Assisting SMEs to Establish RMA Diagnosis Checklist and Innovative RMA Process System to Enhance B2B Innovative Concept Adaptation and Its Value-Added Function

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Abstract: This research attempts to focus on Return Merchandise Authorization (RMA) and the optimization of the RMA solutions. In the meantime, this research establishes RMA Diagnosis Checklist, Innovative RMA Process system, and a number of suggested solutions for Small and Medium Enterprises (SMEs). This research has important implications as it optimizes RMA solutions to B2B problems for SMEs, provides useful information on effective RMA service policies for B2B marketing decisions and creates a general awareness of the importance and rationale of RMA. Finally, this study provides RMA as a diagnostic tool and strategic tactic for SMEs.

Key words: Return merchandise authorization, small and medium enterprises, business to business.

1. Background and Motivation

Current Return-Merchandise-Authorization (RMA) operation has caused unnecessary time waste. For example, the RMA technical staff is often idle during working hours, evidenced by the fact that only 50%~70% of the equipment and capacity of a testing facility is utilized. Nowadays, with the popularity of Internet, buyers can easily find plenty of relevant information on company's products. This will increase the buyers' purchasing power in business negotiations. Thus, the traditional sellers' market has been transformed to the buyers' market, and this transformation has led business people to think from the standpoint of customers and to put themselves in the latter's shoes. Therefore, rebuilding RMA concepts according to the wishes of customers is necessary. Based on the ISP & BSP model, there are three different levels for operational management and decision-making functions in the enterprise [1]. In general, RMA is known as a business activity at the operational level, which is at the bottom layer of the chart in Fig. 1. This research attempts to upgrade RMA into the two higher levels, namely, the middle-management and top-executive levels, so that RMA would become a key to correct business operations [2]. The traditional RMA is defined as "RMA-1." According to the upgraded level as well as CRM (Customer Relationship Management) and CMR (Customers Management of Relationships) theories, RMA-2 and RMA-3 are identified by this research, as shown in Fig. 1.
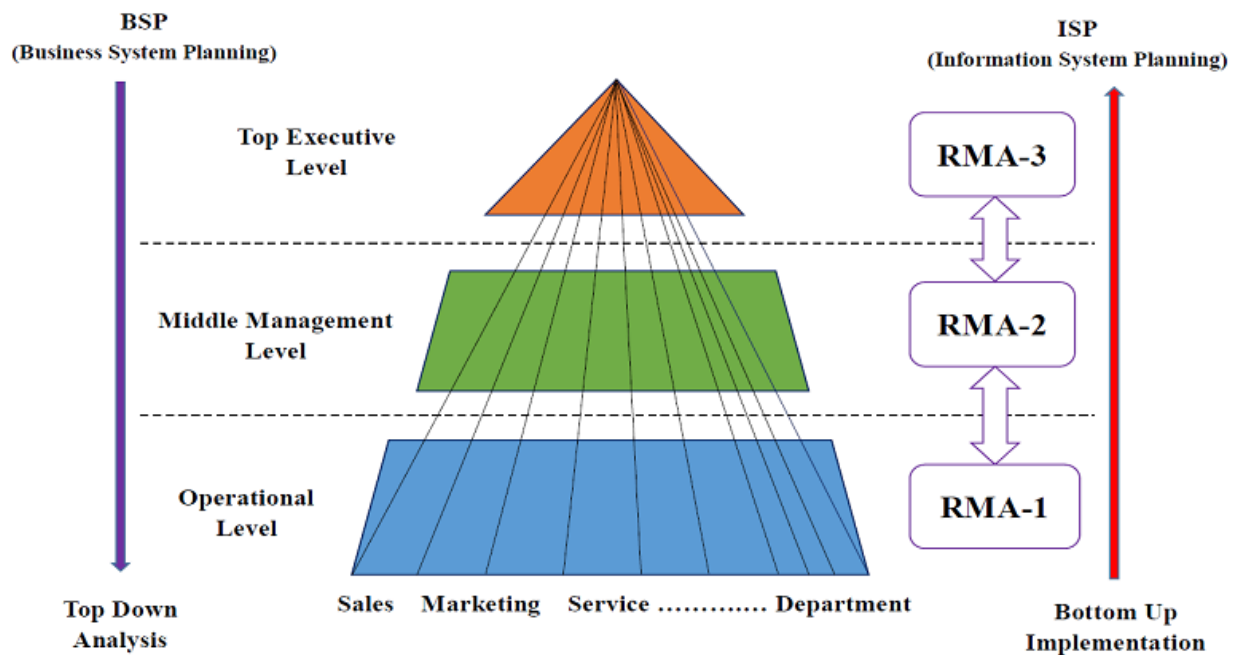
Fig. 1. Three serial levels of Return-Merchandise-Authorization (RMA) in the SMEs.

