develop customer tier plan. Moreover, marketing planners make specific marketing activity plans with product marketing managers, design eDM/eLetter with product marketing managers and CRD managers, make KA account plan with product marketing managers and KASF managers, and scheme the marketing activities on Advantech.com and eStore with web force.

(2) Pre-sales customer relationship development (CRD): the KA CRD team makes a potential KA list to contact, which includes the company name, telephone number and address. The GA CRD team makes a prospective GA list in the same way. Then, the CRD staff contact the prospective customers by telephone according to the list, seek sales leads, and transfer them to the corresponding business units.

For example, when the KA CRD team contacts a prospective customer and finds out that it is a customer of a long-term dealer of Advantech, they should transfer sales lead to CSF. The GA CRD team is required to transfer their sales lead to eSales, CSF, and channel partners. If it contacts a customer who has product demand, and finds out that this customer belongs to eSales or a channel partner, this sales lead should be transferred to them. However, if it is a new customer (no record in Siebel), the lead should be transferred to eSales, channel partners, KASF, or CSF according to the trading volume. It is classified as follows: In Taiwan, a sales lead will be transferred to KASF or CSF when an ePlatform trading volume exceeds NT$500 000 (approximately $17 000), or eAutomation when a trading volume exceeds NT$300 000 (approximately $10 000); otherwise a sales lead will be transferred to DMF eSales or channel partners.

(3) Sales: The sales work of business units are shown in Fig. 2. These business units have to track the sales leads and convert them into sales. During the process, CRD regularly checks the follow-up with the sales lead.

Advantech.com and eStore provide another approach to sell products, and eSales will handle on-line orders. The DMF performance appraisal KPI and the business process of units in DMF are shown in Table A1 and Fig. A1–Fig. A3 in
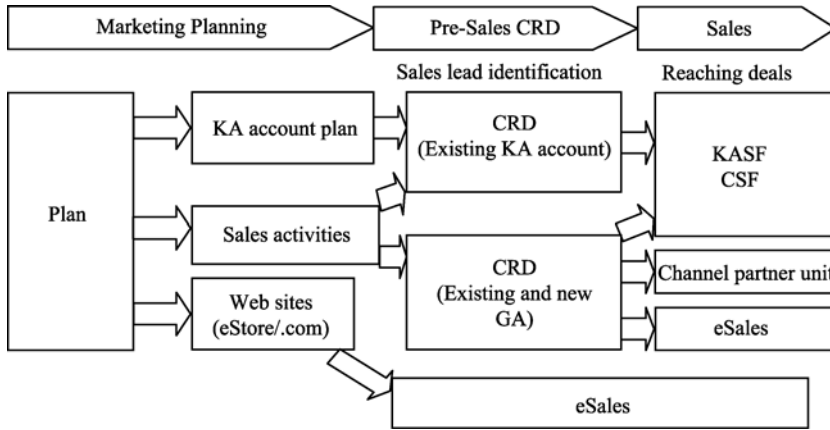
appendix, respectively.

Fig. 2   Main Business Processes of DMF

4   Conflicts and Challenges in DMF Operations

DMF is an integration of three units, the call center, customer relationship development, and sales. Conflicts with existing business units have been foreseen at the beginning, and new problems arose in the real operations. These conflicts include, errors made by DMF staff in transferring information, conflicts with CSF, KASF and channel partners in selling products, and discrepancies in regional markets in implementing unified standards made by the headquarters of DMF. The main problems are identified as follows.

4.1   DMF's Conflicts with CSF

The primary problem in the development of DMF, as pointed out by Yu-Wen Jiang, the director of DMF headquarters in Taipei, is the cooperation with CSF. When designing the DMF business process and setting up a database, the DMF headquarters paid special attention to distinguishing existing and new customers of CSF, transferring the sales lead, and formulating the quota split. Of course, the situations of various regions are different. For example, business conflicts between CSF and DMF in the mainland of China and Europe happened frequently, whereas the conflicts between DMF and CSF in others regions are not common.

   At the initial stage of DMF, Advantech's headquarters foresaw the conflicts. The headquarters was expected to help DMF survive as an independent business

model, rather than as one section of CSF. Therefore, DMF was not required to transfer sales leads of GA to CSF, but to retain these sales leads as its own.

