



Case Study

Intel® Core™ i5 processor
 KoçSistem Pixage* Digital Signage Solution
 Embedded Computing



“Our platform, based on Intel® Core™ i5 processors, enables us to deliver better image processing, enhanced remote management capabilities and greater energy efficiency.”

– Can Barış Öztok, Assistant General Manager, Marketing and Sales, KoçSistem

Maximizing the ROI from Digital Signage Players

KoçSistem increases signage effectiveness and system longevity, while reducing operating expenditures with Intel® processors

Higher Sales, Lower Operating Costs

Marketing durable goods and consumer electronics in more than a hundred countries, Arçelik A.Ş., headquartered in Turkey, understands geographic and cultural diversity. Their household appliances are sold by a large network of dealers who may have shoppers looking for washing machines, while others in warmer areas are buying up air conditioners. Reaching out to a wide range of customers, Arçelik is using digital signage displays in more than 800 retailers to deliver targeted messaging – in the right place, at the right time.

Arçelik credits its use of KoçSistem’s digital signage application, called Pixage*, with boosting sales and increasing customer satisfaction. Previously, retailers used cable and satellite broadcasts, which did not support high definition (HD) rich media; therefore, consumers were unable to differentiate full HD LCD products from conventional televisions. With Pixage, Arçelik displayed its own HD media with rich content (Figure 1 on the next page), demonstrating the benefits of the new technology and eliminating a major product education obstacle.

Further increasing return on investment (ROI), Pixage digital signage players reduce operating expenditures (OpEx) and extend system longevity lifetime by using Intel® processor-based platforms providing performance headroom, remote management and power-efficiency. The players are an integral part of KoçSistem’s all-in-one digital publishing solution that supports the creation, management and distribution of content.

Challenge	<ul style="list-style-type: none"> ▪ Increase sales: Arçelik wanted to use digital signage displays to more effectively market its products, especially HD LCD TVs. ▪ Simplify system management: With hundreds of retail outlets worldwide, Arçelik required the capability to centrally manage all digital signage systems in order to minimize costs.
Solution	<ul style="list-style-type: none"> ▪ Captivating media: Using Pixage* from KoçSistem, Arçelik is able to grab the attention of customers and successfully communicate product benefits, like new HD technology. ▪ Remote management: Pixage system incorporates Intel® Active Management Technology¹ (Intel® AMT), which allows IT to communicate with systems located anywhere, even when the operating system is not functional.
Impact	<ul style="list-style-type: none"> ▪ Customer satisfaction: Customers appreciate the valuable product information conveyed by the digital signage systems when making buying decisions. ▪ Lower operating expense: One IT person can manage all of Arçelik’s digital signage systems, thousands of them, from one central location, thereby decreasing operating costs.



Figure 1. Digital signage deployed by Arçelik retailers. Pictured: Murat Şahin, CEO, Grundig (left); Can Barış Öztok, Assistant General Manager, Marketing and Sales, KoçSistem.

Performance Delivers Rich Content

Presenting eye-catching graphics, animation and video is crucial for getting customers' attention. That's why Pixage supports multiple windows containing a wide variety of content, including multiple full HD video streams, photos, 3D graphics, subtitles and news tickers. Content can also be customized on a screen-by-screen basis. "In addition to providing high image quality and flexibility, the Intel® Core™ i5 processor with integrated graphics has ample computing headroom to adapt to changing requirements and extend system lifetime," says Can Barış Öztok, Assistant General Manager, Marketing and Sales at KoçSistem.

Remote Management Increases Uptime

Although Arçelik's digital signage infrastructure encompasses more than 800 retailers across 9,000 screens, it can be managed from a central location, thanks to the remote management capabilities of Pixage, featuring Intel® Active Management Technology¹ (Intel® AMT). It is built into select Intel processors and chipsets and provides mechanisms for controlling and fixing systems, even when the computing system is not functional. With the help of Intel AMT, IT staff can recover from a blue screen, reload operating systems, update drivers and patch the BIOS. Even if the system is powered off, diagnostics and repairs can be accomplished remotely, helping businesses decrease downtime and reduce system management effort.

Power-Efficiency Lowers Utility Cost

With utility costs soaring, digital signage systems can help the bottom line by consuming less power and scheduling displays to shut off after hours. Significantly reducing power consumption, the Intel Core i5

"Time is changing very fast. Yesterday's discussions about digital convergence are now here and inevitable. Computers, smart phones and TVs are all in communication with each other. We are committed to be quick in adopting new technologies and lead the game in digital signage, smart TV applications and hospitality solutions."

– Murat Şahin, CEO, Grundig

processor has smart power management, delivering extra performance when it's needed and increasing energy efficiency when computing demand drops. Can Barış Öztok adds, "We get additional energy savings from the operating system, which switches the Intel processor to a lower power state, when appropriate." Furthermore, Intel AMT allows IT to remotely turn systems off at night and switch them back on in the morning, which saves even more energy.

To learn more about Pixage digital signage solutions from KoçSistem, please visit www.kocsistem.com.tr/eng/digital_signage_solutions.asp.

To learn more about Intel in digital signage, please visit www.intel.com/go/digitalsignage.

Digital Signage at the Movies

Fida Film, the biggest movie production company in Turkey, realized they could have a larger impact on customers who go to their movie theaters. They created a concept called "Lobby TV," which shows HD-quality trailers of released and upcoming movies, as well as movie schedules, seating plans and third-party advertising. Using over a hundred Pixage* players from KoçSistem, Fida Film deployed approximately 500 screens across its 45 theatres.



Solution provided by:



¹ Intel® Active Management Technology (Intel® AMT) requires the computer system to have an Intel AMT-enabled chipset, network hardware and software, as well as connection with a power source and a corporate network connection. Setup requires configuration by the purchaser and may require scripting with the management console or further integration into existing security frameworks to enable certain functionality. It may also require modifications of implementation of new business processes. With regard to notebooks, Intel AMT may not be available.

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