This research intends to provide the essential web-based RMA solutions for SMEs. It has the benefit of enabling enterprises to use RMA as an enterprise diagnostic tool. RMA cannot stand under some department - it must be autonomous and independent by itself. It can provide both the middle management and top executive/strategic management levels with data needed for analyzing various situations and problems, thus allowing appropriate decisions to be made. This leads to the RMA solutions essential for the entire enterprise. The formula for a RMA solution is RMA-1 plus RMA-2 plus RMA-3. It also demonstrates those SMEs with a self-reflection management system.

2. Literature Review

2.1. RMA as a Management Tool

Some interviewees supported the idea of using RMA as a management tool, others did not. However, most interviewees believed that the RMA data were important to the companies themselves as these data reflected some management issues. Research findings on such management issues, then, would benefit the entire SMEs in its customer service [3]. How to utilize the RMA data was an interesting subject for the present study, and how to upgrade the RMA function and make it a diagnostic tool for the enterprises was an equally compelling one.

2.2. RMA as a Tool for Setting Business Strategies

When you submit your final version, after your paper has been accepted, prepare it in one-column format, including figures and tables. Based on the business-to-business RMA agreement, RMA can be a strategy-setting tool for a business. While some interviewees in the present study agreed with this idea, others did not. Those who did not agree were individuals who had no authority and obligations to make judgments in this area. Several departments, such as accounting, warehouse inventory, R&D, receiving and shipping, QA and QC, assembly, marketing and sales, are linked to the RMA department. For these departments, the RMA department did not have a "no-good" image until recently.

2.3. Strategic Marketing's Influence on RMA Solutions

Cravens and Piercy (2007) said, "Knowledge about markets and competitive space is essential in guiding business and marketing strategies." These same authors asserted, "Nearing the end of the first decade of 21st century, it is apparent that executives face unprecedented challenges in the strategic marketing to cope with turbulent markets, competitive revolution, and escalating customer demands for value superiority" [4]. Without strategic marketing, the RMA is still a functional service department in an enterprise. Therefore, strategies positioning and market targeting relevant to RMA and the implementation and control of marketing strategies will complete the RMA solutions for the entire enterprise.

3. Analysis Results

The results of the study provided essential, web-based, RMA solutions to certain B2B problems. The RMA primary data generated through 10 interviews deserve attention. These data were divided into three levels according to ISP and BSP models. The first fundamental level is an operational one. No matter how an RMA department has been defined in SMEs, it remains a service department at the operational level of a business.

3.1. RMA Diagnosis Checklist

Based on the findings, a number of essential, web-based, RMA solutions were generated for problems on the B2B checklist. On this checklist, there are altogether 30 questions, which entailed analyses in five areas: the definition and processing of RMA, the causes of RMA, RMA as a management tool, RMA as a tool for setting business strategies, and other comments about RMA. Finally, 30 questions on RMA checklist were worked out, as shown in table 1.

Table 1. RMA Diagnosis Checklist

1. Are RMA technicians well-trained by your company?
2. Does RMA department have sufficient facilities for RMA processing?
3. Does RMA department have sufficient manpower for RMA processing?
4. Does RMA department have sufficient supply of goods for RMA processing?
5. Does RMA department have the needed data collected at all times?
6. Is RMA department an independent entity, or is it under other departments' supervision?
7. If a product of RMA is defected, is it well-handled by your company?
8. If a product of RMA has met with customer complaints, is it well-handled by your company?
9. If there are ordering errors for a product of RMA, is it well-handled by your company?
10. If there is a delivery damage to a product of RMA, is it well-handled by your company?
11. If there is a damage in the packaging of a product of RMA, is it well-handled by your company?
12. If a product of RMA is involved in salespersons' ordering errors, is it well-handled by your company?
13. If a problem of RMA was caused by the Research-and-Design department, is it well-solved by your company?
14. Does a product's defect rate equal its RMA rate in your company?
15. Does your company at the middle-management level perform RMA data analysis?
16. Does your company take RMA department seriously?
17. Does your company review RMA reports?
18. Does your company use RMA database and software?
19. Does your company use RMA reports for the evaluation of RMA department's performance?
20. Does your company use RMA reports for re-thinking the product design?
21. Does your company use RMA reports for departmental budgeting?
22. Does your company use RMA reports for profit analysis?
23. Does your company use RMA reports for evaluating a pervious decision?
24. If your company is sales-oriented, is it easy to deal with RMA services?
25. Do the middle managers and RMA supervisors have the knowledge and training on project management and its implementation?
26. Do those at the executive-strategic level use/treat RMA service agreement as part of an RMA strategy?
27. Does RMA department well-linked to all departments in your company?
28. From your point of view, does a CEO's management style have an effect on RMA problems?
29. From your point of view, would RMA checklist generally applied to other industries?
30. According your professional experience, do you think RMA checklist will be useful and helpful to retail industry?