However, CSF could not benefit from cooperation with DMF at the initial stage. And to some extent, CSF's interest was hurt by the establishment of DMF. For example, DMF does provide new customers for CSF, yet the number of new orders is very small as compared with the orders executed by CSF originally. Moreover, the rule of quota split between DMF and CSF is (take the mainland of China as an example): If a business order is transferred from DMF to CSF, CSF and DMF will divide the revenue in the proportion of 30%/70%. This practice, however, may dampen CSFs' enthusiasm, especially when the order is not attractive and the potential profit is not large, CSF has less motivation to cooperate with DMF.

Another conflict is DMF's responsibility for "price inquiry," which provides more detailed information for price-sensitive customers. As a result, channel partners lose some of their long-term customers or have to make big concessions to retain customers. Meanwhile, errors of the CRD team often make channel partners dissatisfied with DMF. For example, newly-established CRD team is likely to transfer one channel partner's customers to another by mistake.

4.2   DMF's Conflicts with KASF

The conflicts between DMF and KASF are similar to those between DMF and CSF. Meanwhile, there are significant differences among KA, customers in the long tail and channel clients. A salesman in KASF is usually deals with about 20 customers. KA requires longer time to find and maintain customers. The feedback of order information tends to be less timely. The project ratio is often large and needs frequent communication. And the level of customization is high and most work is done through "face to face."

However, conflicts between DMF and KASF are fiercer in the mainland of China than in North America and Taiwan. Yan-Hong Zhang, the assistant manager of the mainland of China DMF, has experienced such a serious conflict. In 2009, her CRD team transferred some sales leads to KASF, but could not get feedback. However, the team needed to track customer information according to the feedback and get the corresponding order. Through communicating with the directors and staff of KASF, Zhang found that CSF and KASF were not willing to cooperate with DMF, because they thought it was unfair that DMF can get 50%–70% of sales revenue only by transferring the sales leads.

DMF headquarters made a new Revenue Split Guideline (as shown in Fig. A4 in

Appendix) to redistribute "sales revenue" among different partners involved. As shown in Table 1, the adjustment is comparatively small and the sum remains 100.

Table 1   The New Revenue Split Guideline

Category	Revenue split ratio
DMF passes new sales leads and order executed by KASF	KASF/DMF: 75%/25%
DMF passes new sales leads and order executed by CSF	CSF/DMF: 25%/75%
DMF Direct Sales (GA)	DMF: 100%

4.3   Conflicts Between DMF Headquarters and Regional DMF

Conflicts between the DMF headquarters and regional DMFs mainly result from the paradoxical relationship of global integration (standardization) and local adaptation.

According to the business process, in early days, although Advantech set up the unified business process with IBM's help (as shown in Fig. 2) and required each region to adopt this unified process, some modifications were made to fit practical situations in regions. For example, DMF's development in Europe and the mainland of China were not as good as that in Taiwan and America. The main reason was that the general rules made by the headquarters were not suitable for those regions, leading to conflicts between CSF and DMF.

The "emerging markets" are special regions, which include the Middle East and Africa, and Advantech has not set up offices or branch companies in these regions. The main reason is that the demand amount from "emerging markets" is not very attractive besides the high cost. However, emerging markets have good market prospects. Hence, an office should be set up to deal with the orders. Meanwhile, the special characteristics of emerging markets should be considered, such as the large number of countries, the scattered distribution of markets, and the uniqueness of consumer behavior. Therefore, the match between site choice, culture and the communication with the headquarters should be considered in the process of setting up DMF. Advantech also plans to allow customers in emerging markets to contact with the salesmen in headquarters directly for improving the efficiency of order fulfillment.

5   Current Practices

To cope with the problems and adopting GIE as the global framework, Advantech

has carried out the practices described below.

5.1   Exploring a "Sweet Spot" for the Starfish Model and Spider Model

In 2007, Advantech began to implement IBM's GIE structure. Inspired by the book "The Starfish and the Spider," Advantech explored the juncture between centralization and decentralization based on the demand of business development. "The Starfish and the Spider" divides organizational structure into two types. One is the traditional Spider Model, which represents a strictly hierarchical structure and top-down leadership relations. The other one is the Starfish Model, which represents horizontal organizational structure and decentralized decision-making power. Unlike the Spider Model, which is suitable for mature organizations, Starfish Model is fit for creative organizations.

