Strategic IT investments at Yildiz Holding are key business ingredients

The story of Yildiz Holding began with a single cookie—a petit-beurre from the company’s flagship and founding company Ülker Bisüvi—in 1944. Yildiz Holding added chocolate products to its portfolio in 1972 and, with its 50th anniversary in 1994, began taking steps to expand beyond the cookie and chocolate markets, acquiring companies across and outside of the food sector.
Today, Yildiz Holding’s operations are vast, encompassing eight publicly traded companies, 300 brands, 54 manufacturing facilities, and sales in more than 80 countries globally.

IT has always been a critical lynchpin holding the different pieces of Yildiz Holding together. An optimized IT environment is a fundamental advantage in this scenario. On the flip side, anything else can quickly translate into a business inhibitor. The latter is where Yildiz Holding found itself several years ago: the complexity of delivering IT services across a vast network of companies and operations—not to mention the constant beat of ongoing acquisitions—had reached a breaking point.

With the objective of turning IT into a business enabler, the company’s board of directors recruited Yekta Caymaz as chief information officer in early 2010. Overhauling the company’s IT infrastructure was one of the top priorities for Caymaz. For this task, he turned to Bulent Soylemez.

“It was the start of Ramadan when I joined, the busiest time of the year for us,” remembers Soylemez, the company’s technology director and chief technology officer. The systems were highly unstable—from customer relationship management, to finance, to sales. There were several times when I thought the transaction volumes would take the systems down at week’s end and the end of the month.”

To remediate, Soylemez and his team re-architected the underlying infrastructure for each of the applications. “We now have a stable IT infrastructure and last year Ramadan passed without any incidents,” he proudly reports.

**Shared services model**

Yildiz Holding maintains a centralized IT infrastructure, an initiative completed before Caymaz and Soylemez joined the company. While this provides a number of advantages such as lower cost, it also presents challenges. The answer according to Soylemez is shared services, something he and his team are moving towards. “We will continue to manage IT centrally and maintain standard configurations and processes,” he explains. “But we want to move day-to-day management of remote environments for each of the different companies to local resources.”

Email services were also migrated to a shared services model. “They previously resided at our remote location and were managed by local staff resources,” Soylemez says. By consolidating everything into the company’s production and disaster recovery data centers in Istanbul, Soylemez shrank the server count from 40 to 12, a substantial capital and operating expenditure savings, while dramatically improving service reliability and availability.

**“The cost of a lost device is marginal; it is the information on the device or that can be accessed from the device.”**

– Bulent Soylemez, Technology Director and CTO, Yildiz Holding

Proliferation of domain controllers was another issue for Yildiz Holding. “We had more than 55 spread across our IT infrastructure,” Soylemez says. “We reconfigured the workloads and cut those to 20.”

Consolidation obviously has been on Soylemez’ mind since he joined Yildiz Holding—and virtualization has been front and center. “We have virtualized approximately 80 percent of our environment with...
VMware vSphere,” he says. “We’ve gone from more than 800 physical servers to less than 450.” This has driven substantial cost savings while reducing complexity for Yildiz Holding. “We’ve shut down one server a day since we joined Yildiz Holding,” Soylemez states. “This is a huge number and savings.”

Mergers and acquisitions are a critical part of Yildiz Holding’s corporate strategy. In this past year alone, the company made several key acquisitions. “We also have embarked on joint ventures with entities such as McCormick, SCA and Komili Paper AŞ, and Eckes-Granini Group,” Soylemez says. “Integrating our acquisitions and joint ventures into our IT infrastructure is a major part of their success.” The various pieces of the IT infrastructure Soylemez and his team have evolved or changed over the past two years are a critical part of the successful recipe: integration cycles are shorter and operational efficiency costs are less.

Organizing for the transformation
The Technology Organization is comprised of 100-plus employees who are configured into five groups—systems support and help desk operations, security operations, network operations, back office operations, and database operations. Soylemez opts to supplement his team with the subject-matter expertise of external managed services consultants from Symantec Partners Symturf Ltd. for security issues and Platin Bilisim for data center components. “The consultants from Symturf and Platin Bilisim allow my team to focus on their core competencies and provide us with the flexibility to quickly address changing business requirements,” he observes.

One of the biggest changes Soylemez introduced was the formation of a security group. Security is an area of expertise for Soylemez, who previously managed core security at Vodafone Turkey. “I saw that most of the applications and services that should have been managed by a centralized security team were overseen by back office operations team,” he says. “They were overloaded when they arrived in the morning and unable to dedicate the appropriate amount of time to security management. This is the reason I chose to create a new group dedicated to security.”

Starts with endpoint security
Organizational realignment was just the starting point for Soylemez. “Endpoint security was not well managed,” he remembers. “We were experiencing problems during patch updates and conducted an assessment of the environment and operational processes. We discovered that only half of our endpoint clients were visible and managed.”