To find the essential, web-based, RMA solutions to the B2B problems on the checklist, business owners

will need to pay attention while evaluating and grading their own performance by gathering feedback from the collected RMA primary data. In this endeavor, the RMA diagnosis checklist should be utilized as a diagnostic tool.

3.2. Innovative RMA Process System

This research, therefore, establish RMA process system for SMEs as shown in Fig. 2. The first step is through Supply Chain Management (SCM) system. Utilizing SCM system to make the reversed-logistics for recording and collecting RMA1 primary data. RMA2 is Reaching Management Agreement and by employing the second step of Management Information System (MIS), it helps SMEs crystallize RMA1 service data transforming to useful information about RMA2 function. The third step of RMA3 needs to get Enterprise Resource Planning (ERP) system interacting with enterprise. This action provides necessary financial information to help the executive level managers recheck and rethink the whole business decisions and strategic strategies. The fourth step would be Decision Support System (DSS), to offer function for self-reflection, and repositioning mind-setting approaching of RMA3. And then by following up to fifth step can be reached to Human Resource Management (HRM) system. After properly allocate employees' roles in the enterprise, the sixth step is to gather all critical information and feedback back and forth of Customer Relationship Management (CRM) system that would be useful for the enterprise to make self-diagnostics action [5].
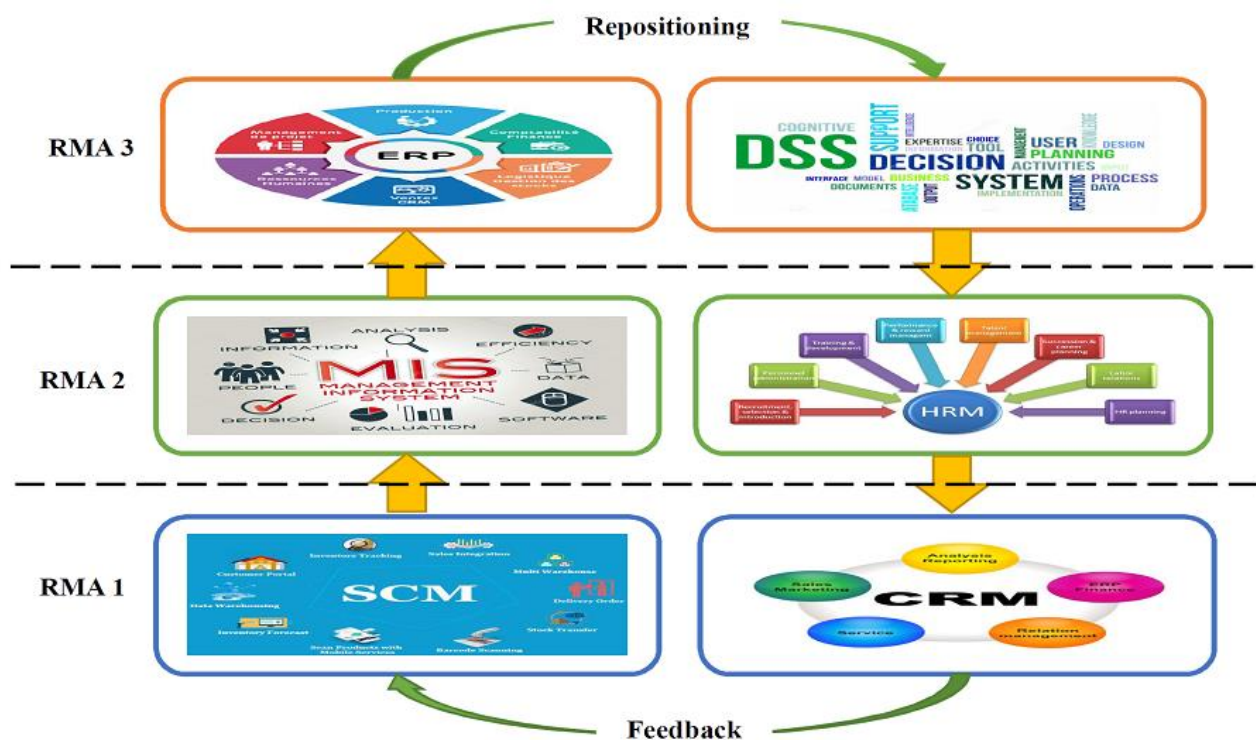

Fig. 2. Innovative RMA process system for SMEs.