Advantech attempts to build a globally integrated firm and tries to seek for the "sweet spot" through integrating the above two models. On the one hand, the competitors in regional markets are small and flexible. Therefore, a business unit of the Starfish model could improve the speed of decision making and responding, in order to improve its competitiveness. On the other hand, the functional units in the headquarters need more power to control and allocate resources in the global market, requiring the organization to adopt the Spider Model. Specifically, the adjustments include: regional organizations change from the Spider Model to the Starfish Model; organizations in headquarters shift in the opposite direction; DTOS combine the front-end of the Starfish Model (local design teams) and the back-end of the Spider Model (fundamental framework). The details are shown in Fig. A5 in Appendix.

5.1.1   The DMF Headquarters' Management Basing on eBalance Sheet

The DMF headquarters is more likely to be a "Spider" that manages each region DMF through formulating unified policies, processes and regulations and establishing global unified IT platform and tools. Some functions, such as IT systems maintenance, human resources management, financial management and legal advice, are established and unified by the DMF headquarters.

Recently, Advantech brought in a new system so that each regional DMF can observe the performance of other regions through an updating eBalance sheet, which could help DMF directors and other staffs to adjust and improve their work by comparing with each other.

Table A2 in Appendix shows Advantech's global DMF eBalance sheet of one

day in October 2010, and the eBalance sheet is shown in an eye-catching place in DMF office. The number in the table is the performance of each regional DMF's CRD team, and the performance of CCR and eSales would be shown interval. This sheet is designed and managed by DMF headquarters, and can be seen by each regional DMF at the same time.

The headquarters could manage regional performance according to the eBalance sheet. When the DMF performance problem is resulted from the region, the headquarter will intervene directly, and the main interventions include providing necessary technology and information, as well as sending excellent managers from other regions to provide counseling.

Additionally, the DMF headquarters usually provides the sales revenue target to regional DMF as reference, but regions have the power to decide the approaches of implementation. DMF managers make decisions according to their special circumstances. The DMF headquarters will not intervene in the specific business operations of regional DMF.

5.1.2   Refinement of Business Processes in Regional DMF

As described above, differences in consumer behavior and regional culture made it necessary to change the old revenue split rules. The case in the mainland of China is a typical example. The relationship between DMF and KASF stated in the mainland of China has been described by Zhang, the assistant manager of DMF: "DMF did well in implementing the work, but KASF didn't provide any feedback. Besides, the 'information feedback' is one of the regulations. Why KASF didn't cooperate with DMF?"

By interviewing with directors and staff in KASF, Zhang found that the staff in KASF had a strong feeling of unfairness. Inspired by collaboration cases in other industries, Zhang introduced and implemented a new incentive mechanism called "Crossover Collaboration."

After Zhang gained formal approval of "Crossover Collaboration" from the headquarters. The new rule was published in the eManager[2] as a model of improvement for other regional managers. Comparing with eBalance sheet, the data in eManager is more specific and detailed. However, it can only be accessed by staff with "manager" authority.

The new quota split rules aim at promoting Crossover Collaboration among different units as the following:

---

[2] The eManager is a sector of the firm's intranet which is to provide reference for managers.

First, as to the potential customer introduced by DMF, if the order is fulfilled within 12 months, 50% of the order sales profit goes to DMF, and 75% is owned by KASF.

Second, as to the orders transferred from DMF to CSF, if the order is fulfilled, both DMF and CSF can get 75% of the order sales revenue.

Thirdly, as to the orders fulfilled by DMF, 100% of the order sales revenue goes to DMF.

According to the above division rules, the sum of quota in the first situation is 125%, and in the second situation is 150%. This method called "Management Quota" is adopted in the mainland of China, and the exceeding part (the part that more than 100%) is an extra cost to the company, but "this extra payment will motivate the cooperation among different sales units," as Ho put it.

5.1.3 Collaborative Mechanism of Region-Headquarters and Region-Region

Under the framework of GIE, each regional DMF relies on the collaboration between RBU general managers (GM) and the DMF headquarters Head to increase the sales of eA and eP products. The main responsibility of regional market is to keep and improve the market share and brand equity.

