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RMS Integrated Online Store

Kazuki Watanabe wanted the tee-shirt badly. An FSI international Studies freshman hailing from the outskirts of Kyoto, Japan, Kazuki was delighted to see a few compatriot sophomores sporting cardinal tees with "Stanford University" proudly written in Japanese. "Where can I get it?" He inquired. "Why, this is from the Stanford Store!" Replied a sophomore, "Go to Lagunita Drive, it's in Tresidder." For Kazuki and many other foreign students at Stanford, the language tee found at Stanford Store is a prized possession as it creates a cultural bridge between his country of origin and the academia.

"We are entirely student-run and all of our profits go back to the Student Body to benefit on-campus groups and student body activities," said Brian Tolkin, one of the senior business managers at **Stanford Store**. Stanford Store has been online since summer, 2000; offering low-priced, high-quality Stanford merchandise to the flamboyant Stanford crowd.

The management at Stanford Store finds Microsoft Dynamics RMS (Retail Management system) solution a convenient way to run the store operation. "RMS is a good program that helps us efficiently manage our inventory and perform transactions", Brian admitted. With the Microsoft Dynamics RMS in place, they wanted a solution to integrate the online store with it; a system towards efficient resource and cost management. They were desperately looking for a solution to make two systems a single, synchronized entity.

For Stanford Store, they have found the perfect ally in California-based **LAN Services** who can integrate the RMS and the online store with proper synchronization. "With the RMS integrated shopping cart solution by **LAN Services** in place, our store can now run and expand a successful retail business."

The online shopping site and the physical store are now integrated into one where guys like Kazuki can shop at ease.



The Situation

Stanford Store has a varied inventory of apparels and other accessories ranging from Tees to key rings. The staff had to manage the point-of-sale system and online store separately which was a matter of repetitive work. The same product was entered twice in two disparate systems and processed separately costing resources which is critical for a non-profit organization devoted to students' cause. Moreover, the inventory management was a nightmare as even after they had processed an online order, they used to separately feed the transaction in the RMS for general record-keeping purposes. The solution – integrate the RMS with the shopping cart so that the stock is always up-to-date in both. At the same time they needed some customized features to improve the shopping experience of their customers.

But, **LAN Services** encountered a unique problem from a completely different quarter.

The old online storefront on the Linux platform was conveniently placed in the University's main server and Microsoft RMS was running on Windows in Stanford Store. So, the team at **LAN Services** had the following riddles to solve:

- ❖ Security policy of Stanford University (“the Stanford Firewall”) debars anything controlled by the University or its affiliated bodies to be placed outside of the University's server. Thus, **LAN Services** could not host the store in their own server.
- ❖ To complete the integration process with RMS at Stanford Store, the shopping cart system should conform to the architectural standards of .NET platform. In other words, the online store must be set in a Windows-based server for a seamless synchronization between the two.
- ❖ The Stanford Alumni and the teaching staff are privileged with some discounts and other advantages when they shop from Stanford Store. Brian and other business managers wanted the same to take place in the online storefront.



The Solution ~ *Understanding the System*

“LAN Services was recommended to us, and they had prior experience integrating shopping cart with RMS.” Brian replies when asked why they opted for LAN Services. However, alternate solutions to the major obstacles towards completing the project was not known beforehand.

“We didn’t have many choices initially. So, we did a drilled-down analysis of the situation and tried to find out the most cost-effective solution within the budget limits”, says Vikram, the project-coordinator at LAN Services. Since the basic purpose of the project is to sync the online storefront with the RMS running at the store, Stanford Store’s business managers reviewed project plan and did a cost-return analysis for a possible windows server.

“For our particular market, our business should be the first place that potential customers will turn”, emphasizes Brian. Naturally, with a reduction in the huge running cost (which they were incurring additionally) and a greater probability in terms of reaching new customers, the additional cost of a dedicated Windows server was a highly profitable investment for them. The think-tank at Stanford Store decided to go for a new server for the online store.

The team at LAN Services now had other points to cover:

- Help the Stanford IT team to set the server
- Map the new server to the existing server with restricted access
- Analyze and integrate the design theme given by Stanford Store
- Setup the online store system in the new server
- Migrate data from the MySQL database to web database running on MS-SQL Server
- Complete the customization requirement with feature enhancements
- **Set up RMSlink – the web integrator that would synchronize the RMS and the online storefront**
- Complete testing and functional analysis



The Solution ~ *System Integration*

To complete the project in a phased way, the networking team at **LAN Services** first disembarked to remotely set the server for Stanford Store. Once the server was set, the security settings were configured to match the standard firewall at Stanford and the new server was mapped with the currently running server. The mapping thus makes the online store accessible to everyone without compromising the security protocol.

Meanwhile, with the new template in place, the online store was set up in the demo at LAN Services' end. At this point Brian and his team constantly evaluated the features and instructed the necessary customization to get the specific features required for the store. "The project manager went out of his way to guarantee the success of the project and the team was very responsive with all our demands and requests," admits Brian.

Once the online store is set and the data (from the old database) is migrated to the new database running on the MS-SQL Server, the developers successfully installed and configured **RMSlink** with the RMS at Stanford Store.

The project crossed the penultimate stage. With the help of experienced system administrators at **LAN Services** and equally competent experts at Stanford Store, finally, the online store was up on the new server. Truly, both the teams were extremely happy as for Stanford Store, they can now run the online store with unmatched comfort; for LAN Services, it is a success story where they successfully mobilized resources from different quarters within the organizations to complete this project.



The Benefits

The successful implementation of the RMS-integrated online store has unplugged a number of new business avenues for Stanford Store. “Our online customers will enjoy the added functionalities, such as the related-products feature,” commented Brian. “We can now reach new customers by providing a professional website and excellent service.”

The staff that earlier used to spend hours on updating the online store, can now do the same task with a few clicks. The direct benefits derived from the present system are:

- 75% reduction in the time spent to update the web store
- Decrement in the time required to update Microsoft RMS with new orders by 75%
- Overall major minimization in data-entry related errors because of “enter-once-use-everywhere” concept
- Control flexible discount option for members, Stanford Alumni and teaching staff
- Optimized Shipping and tax management

Brian and his team can now explore the possibilities of marketing their products in a wider way. “We also have a custom products division that fully services all needs, both Stanford related and unrelated” says Brian. With the reduced cost, the management can now focus on enhancing various divisions and channelize the manpower accordingly.

The possibilities are enormous and Stanford Store is gearing up to make the fullest use of all.

When Kazuki returns to Kyoto after getting a coveted degree from one of the best universities in the world, he will surely miss his friends and teachers from different parts of the world. But, he can and like him many others, access the Stanford Store at any time and send a token of love to someone thousands of miles away who shares the same perennial bondage found only in the great Stanford Diaspora.