3.3. Discussions of the Qualitative Investigation

The qualitative data generated in the study held some important information. The checklist of the essential, web-based, RMA solutions can help evaluate RMA-related situations at all levels of management: operational, middle-management and strategic/executive [6]. These qualitative data could also provide essential, web-based, RMA solutions to B2B problems. The major inspiration of the entire RMA solution lies

in its ability to enable business operators to do good self-reflection on the three Rs: review, rethink and reaction. RMA-1, RMA-2 and RMA-3, when integrated, can be an accurate diagnostic tool and a powerful business weapon for SMEs.

4. Recommendations and Managerial Implications

The results of this study provide a good idea about how to make self-reflections from the bottom, i.e., operational, level through the middle-management level to the top executive and strategic level in a company. The action of double-checking is not a sign of shame or losing face. In real business' war-zones, it is both realistic and necessary. After all, it is very important for business owners to be honest with themselves and to take necessary actions. These actions may be hard or easy, depending on how one looks at it. Moreover, providing the RMA solutions to certain business-to-business and business-to-customers problems in various companies or industries will be a useful approach. The RMA checklist generated through the present study can be adjusted to fit the circumstances in different industries and companies. Its actual implementation, however, hinges on the self-reflection and the mentality of the middle managers and top-level decision makers [7].

4.1. For Business and Solutions for B2B RMA

The present research has important implications for businesses. First, it has generated RMA solutions to B2B and B2C problems for SMEs. Second, it provides data on effective RMA service policies for B2C marketing. Third, it may change SMEs middle managers' and top executives' minds about RMA. Finally, it will create a general awareness of the importance of an RMA department and of the major rationale behind the traditional RMA, that is, the optimization of the RMA solution all around. The present research provides an RMA checklist and offers solutions to SMEs. Upgrading the RMA service department's functions and positions in a company is a necessary action. It provides companies with the new three Rs (review, rethink, reaction). It also offers a second chance for double-checking and self-reflecting. Review is for those at the middle-management level to examine their customers' RMA data. Rethink is for those at the executive-and-strategic level to reconsider the management and marketing decisions. Reaction is for the company executives to determine what their defensive and offensive actions will be regarding their marketing strategies [8].

4.2. Managerial Implications

First of all, it tested RMA-2's and RMA-3's ability to focus on and implement B2B in SMEs. Secondly, it re-identified RMAs' new meanings and its revolutionary values and functions. Thirdly, it brought forth RMA as a diagnostic tool and a tactic for the enterprises. There is philosophical inspiration derived from the present study: self-reflection. While some companies are already familiar with this spirit, how to carry it out and understand its finer detail is still a challenge. In essence, an RMA service department can benefit greatly from this double checking, that is, self-reflection. Usually, however, an RMA department serves as a defense and backup mechanism for a company [9]. The adage goes, "The best offense is the great defense," and, as found in the present study, saving RMA costs is a defense action. The much-celebrated Art of War also mentions "Gi-Ji-Gi-Bi", meaning a thorough understanding of the situations of both the army itself and its enemy. This requires a deep self-reflection and a profound knowledge of the competitors.

Conflict of Interest

The authors declare no conflict of interest.

Author Contributions

First author conducted the research and the whole paper framework; second author and corresponding author analyzed the data and proofreading of this paper; third author collected the data; all authors had approved the final version.

References

[1] Karande, K., Magnini, V. P., & Tam, L. (2007). Recovery voice and satisfaction after service failure: An experimental investigation of mediating and underrating factors. *Journal of Service Research*, *10(2)*, 188.

[2] Belk, R. W. (2009). The modeling-empiricism gaps: Lessons from the qualitative-quantitative gap in consumer research. *Journal of Supply Chain Management*, *45(1)*, 35-37.

[3] Levis, M., Brady, M., & Helfert, M. (2008). Total quality management underpins information quality management. *The Journal of American Academy of Business*, *44(1)*, 172-178.

[4] Erickson, J., & Siau, K. (2008). Web service, service-oriented computing, and service-oriented architecture: Separating hype from reality. *Journal of Data Management*, *19(3)*, 42-54.

[5] Kumar, S. (2011). Motivating employees: An exploratory study on knowledge workers. *South Asian Journal of Management*, *18(3)*, 10-11.

[6] Siddiqi, K. O. (2011). Interrelations between service quality attributes, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. *International Journal of Business and Management*, *6(3)*, 12-36.

[7] Wittgreffe, J., Dannes, M., Clark, J. & McDonald, J. (2006). End-to-end service level agreements for complex ICT solutions. *BT Technology Journal*, *24(4)*, 31-46.

[8] Paliva, S. C. J. (2008). Editorial preface: Definition, domain, and identity of the IT discipline. *Journal of Information Technology Case and Application Research*, *10(2)*, 1-7.

[9] Siddiqi, K. O. (2011). Interrelations between service quality attributes, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. *International Journal of Business and Management*, *6(3)*, 12-36.

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