As shown in Fig. 3, both RBU GM and DMF headquarters Head are the superiors of DMF RBU Head. RBU Head is required to report to headquarter Head and RBU GM. The main role of RBU GM is converted to an Enabler and Host to help the company developing regional business. Therefore, the RBU GM needs to check and evaluate the business performance in order to make sure the global business revenue goals are achieved.
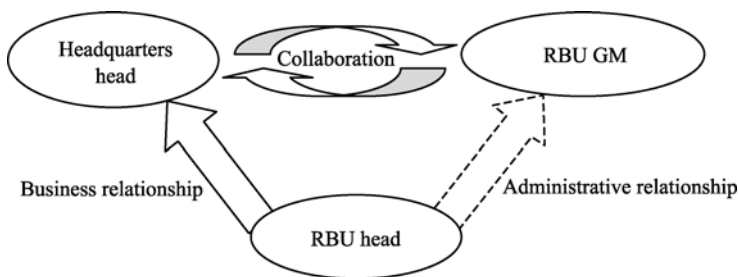

Fig. 3   The Relationship among Headquarter Head, RBU GM and RBU Head

In order to improve the relationship between emerging markets and the headquarters, Advantech set up a DMF office in Malaysia to manage the business

issues in the emerging markets. The reasons to choose Malaysia is that Malaysians often do international business, so they can speak many kinds of foreign languages. Moreover, another two measurements to manage the emerging market were also taken into consideration: building cooperative relationship with local partners; encouraging customers to do business with Taiwan (the headquarters location) directly through an online order trading system. These two measurements could save the customers' time and money.

As for the relationships among regions, cooperation rather than competition is encouraged. A representative example happened between America and Hong Kong. An American customer made an order through online eSales, which is affiliated with Hong Kong's DMF. When Hong Kong's DMF checking in the Siebel, he/she found this order was exactly the same as previous one placed in America. After finding this problem, DMF headquarters communicated with the directors of America and Hong Kong. They discovered that this customer placed the order in Hong Kong after finding the price of this product in Hong Kong was lower than that in Miami. DMF headquarters decided to let Hong Kong eSales team return this order to American eSales, hence avoided vicious competition between these two regions.

5.2   Cooperation among Business Units within the Region

Advantech declared that DMF is not only a "business" unit, but also an "online sales" function and a "brand promotion" unit. Therefore, DMF should be appropriately positioned as sales and marketing unit.

As described above, the revision of business process and revenue split rules can be an effective way to resolve conflicts among business units. Under the framework of GIE, DMF headquarters encourages regional DMF to put all of their sales leads into the Siebel database. When a sales lead appears, staff in DMF first needs to check it in the Siebel database to make sure whether it is new, and then transfers this sales lead to the corresponding business units. To competent for this job, staff needs lots of tacit knowledge (know-how). Therefore, only understanding the transferring procedure is not enough for the employees, they should also try hard to accumulate experience and gain know-how from their jobs. Experienced DMF staff can differentiate customers according to the questions they ask. For example, if a customer knows little about the product, he/she can be labeled as a "new" customer. If a customer has a deep understanding of the product, it indicates that this customer is an "old" customer.

In order to enhance the "Crossover Collaboration" among sales units, DMF

needs to get the trust from CSF and KASF. However, errors of DMF may hurt the interests of other sales units, resulting in a loss of trust of these units. Here is a typical example, a channel partner in Chengdu has been cooperating with one salesman of local CSF for more than 3 years, and this salesman has done a lot of work to maintain their cooperation relationship. However, after this salesman left the company, the channel partner in Chengdu did not contact the local CSF as usual, but contacted DMF in Beijing instead. After checking Siebel database, the staff of DMF in Beijing found out that this order was similar to a previous one. Then, the staff of DMF in Beijing cancelled the order to "protect" the interests of CSF in Chengdu.

As one of its responsibilities, DMF also needs to work closely with other business units to boost business. For example, in 2009, the CRD team in the mainland of China, contacted one Iron and Steel Company and found it in need of no-fan Embedded Industrial Personal Computer. After several contacts, the company finally chose Advantech's UNO-3282 machine. The CRD team transferred this sales lead to local CSF and let them bid. After this, the CRD team continued to contact the company and found more valuable demands: first, the company needs Switches and Safety Defense System; second, the company would rebuild its construct machinery rooms after 2010 Spring Festival; third, the iron company needs a new resource management and control plan in 2010; fourth, the construction of a new iron and steel plant would be executed in 2010. Then the CRD team shared all the information with KASF and worked together with them to execute this order. This example shows that small customers can be cultivated into big ones, making other business units glad to cooperate with DMF.

A key problem of cooperation between DMF and other sales units is the "price inquiry" function of DMF. To solve this problem, one basic rule is to protect other units' interests. Accordingly, the DMF headquarters established a price surveillance system to make sure that prices offered by DMF are not lower than the prices offered by other sales units, so the prices are reasonable and will not hurt other sales units' interests.

