Information System Outsourcing at Mamiya-OP

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In an era in which companies that cannot offer competitive products and/or services are being weeded out, more and more companies are turning to outsourcing various tasks for the sake of trimming their organizations for higher speed and efficiency. Many companies have pursued this outsourcing strategy to the point where they have become "virtual companies" that focus only on areas of core competence and purchase everything else-hardware and software-as "packaged" products. In fact, we can expect to see more and more outsourcing occur on a project-by-project basis. Japan's outsourcing market has been predicted to grow from \872.4 billion in 2000 to \1.67 trillion in 2005 (an annual growth of 12%, according to an IDC Japan study)¹.

This article describes information system outsourcing at Mamiya-OP

Overview of Mamiya-OP and its Relationship with Oki Electric

Mamiya-OP Co., Ltd. was created in October 1992 through a merger between Olympic, a manufacturer of fishing gear and electronic equipment, and Mamiya Camera Co., Ltd., a manufacturer of optical equipment. This merger brought three different information systems together, and executives made it a priority to integrate these information systems, including those dealing with costs and personnel records. With reports of companies being either spun off or integrated via mergers in the news almost daily, we can expect to see many other cases similar to that of Mamiya-OP in the future.

The main issues facing Mamiya-OP's managers were (1) standardizing management through systems integration, (2) promoting better communication and cooperation among personnel, and (3) speeding up monthly consolidated accounting, but the information systems division of each of the pre-merger companies, vied to keep its respective information systems in place. As a result, there was a top-down decision to introduce an ERP (Enterprise Resource Planning) system as a package. Managers began shopping for such an ERP package early in 1995, but they encountered many difficulties and decided to temporarily shelve the idea. Next, they asked a U.S.-based consulting firm to help them select an ERP package and, after many twists and turns, Mamiya-OP decided upon an ERP package for manufacturers, called BaaN^{*1)}. At that point, Mamiya-OP asked for Oki Electric's help in systems integration, and the project to introduce BaaN began in late August 1996.

By May 1997, Mamiya-OP had launched its Electronic Operations Division and by August 2000 BaaN was introduced throughout the company including its group companies.

The Mamiya-OP organization consists of business divisions in fishing equipment, electronics goods, and optical products. The fishing equipment division, under the Olympic brand, had previously enjoyed the top share in the Japanese market, but later lost that No. 1 spot to the competition. This division continued operating in the red, and, although Mamiya-OP tried several times to resuscitate it, the company eventually lost hope and, in December 2000, announced it was pulling out of the fishing equipment business. At the same time, the company also announced it would be making staff cutbacks in all of its remaining divisions.

Managers in Mamiya-OP's information systems division were assigned to areas of responsibility that included platforms, networks, applications, maintenance, planning, and consulting. Those in charge of making staff cutbacks recognized that reducing personnel by a certain percentage would result in a degraded level of service and insufficient functionality of their information system. At that time, Mamiya-OP considered Oki Electric for possible information system outsourcing and also considered dispatching all of its information system division managers to Oki Electric . In April 2001, Oki Electric began providing information system outsourcing services to Mamiya-OP and accepted staff sent from Mamiya-OP's information system division. This helped Oki Electric strengthen and expand its ERP operations and gave Oki Electric its start in outsourcing services. Mamiya-OP set up a structure by which it could receive various kinds of support from Oki Electric relating to the implementation of network and information system strategies. (See Fig. 1.)

*1) BaaN is a registered trademark of Baan Japan (under license from Baan of the Netherlands).



Fig. 1 System Configuration

Customer's Evaluation of Information Outsourcing Services

One direct benefit gained from Mamiya-OP's information outsourcing was that it helped to reduce costs in indirectly related divisions. Also, by introducing a highly specialized and advanced information system, Mamiya-OP boosted its own capabilities and reliability. Mamiya-OP was able to concentrate its management resources on its core business, which made overall management more efficient and stable.

However, one problem currently confronting many information systems divisions is the fact that division staff, at all levels from managers to clerical workers, were being treated as just "handymen." To avoid possible misunderstanding of this term "handymen," what this means specifically is that they were expected to set up and maintain computer terminals, fine-tune the processing flow, etc., but otherwise stay out of the way of the work being done. It also meant that the information systems division staff was perceived as somehow unable to perform requested tasks, or to be quick and efficient at it. The information systems division itself was regarded as a financial black hole. When opinions such as these are heard, it is a sign that such negative perceptions exist. These issues tend to persist at any company whose information systems were previously handled

independently and diligently by the company's own staff.

It is from this perspective that Mamiya-OP's end users expressed dissatisfaction with the new outsourced services. Previously, end users could count on Mamiya-OP to meet their various requests without charge. However, when a provider of outsourced services is asked to perform services that are not in the outsourcing contract, the provider naturally invoices for those services. It is therefore easy to predict how that practice might result in dissatisfaction among end users.