The previous endpoint security environment consisted of a mixed set of solutions that included Symantec Endpoint Protection. As a starting point, Soylemez and his team elected to standardize endpoint security across the IT environment onto Endpoint Protection Suite, including Endpoint Protection 12.1, and engaged Symantec Partner Symturf for assistance with both the upgrade and ongoing management. “I believe that even if you have the best-in-class solution in a particular space, if you cannot manage it well, then you will not get the desired results,” Soylemez notes.
Yildiz Holding is using the antivirus, antispyware, firewall, and device control features in Endpoint Protection. “The consolidated endpoint security environment provides us with real-time, centralized reporting,” Soylemez says. There are tangible operational efficiencies tied to these new capabilities. For example, the team saw improved scan performance on virtualized data center servers. “Most importantly, we know that all of our endpoints are protected,” he adds.

Also part of Symantec Protection Suite, Symantec Message Gateway, which was implemented before Soylemez’ arrival, is used to protect against incoming malware and spam. In synch with the company’s focus on virtualization, Soylemez and his team configured it on a virtual appliance when they upgraded to Symantec Protection Suite in late 2011.

Broadening the security portfolio
Encryption is also an important part of the Yildiz Holding security portfolio. “It is not unusual for employees to lose their laptops or mobile devices,” Soylemez says. “The cost of a lost device is marginal. It is the information on the device that can be accessed that is critical.”

Soylemez determined to start with PGP Whole Disk Encryption from Symantec. “One of the factors behind our decision was based on the referral of a Fortune 100 company that has it deployed across 100,000 seats,” he says. “It is an incremental deployment, starting with endpoints in our headquarters and then across different remote locations.” Symturk is helping with the deployment and then ongoing management. “Our objective with encryption is to add it to our file server,” Soylemez continues. “Those systems are highly visible and accessible and thus the reason we want to move in this direction.”

In mid-2011, Yildiz Holding conducted a proof-of-concept bake off between Symantec Security Information Manager and another security information management solution. “Standardization of toolsets and development of strategic vendor partnerships were factors we considered,” Soylemez observes. “That’s why we selected Symantec Security Information Manager.”

With the proof of concept completed, Soylemez’ team is preparing for a deployment later this year. The project will be overseen by a joint team from Symturk, Symantec, and Yildiz Holding. Policies will be developed in concert with the HR and legal teams using both built-in policies in Data Loss Prevention and those customized to fit requirements specific to Yildiz Holding. Once it’s fully live, the solution will be used for monitoring and managing data in motion and at risk across the company’s endpoints, network, and storage.

Moving on to compliance and data loss prevention
With core security components in place, Soylemez is turning his attention to other pressing concerns in 2012. “We looked at two different solutions—Symantec Data Loss Prevention and another competitive solution—during the proof of concept,” he says. “We had a diverse set of requirements and sought a solution that would integrate with our existing security infrastructure.” He specifically sought to protect information across his endpoints, storage, and networks. “We wanted to have the ability to encrypt data as it goes out based on data type and the identity of the actual user,” he adds.

The innovation with the IT department is part of Yildiz Holding’s DNA. The company has grown to become a fixture in Turkey while developing a global presence. One of the attributes that attracted Soylemez and keeps him energized is the company’s focus on giving back to the community. “Yildiz Holding is an exciting company to work for,” he says. “It contributes to Turkey in a number of ways, and I am proud to work for it.”

And the impact is tangible. To date, 220,000 children have been introduced to sports, 645,000 children have participated in the Ülker Children’s Cinema Festival, and 40,000 children have learned about nutrition and a balanced diet through the Sabri Ülker Food Research Foundation.

Giving Back

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Compliance is also on Soylemez’ 2012 radar. Recently, his team completed a proof of concept with Symantec Control Compliance Suite. “I want to define security baselines for servers and clients and adjust those as requirements change,” he observes. “I also want to have the ability to perform regular scans across the entire environment to detect servers and clients that are out of policy and then remediate those.” Soylemez’ team is currently in the process of working with Symturk to build an implementation plan and schedule for later this year.

Data protection: reversing failure

Soylemez also uncovered pressing issues with the company’s data protection infrastructure. Two parallel backup and recovery solutions were in place for Windows and non-Windows servers. “It was difficult to deliver regular reports,” Soylemez recalls. “And our backup success rates were not where we wanted them to be.”

The Yildiz Holding team looked at several different options and settled on Symantec NetBackup. “We had a number of criteria, starting with the need for seamless integration with our VMware environment and the ability to deduplicate data from our remote office locations,” Soylemez says. The project launched in September 2011 with the help of Platin Bilisim and concluded in December 2011.

The Yildiz Holding’s team conducts weekly full backups and differentials throughout the week. With the implementation of NetBackup, Yildiz Holding moved to a disk-to-disk-to-tape backup strategy and a tiered storage strategy, with tier one consisting of SAS disk and tier two comprised of SATA disk. At the same time, Soylemez’ team instituted retention and expiration policies.

Going into the project, deduplication of data was particularly important to Yildiz Holding. The company has more than 50 remote office locations. “We sought to shrink the data backed up at those locations while creating a centralized repository,” Soylemez notes. “With the NetBackup Deduplication Option, we have been able to cut backup data by 90 percent or more.” Comparable success has been achieved around backup success ratios; Soylemez reports that his team is sustaining ratios of 99 percent.