5.3   Knowledge Sharing among Regional DMFs

Advantech tried to make the best practices shared among DMFs in different regions under the GIE structure. The concepts of COE (Core of Excellence) and NOI (Node of Intelligence) were introduced by the headquarters. If one DMF's experiences and skills are worth learning by other DMFs, Advantech will regard

this DMF as COE and spread its experiences and skills to all other DMFs. With the mass collaboration, all the COEs will be sublimated into NOI of the global knowledge net. For example, an employee of DMF in Singapore designed a very good personnel assessment and expense application system, and the headquarters of Advantech promoted the system to other DMFs around the world. In fact, Advantech could benefit from GIE in four aspects: "Best Practice Sharing," "unified SOPs," "Leverage of Resources" and "Duplication of Success."

Driven by NOI and the Mass Collaboration concept, different regional DMFs communicate and exchange information with each other via video conferencing and reading clubs. As a result, good experiences and skills are expanded and improved through mutual learning and sharing among different regions.

6 Puzzles about the DMF's Future Road

To develop the DMF system, in May 2009, the DMF headquarters created a new DMF prospect blueprint and vision for the next 3 years (Table 2). One director of the DMF headquarters said: "DMF's future development is to pay more attention to perfect details. Operational procedures should be more standardized and explicit, potential customers should be further cultivated and customer classification and assessment should be more accurate." The newly established CRD team will be entitled with new function of online sales for small self-finding customers. With the new function of finding small customers and direct sales being added, performance of DMF will be improved highly.

Table 2 DMF's 3-year Roadmap and 2012 Vision

	Value to Customers	Easier to do business with Advantech
DMF 3-year Roadmap	Value to Advantech	Expand Advantech market coverage Increase Advantech brand awareness in target segments Improve sales-marketing & KASF/CSF/DMF synergy
2012 DMF Vision	Worldwide sales reaches 150M USD	
	DMF is an eA/eP joint sales force and as important as KASF & CSF	
	Advantech eStore becomes the most well-known online store for eP services	
	DMF is the main sales force for brand sales model (standard box moving components & systems)	
	DMF is the primary platform for new product Introduction and certified 3rd party products	
	DMF is the pioneer sales force for emerging markets (e.g., Eastern Europe, South America)	

However, as for DMF in the mainland of China, the most important task for Tsai is how to accomplish the goal in the special context of China and how to localize DMF further. As the director of Automation BU and DMF in the mainland of China, Tsai needs not only to consider the automation business that he is directly responsible for, but also to promote all the business in China to gain better revenue and profit through the role of DMF. He is required to seek for a useful operation mode with "Chinese characteristics" for DMF. In doing so, Tsai has to face and solve a paradox: On the one hand, more elaborated cultivation of small customers will make DMF's costs increase; on the other hand, the performance of DMF is very difficult to improve within a short time, considering China's special conditions. Meanwhile, although the company's policy encourages the DMF unit to transfer customers that have been cultivated to large ones to other business units, a balance of unit interests shall be carefully considered during the course of implementation of this policy.

However, Tsai has full confidence in solving the above problems, and he needs more time to further analyze the gains and losses of Advantech's exploration in DMF. He believes that, based on its previous successes and failures, a new development blueprint for DMF will be established and implemented in the company soon.

References

Advantech. 研华科技公司. 2007. 2007 年研华将持续深耕军衔制化设计服务、垂直领域市场，奠定全球产业计算机之领导地位 (Advantech continues to develop military ranks design service and explore vertical market to become the leader in computer industry in 2007). *计算机测量与控制 (Computer Measurement & Control)*, (3): 307.

Advantech. 研华科技公司. 2007. 研华再显雄志：立足大中国，面向全世界——记 2007 研华科技北京媒体说明会 (Advantech grows stronger: Keeping a foothold in the mainland of China and facing the whole world—The media briefing of Advantech in Beijing in 2007). *电子技术应用 (Application of Electronic Technique)*, (2): 11.

Anderson, C. 2006. *The long tail: Why the future of business is selling less of more*. New York: Hyperion.

Brafman, O., & Beckstrom, R.A. 2008. *The starfish and the spider: The unstoppable power of leadless organizations*. London: Penguin Books.

Eisenhardt, K.M. 1989. Building theories from case study research. *Academy of Management Review*, 14(4): 532–550.