After considering this problem, it became clear that to help ensure customer satisfaction with outsourced services all parties must begin with a thorough understanding and agreement as to the content and scope of outsourcing contracts. In addition, outsourcing providers must continually offer more advanced proposals and thus position themselves where they make a definite contribution to corporate revitalization. Moreover, to ensure smooth operation, it is necessary to create systems which do not depend on personal styles. Also, a system that is built by assigning separate tasks to each staff person cannot fully respond to customers. The above conclusions all led to a realization that the methods used to build information systems must be reevaluated in order to promote better information system outsourcing in the future.



Fig. 2 Image of Modules and Interface System (Comparison with Ordinary System) 5)

Modularization: the Key Word for Future Deployment and Orientation of Information System Outsourcing

With the intention of becoming a total system integrator focusing on manufacturing industries, one business concept of our company is MAI (Manufacturing Applications Integration) which we are expanding to enable total solutions across the breadth and length of the product development, design, and manufacturing functions. MAI is grounded on the concept of BOM, or bill of materials, a concept which links the product development, production, and even service departments, providing them with information on product configurations and manufacturing. Building upon this MAI concept, Oki Electric must carefully consider the orientation and goals to be set for its outsourcing services. According to an original business model, the idea is to build a framework (architecture) based on business concepts of various companies, then establish modules corresponding to value processes. Business processes are subsequently devised as sub-components of particular modules. In contrast, the approach called "business process reengineering" which has been talked about for a long time is nothing more than staff reduction under the banner of restructuring, plus modification of business processes. It ignores the framework described above and this has led to needless chaos and confusion^{2) 3)}.

To accomplish BPR (Business Process Reengineering) in its true sense, companies must clearly identify their areas of core competence and then reevaluate their operations through selection and concentration. This entails applying selection and concentration to each module. By focusing on modules, a company can distinguish between modules that represent the company's strengths and modules that are best outsourced, which will help change certain fixed costs into variable costs while accelerating management responsiveness. When focusing on modules in this way, it is important to identify the position of each module within the whole. Once a company understands how each of its modules functions as a part of the whole, it becomes easier to make judgments through selection and concentration.

Traditionally, Japanese companies have practiced a sort of closed style of management based on internal hierarchical relationships. This has resulted in an unnecessarily complicated system of specifications unique to the company and in business processes which, being based on an "in-house only" mentality, are quite unclear. In any company and for any product or business process, complexity is aggravated as different approaches are used in each office or factory or for each product. In contrast, when these complex, disparate operations are analyzed and put into perspective as modules within a common framework, we have seen numerous cases in which it has been possible to standardize them. Although some minimum amount of customization is required due to the core competences that represent the strength of each company, there are still many companies that have not yet overcome their anti-outsourcing and their bias penchant for customization, and are therefore suffering from needless customization (see Fig. 2)⁴⁾.

When building a system within a company, the traditional approach has been for each company to respond to customer needs with its own type of customization. It is guite doubtful that this approach has ever generally resulted in higher customer satisfaction. In addition, when this "custom-made" approach is taken, it takes N times more staff members to achieve N times higher sales. To avoid this, companies should respond to market needs by designing, building, and deploying tools to modularize and standardize their business operations. When all of the company's operations (from development, procurement and manufacturing to distribution, sales, and after-sales service) are based on common platform modules and are then unified and integrated, the efficiency, effectiveness, and strengths of the company become more clearly defined. This provides a basis for combining various disparate modules to meet specific needs, so that the company's core competence can be strengthened and customization can be minimized. The end result will be a system that is built to be faster, more efficient, more flexible, and more costeffective than ever before; a company that will not only satisfy its customers but also impress them.

When a module-based information system is ordered on an outsourcing basis, that system has platform modules that can serve as a common foundation. Only the customized parts, positioned to meet specific needs, will be different. Specific responses, to the extent that common parts can be used, can be handled by a small number of people. Then, more staff can be concentrated on responding to the parts that require customization, which translates into faster and better responses to customer needs.

One constraint that must be placed on all of this is that finely tuned responses will still be essential for "service packs" that implement version management and address faults in previous packages. Obviously, it would be counterproductive to abandon quality assurance for the sake of implementing modularized responses.

The building of Mamiya-OP's information system was completed, but some aspects of the system still depended on individual styles.

Subsequently, the system was reworked to move away from assignment of tasks to each individual and toward modularization, whereby tasks are reorganized as modules. These modularized tasks were then standardized.

As a result, this outsourcing service is now immune to the risk that "this cannot be done today because so-andso is not here," and that too has helped to improve customer satisfaction.

Conclusion

We have examined how outsourcing has been improved at Mamiya-OP. This has shown how modularization became a useful concept for solving Mamiya-OP's problems. At our company, we are busy developing new tools and methods for introducing ERP in order to accomplish this sort of modularization, and we plan to continue to deploy these tools in other businesses in the future.

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