CASE STUDY

2nd Generation Intel® Core™ i5 vPro™ Processors

Financial Services
IT Efficiency

Faster, more economical computing

Ziraat Bank improves performance of branch office computers with 2nd generation Intel® Core™ i5 vPro™ processor

With 23,000 employees in over 1,500 branch offices in Turkey and abroad, Ziraat Bank supports its operations with a large, geographically-dispersed network of desktop computers. To improve the environmental performance and operating efficiency of its IT, it recently replaced 18,500 of these with new computers powered by 2nd generation Intel® Core™ i5 vPro™ processors. As a result of the lower energy consumption, faster performance and remote manageability features in the new processors, Ziraat Bank will save an estimated USD 1 million (EUR 759,215) in the annual power and maintenance costs associated with running the computers, while speeding up its banking applications by up to 40 percent[1].

Ziraat Bankası

Fintek

"The new computers with 2nd generation Intel® Core™ i5 vPro™ processors are the ideal choice for a widely-dispersed installation such as that in Ziraat Bank. By replacing the old models, we have sped up admin processes in branches and are seeing a real difference in the cost of supporting the bank's IT."

Yunus Uygur Kocaoglu,
General Manager,
Fintek Financial Technology Services
(fully-owned IT provider to Ziraat Bank)

CHALLENGES

- **Modernization:** Ziraat Bank wanted to replace its old desktop computers with faster, more efficient models
- **Environment:** It was eager to reduce the power consumption of its IT
- **Control:** It planned to use on-board remote management technology to streamline maintenance of its computing network

SOLUTIONS

- **Refresh:** The bank replaced 18,500 desktop computers with new models powered by 2nd generation Intel Core i5 vPro processors
- **Maintenance:** Engineers have used the processors' remote management features to streamline IT maintenance and problem-solving
- **Inventory:** The Intel® vPro™ technology module for Microsoft Windows PowerShell* enables accurate remote tracking of Ziraat's hardware inventory

IMPACT

- **Speed:** The additional processing power of the 2nd generation Intel Core i5 vPro processor enables banking transactions to be processed up to 40 percent faster
- **Efficient:** The lower energy consumption of the new processors will help the bank save around USD 500,000 (EUR 379,643) a year on its running costs
- **Support:** Flexible remote management of the computers contributes another USD 500,000 (EUR 379,643) in savings from lower field servicing costs

Distributed computing

Ziraat Bank operates the largest banking service network in Turkey, with 1,460 branches across the country and a growing presence abroad.

With operations dispersed across a large area, staff at local branch offices rely on the bank's network of desktop computing resources to provide banking facilities, carry out admin processes, and process transactions. These are maintained by a team from Fintek Financial Technology Services, an IT company that is fully-owned by Ziraat Bank.

Previously, Ziraat Bank was using an aging fleet of computers based on Intel® Pentium® 4 processors. As these neared their end of life, the limitations of the old technology became increasingly apparent. The lower performance of the processors meant computers took longer to start up, office admin applications ran slower, and banking applications took more time to process transactions. This affected productivity: the number of transactions that could be processed within a given period of time was falling.

Besides slowing down branch staff, the computers were placing a greater burden on Ziraat Bank's IT team as a result of the growing number of problems and malfunctions they experienced. Branch staff productivity was falling due to downtime, and maintenance costs were rising from the need to dispatch repair engineers.

Ziraat Bank improves productivity of staff and IT support with 2nd generation Intel® Core™ i5 vPro™ processor

Spotlight on Ziraat Bank

Ziraat Bank was established in the first half of the 19th century and today provides the largest banking service network in Turkey. It supports its customers' financial requirements with automated teller machines (ATM), virtual teller machines (VTM), and telephone, Internet and mobile banking services. Ziraat Bank also oversees the largest international service network in the Turkish banking sector, with 78 branch offices in 17 countries.

Refreshing the infrastructure

Ziraat Bank decided it needed an organization-wide overhaul of the computers at its bank branches, replacing them with new models powered by 2nd generation Intel Core i5 vPro processors. These offered several advantages over the existing hardware. Tests conducted in Sysmark 2007 Preview*, PCMark* and PassMark* showed that the new processors offered three to five times greater performance.

The power consumption of the new models is also better. The old processors consumed an average of 79 watts per hour (W/h) during operation, and 8 W/h in standby and power off modes. By contrast, 2nd generation Intel Core i5 vPro processors use 31 W/h during average performance and less than 3 W/h in power-saving modes. Multiplied across the whole of Ziraat's bank branches, this offered the prospect of significant environmental and cost savings.

Ziraat Bank also identified an opportunity to save on the ongoing maintenance costs for the computers. In particular, the remote management features in the 2nd generation Intel Core i5 vPro processor offer IT engineers the ability to remotely and securely connect to a computer to treat issues without the time and cost of a site visit.

The bank deployed a total of 18,500 new computers with the new Intel processors.

The initiative was supported by Fintek as its strategic IT and infrastructure management partner.

A real impact

With the new computers, Ziraat Bank's branch staff can now perform their duties more efficiently. Transactions can be processed up to 40 percent faster, resulting in a better experience for customers.

Across Ziraat Bank's branch operations, the 2nd generation Intel Core i5 vPro processor's superior power performance has enabled a 65 percent reduction in the energy consumption of its desktop computers. In financial terms, this translates into an annual saving of USD 135 (EUR 103) per computer, scaling up to a total of USD 500,000 (EUR 379,643) across the entire computing fleet.

The hardware-based remote management features in the Intel® processors have also helped the bank's IT engineers streamline maintenance processes. If a branch computer has issues, a support technician can establish a secure remote connection with the affected machine. This enables quicker problem resolution and reduces the number of site visits engineers need to make.

Even in the event of an operating system failure, with Intel's KVM Remote Control technology, technicians can still gain access to the computer. This further reduces the need to escalate the incident into a site visit, helping avoid associated productivity losses.

The Fintek IT team also uses the 2nd generation Intel Core i5 vPro processor's remote management features to maintain an accurate and up-to-date inventory of hardware resources across the bank. By using the Intel vPro technology module for Microsoft Windows PowerShell to automate this process, the team has been able to overhaul its previous system of manually accounting for computers using barcodes attached to the side of the terminal.

Overall, Ziraat Bank estimates its increased remote management capabilities will produce annual savings of USD 500,000 (EUR 379,643) by reducing engineer site visits and labor costs.

A more efficient platform

With its branch office operations now supported by a powerful, efficient computing infrastructure, Ziraat Bank has increased productivity and enhanced the experience of the customers who use its services.

Find the solution that's right for your organization. Contact your Intel representative, visit Intel's Business Success Stories for IT Managers (**www.intel.co.uk/Itcasestudies**) or explore the Intel.com IT Center (**www.intel.com/itcenter**).

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Intel® vPro™ Technology Intel® vPro™ Technology is sophisticated and requires setup and activation. Availability of features and results will depend upon the setup and configuration of your hardware, software, and IT environment. To learn more, visit http://www.intel.com/technology/vpro.

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