And when it comes time to recovery, his team has not come across a situation where they have not been able to restore the data.

Soylemez and his team are preparing to upgrade to NetBackup 7.5 later this year. “NetBackup Accelerator will further reduce our backup windows,” he says. “We also anticipate that we will be able to streamline search and recovery using new features such as...”

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From Software Developer to CTO

After completing his bachelor’s degree in computer science at Istanbul Technical University, Bulent Soylemez started his career as a software developer. “I worked on various business applications,” he says. “But I found it very uneventful.” He then changed direction and moved over to IT infrastructure and then UNIX administration prior to fulfilling his Turkish military assignment.

When Soylemez returned from the military, he was recruited by Vodafone Turkey (formerly Telsim) as an IT security specialist. This was an important step in his professional development. “As a security administrator, you must understand the breadth of all pieces of the IT infrastructure—baselines and best practices, all types of databases, every aspect of the network,” he says. In 2003, he moved over to the pharmaceutical industry and took a position with Sandoz, the generic pharmaceuticals division of Novartis. “The position didn’t provide me with additional technical skills but rather management acumen around areas such as documentation, quality control, standard operating procedures, and business process engineering,” he says. “This was an important step in laying the foundation for my move into senior management and executive roles.”

In his final year and a half at Sandoz, Soylemez assumed the role of global infrastructure services manager. He also completed work on a master of business administration at Fatih Universitesi. All of these different professional and educational pieces laid the foundation for Soylemez’ transition to the next level as technology director and chief technology officer at Yildiz Holding. And Soylemez’ breadth of industry and experience in a variety of different IT roles played an important role in preparing him for his current assignment.
as NetBackup Replication Director and NetBackup Search.”

**Tackling email archiving**

Email archiving was an issue Soylemez tackled at the same time as the NetBackup implementation. “Much of our Microsoft Exchange data resided in PST files on local systems,” he says. “In the event of a system failure, we would lose those mailboxes.” As a result, while examining NetBackup, Soylemez also looked at Symantec Enterprise Vault. “We were able to use the PST Migrator Option to migrate all of our PST files into a centralized archive,” he explains. Starting in September 2011, Soylemez’ team, with help from Platin Bilisim, completed the Enterprise Vault implementation in less than one month and then migrated the PST files during the next three months.

The deduplication capabilities in Enterprise Vault shrank Exchange backup windows and the amount of Exchange data that is retained. In addition, users have the ability to perform their own eDiscovery. This has reduced the number of IT help desk inquiries, helping to improve IT staff productivity.

Soylemez is looking at opportunities to extend the Enterprise Vault deployment later this year using the Microsoft SharePoint and File System Archiving options. “We have a substantial amount of unstructured data spread across print and file servers and SharePoint servers,” he says. “The same storage savings and efficiency gains that we achieved on the Exchange front we expect to see with other types of unstructured data.”

**Authentication from the cloud**

Internet access infrastructure is another area of focus for Soylemez. The prior environment consumed valuable time to manage and incurred substantial capital expenditures. In early 2012, Soylemez initiated a project to replace 15 physical servers with two Juniper appliances. “The consolidation not only reduced cost and improved productivity but increased service availability and performance,” he notes. “We made a decision at the same time to implement two-factor authentication. And though we looked at other solutions, we ultimately selected Symantec Validation and ID Protection Service.”

In addition to security requirements, ease of use was one of the topmost consideration factors. “We wanted to provide one-time access to all of our different applications and services,” Soylemez comments. “We also didn’t want to manage the authentication solution, and thus we looked to the cloud.” Being able to leverage a token-based solution in the cloud versus a hardware—or even software—based solution has both lower operating and capital expenditures.

**Comprehensive transformation**

The results of the IT Infrastructure changes Caymaz and Soylemez have led are significant: Yildiz Holding has realized substantial operational and capital expenditure savings. “What’s exciting is that we’re really just getting started,” Soylemez notes. “We addressed foundational issues that serve as the springboard for more innovative initiatives that have the potential to revolutionize how we run the business and deliver services to our customers.”

As an example, when Soylemez peers into his crystal ball, he envisions coalescence around the cloud and mobility. “We are definitely committed to the cloud,” he states. “We are currently looking at options to move our existing email services to the cloud. But this is just one of a number of different areas we’re investigating. Security and privacy requirements obviously serve as guiding principles, but the cloud is something we plan to leverage.”

Mobility is another area Soylemez anticipates will be a major focus for him and his team. “We are still sorting through business requirements and technology options,” he says.

“We have replaced most of the IT infrastructure,” Soylemez sums up. “We renewed our email infrastructure. We replaced the Internet infrastructure. We replaced the VPN infrastructure. We replaced the backup—data protection—environment. All of this was done in less than a year. We are truly transforming IT and are quite pleased to have partners like Symantec along for the journey.”

Patrick E. Spencer (Ph.D.) is the editor in chief and publisher for CIO Digest and the author of a book and various articles and reviews published by Continuum Books and Sage Publications, among others.