Jiang, Q. 姜奇平. 2008. 海星与蜘蛛的原型 (The prototypes of the starfish and the spider). *商学院 (Business Management Review)*, (8): 140–141.

Lü, B. 吕本富. 2008. 蜘蛛和海星的混血儿会改变商业世界吗 (Could the mixed-blood of starfish and spider change the business world?) *IT 时代周刊 (IT Time Weekly)*, (2): 77.

Xu, Y. 2009. 全球整合企业将带来什么？(What will the global integrated enterprises bring to us?) *商务周刊 (Business Watch Magazine)*, (1): 34–35.

Yin, R. 2003. *Case study research: Design and methods* (3rd edition). Thousands Oaks: Sage Publications.

Appendix

Table A1   The KPI of DMF

	KPI	Recognition rules	Target numbers	Actual numbers
No. of Sales leads	KA leads	New sales leads created in Siebel and assigned to KASF		
	GA leads	New sales leads created in Siebel and transferred to CRD in DMF		
	CP leads	New sales leads created in Siebel by CCR and assigned to Channel Partner.		
	Prospects	New sales leads created in Siebel by CCR.		
Revenue	eStore	Orders placed directly on eStore		
	Inside sales	Orders closed by IS and sales leads developed by DMF and passed on to KASF & CSF		

Table A2   Advantech's Global DMF eBalance Sheet (Each region's performance of customer relationship on xx Oct, 2010)

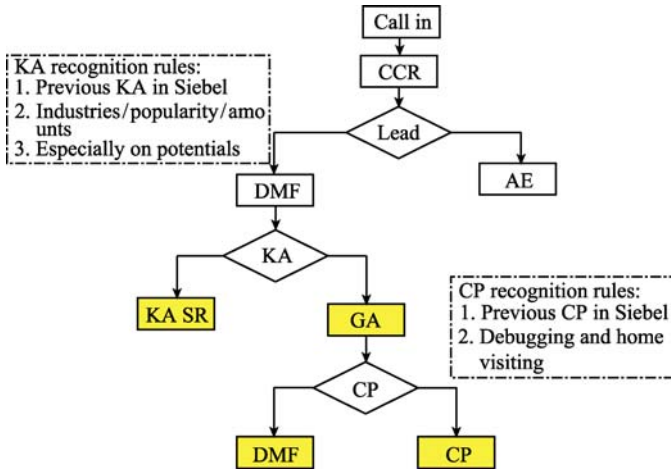| Regions	Transfer to KASF	Transfer to CSF	Transfer to eSales	New customers
Australia	40 000	0	12 000	58
Brazil	109 000	0	0	31
The mainland of China	3 000	8 000	14 000	68
Europe	0	5 000	28 000	41
India	0	0	0	11
Japan	0	69 000	107 000	7
South Korea	0	0	6 000	17
Malaysia	0	0	0	13
Taiwan, China	50 000	0	13 000	22
Singapore	0	0	27 000	32

Fig. A1 CCR Work Flow in DMF

|		Identify target segment/ region	Generate customer list	Product/ VM training	Develop DMF campaign	Develop tier Plan/schedule Call plan	Define DMF R & R	Daily /Monthly Review
PSM/ BDM		Discuss together to make decision	1. region or industry lists 2. exhibitionlists	1. product training by product manager				
Sales		Discuss together to make decision		2. industry training by SR 3. cases by SR ROC with customer by SR	1. meterials provided by SR to make the e-letter	1. label customer type and industry type		1. communicati on with SR referring to call out in 30 minutes in early weeks
CRD		Discuss together to make decision	3. potential customers in Siebel 4. search list on website		2. e-letter provided by MKT 3. marketing activities by MKT	2. customer recognition rules 3. assign the customers 4. lists by MKT call out 5. setting the daily workload and list deadline 6. list call plan	1. lists by MKT call out 2. setting the daily workload and list deadline 3. list call plan	1. assess performance by KPI 2. summarize call out in one month

Fig. A2 CRD Work Flow in DMF
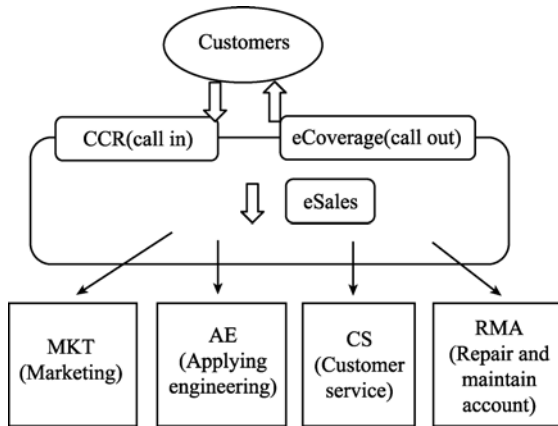
Fig. A3   eSales Work Flow in DMF

KA Customers

KA customers refer to those customers who have No.01–06 attributes in the Siebel database. These customers are assigned to the original owners.

