Customer Case 4: Developing a new Management System

Our customer is US-based network equipment vendor that developed a state-of-the art optical cross connect switch. Because most of the resources focused on the development of the switch itself, the development of the corresponding element/network management system was delegated to a different project group. This group estimated the effort of developing this system in-house at around 24 years, requiring eight developers working in parallel for 3 years. The high cost and long time to market made the vendor look at third-party alternatives.

Using the M*Ware convergent manager, the development effort was successfully reduced to six years, requiring four developers working for 1.5 years. The M*Ware convergent manager reduced the required development time to 75% of the original estimation, equaling a development cost reduction of **60%**.

M*Ware-based development is more cost-efficient with increasing complexity. Because the involved cross-connect switch was a very complex network element, the development of a management system needed to include a large number of managed objects with associated complex behavior. The M*Ware efficiency is very high in these complex cases, and the resulting cost saving of 60 % is of course very impressive. According to market reports, in average in-house element management system development costs around $1.5 million. For these average cases, M*Ware achieves a cost savings of around 35%.

Customer Business Case:

Cost Savings Factor A— Running Costs
Running costs reduction was not calculated in this case, we are only discussing the specific system implementation in this document.

Cost Savings Factor B —Project Implementation Costs
The equipment provider originally calculated 24 development years. Assuming a loaded annual salary of $100,000, this equates to $2.4 million.
The M*Ware convergent manager was purchased with all its built-in services and the necessary development environment components included, adding up to an initial licenses fee of $250,000, which can be depreciated over three years. In addition, annual maintenance from Vertel for these licenses was required at 20% of the license costs. Figure illustrates how the total project implementation costs were significantly reduced using M*Ware.
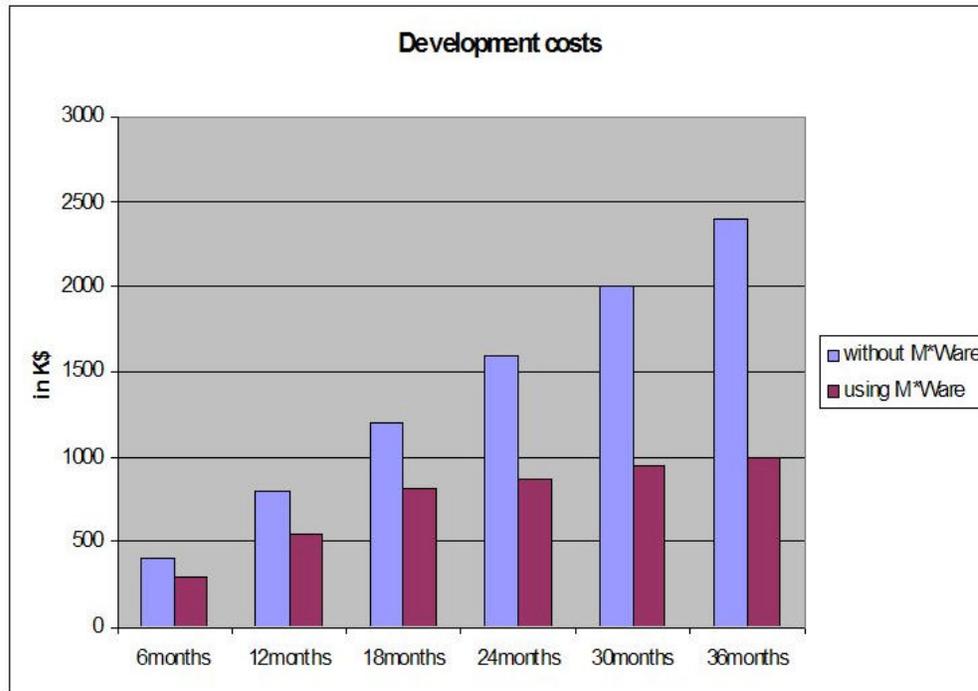
Figure: Development of an optical cross connect management system

Cost Savings Factor C—Change Management Costs

Every time the network equipment changes, the management system needs to change as well. During the development phase, network equipment changes are unlikely; however, once the equipment and manager are deployed operationally, these changes become a factor. Because the network equipment vendor will have to deal with different changes requested by different customers with different schedules, the change management and maintenance costs are considerable.

Without M*Ware, a major change in the network equipment in the north-bound systems or a required change in functionality take approximately nine months. With M*Ware, these changes are possible within four months. Assuming one required change per year, the annual cost savings for the equipment vendor **are $42,000 per customer**.

Cost factor D—Cost to Expand Business or Automate

If the provider decides to add a network or network equipment type, or would like to add another network application to his operations, the network integration software must be enhanced.

Without M*Ware, integrating a new network with the application and ensuring full functionality with other applications costs around $360,000 ($300,000 for the new network binding, and $60,000 for the changes in the application bindings).With M*Ware, integrating a new network re-uses the majority of the existing M*Ware software components and costs only **$230,000** for a network (40% cheaper)

Cost Savings Factor E—Shorter Time To Market

M*Ware provides considerable cost savings because of the decreased time to market. Development time for the initial system was reduced from 36 months to 18 months. This implies 18 months of revenue not only from the network manager but also from revenue for the total network equipment line that depends on this system. M*Ware also increased the likelihood of a larger market share for the network equipment vendor because of faster market introduction.

vertel

Cost Saving Factor F—Customer Satisfaction

Vertel customers often mention the measurable improvement in customer satisfaction due to the introduction of M*Ware; however, quantifying customer satisfaction in hard dollars is difficult. In this specific customer case, the equipment vendor regularly measured customer satisfaction related to changes and upgrades, which improved 30% once M*Ware was introduced.

The following table shows the major cost savings achievements using M*Ware in a management system development project.

Impacted Cost and Profit Areas

M*Ware	A: Cost	B: Project	C: Change Management	D: Expanding	D: Time to Market	E: Customer Satisfaction
System Development	n.a.	-75 % Time -60 % Costs	-55 % in time from 9 to 4 months	-40% /network	-50% project	+30% For changes
		$1,5 M for total	$42,000 per customer	$ 130,000 per interface	Around twice the first year revenue	

*Figure—Diverse cost savings achieved by M*Ware in a system development project*

Your Vertel account manager can show you in detail how these numbers where gathered. A similar automated spreadsheet can be used to calculate costs and savings, which can help you draw your own conclusions in the process automation project you are planning.

About Vertel

Vertel is a leading provider of Mediation, Network Management and B2B Exchange Solutions.

Since 1995, Vertel has provided solutions to over 300 companies, including telecom infrastructure vendors, operators and service providers such as Alcatel, Nokia, Siemens, Motorola, Lucent, Nortel, NTT, Samsung, AT&T, BT, Deutsche Telekom, Cingular and Williams Communications.

Vertel's in-depth knowledge and commitment to industry standards, combined with experience of working with many different equipment types, allows the creation of high performance solutions that enable customers to quickly overcome technological barriers.

Vertel's mission is to make its customers successful by enabling them to reduce operational costs and introduce new services, networks and OSSs whilst maximizing existing investments.

Vertel's Professional Services organization in USA, Europe and Asia develops communications software solutions tailored to individual customer requirements and offers project management, systems analysis and other technical services.

For more information on Vertel or our M*Ware products, contact us at 21300 Victory Boulevard, Suite 700, Woodland Hills, Ca. 91367; telephone: + 1818 227 1400; fax: +1 818 598 0047 or visit www.vertel.com