Potential KA Customers

—classification standard:

* Prestigious large companies; Companies of industrial attributes (Listed by KA unit)

* Order larger than specific amount (eA larger than 100 000, eP larger than 200 000)

—information feedback

* If IS SRs input information into SIEBEL database, the owners are KA SRs.

* KA team makes judgments of these activities and opportunities. If not recognized, they will be return to GA unit to deal with (3 month to 6 month tracking periods).

* If KA SRs give feedback about information usage timely in the SIEBEL database, then half deals in the first year belong to DMF SRs.

CP customers

-- **Customers need to be visited and tested**. Customers of this kind are for the CP unit to deal with. IS changes these customers' attribute to No.09—they are assigned to partner and record the information. 70% of these deals belong to DMF SRs.

Original Customers of CP.   If these customers make price inquiries, they will be transferred to corresponding CP BU. Their attributes will be changed to NO.09—Assigned to partner and record the information. 30% of these deals belong to DMF SR.

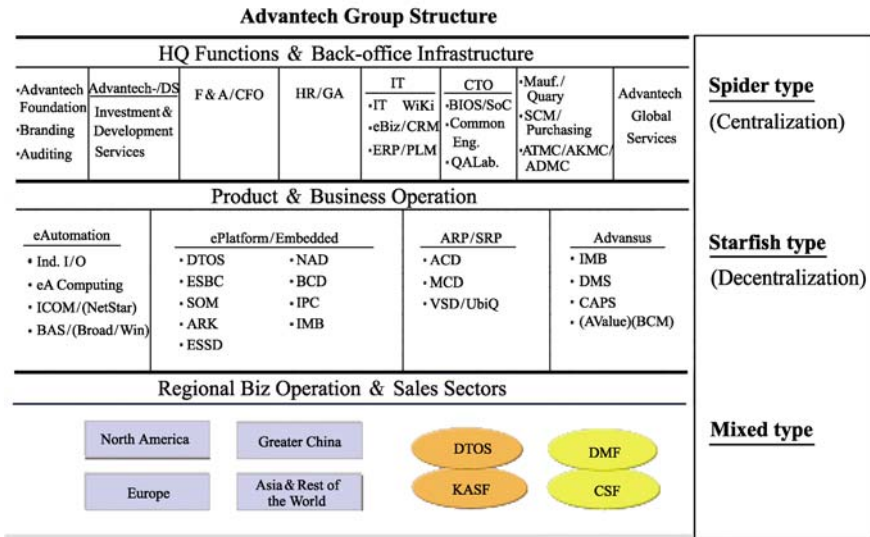**Fig. A4**   Specific Rules for Inside SR to Deal with Sales Leads

Advantech Group Structure

HQ Functions & Back-office Infrastructure								Spider type (Centralization)
·Advantech Foundation ·Branding ·Auditing	Advantech-/DS Investment & Development Services	F & A/CFO	HR/GA	IT ·IT WiKi ·eBiz/CRM ·ERP/PLM	CTO ·BIOS/SoC ·Common Eng. ·QALab.	·Mauf./ Quary ·SCM/ Purchasing ·ATMC/AKMC/ ADMC	Advantech Global Services	

Product & Business Operation				Starfish type (Decentralization)
eAutomation ・Ind. I/O ・eA Computing ・ICOM/(NetStar) ・BAS/(Broad/Win)	ePlatform/Embedded ·DTOS ·NAD ·ESBC ·BCD ·SOM ·IPC ·ARK ·IMB ·ESSD	ARP/SRP ·ACD ·MCD ·VSD/UbiQ	Advansus ・IMB ・DMS ・CAPS ・(AValue)(BCM)	

Regional Biz Operation & Sales Sectors				Mixed type
North America Europe	Greater China Asia & Rest of the World	DTOS KASF	DMF CSF	

Fig. A5   Advantech's Current Structure under GIE