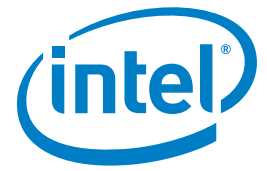


CASE STUDY

Intel® Core™ i5 vPro™ processor,
Intel® Active Management Technology,
Intel® KVM technology
Security and Manageability



Removing boundaries

Telefónica On The Spot Services enhances digital signage service with the Intel® Core™ i5 vPro™ processor

A subsidiary of Telefónica Group, Telefónica On The Spot Services delivers digital signage technology and services to enterprise clients such as retailers to support their interactions with customers and drive sales. It can install the hardware on-site at clients' premises, supply targeted content for display on the digital screens, and provide ongoing platform maintenance, depending on the needs and capabilities of the client. Telefónica On The Spot Services recently chose the superior remote management capabilities of the Intel® Core™ i5 vPro™ processor to enhance its support for the service, reduce ongoing operating costs, and extend capabilities.



CHALLENGES

- **Flexible support:** Wanted to extend the remote management functionality of its digital signage service to allow updates and maintenance to be delivered in a more convenient way
- **More for less:** Aimed to enhance the end-user experience by improving the performance and reliability of the technology while reducing the cost of operating the service
- **New capabilities:** Wanted a hardware platform that could help extend its service offering, such as by delivering targeted ads, with the ability to remotely access accurate playback data

SOLUTIONS

- **Full access:** Identified the Intel Core i5 vPro processor with Intel® Active Management Technology² (Intel® AMT) as offering the greatest remote management functionality available, including the ability to access processes below the operating system and remotely power hardware both on and off
- **Integration:** Worked with Intel engineers to integrate Intel AMT and Intel® KVM technology³ into its proprietary service platform, and to calculate the positive impact this could have on the total cost of ownership (TCO) of the hardware

IMPACT

- **Greater commercial appeal:** The efficiency and performance improvements of the Intel Core i5 vPro processor help increase the appeal of the digital signage service to enterprise clients
- **Lower overhead:** The technology helps keep operating costs to a minimum by making it easier for engineers to deliver remote support, updates, and maintenance
- **Extending the service:** New features, such as the ability to collect up-to-date information on what content has been displayed and live monitoring of what is being played on screen using Intel KVM technology, allow Telefónica On The Spot Services to strengthen the service as an advertising platform

A new way to reach customers

Telefónica On The Spot Services – a subsidiary of parent company Telefónica Group – provides multimedia content delivery solutions, including a complete digital signage offering, to help enterprise clients, such as retailers, increase sales and support interactions with customers through targeted multimedia and advertising content. Telefónica On The Spot Services' offering ranges from consulting on how to effectively deploy digital signs to carrying out the on-site installation of the hardware, supplying content updates, and operating the digital signs on an ongoing basis.

As Telefónica On The Spot Services' CEO, Vicente Muñoz, explains: "We offer the most reliable, complete and innovative service portfolio to make an impact on the consumer and enhance the end client's customer experience, wherever he may be, with a clear objective to increase profits."

Depending on their requirements, clients can either purchase the digital signage hardware on a one-off basis and operate the service themselves, or rely on Telefónica On The Spot Services for ongoing content updates, support, and maintenance. So far, Telefónica On The Spot Services has delivered around 10,000 installations via its direct sales channel and through partner organizations, with Spain, Portugal, and Argentina currently the main market segments for the service.

New possibilities

Since Telefónica On The Spot Services' digital signage service is used to interact directly with customers and managed mostly remotely, it is important for the supporting hardware to be reliable and easily accessed by remote support engineers for routine maintenance or if there is an issue.

Telefonica

onthespot

"The enhanced remote management capabilities of the Intel® Core™ i5 vPro™ processor enable us to improve the quality of our digital signage service and the support we can offer, while keeping ongoing maintenance costs to a minimum."

Carlos Carazo
Director of Technology and Operations,
Telefónica On The Spot Services



Intel's advanced remote management technology helps Telefónica On The Spot Services improve service quality and lower operating costs

Telefónica On The Spot Services identified the advanced remote management functionality of the Intel Core i5 vPro processor with Intel AMT and Intel KVM technology as offering the potential to improve the support it could provide for clients. In particular, it recognized that being able to remotely power digital signage installations both on and off could increase the convenience and efficiency of operating the service. Since the digital signs are typically in stores and other public places, updates and routine maintenance are normally delivered during closed hours. Previously, this required leaving the signs on until the process was complete. However, with Intel AMT engineers can remotely turn the hardware on and off as required. For clients with several installations, this offered the potential to significantly lower the cost of operating the service.

The remote management capabilities of the Intel Core i5 vPro processor also give support engineers greater insight into the hardware they are accessing, making it easier to diagnose IT issues and enabling more remote maintenance. Telefónica On The Spot Services was interested in finding out how this could help it improve the reliability of its service and lower the cost of maintaining the hardware.

Applying the technology

Telefónica On The Spot Services decided to incorporate the Intel Core i5 vPro processor into the hardware for its digital signage service, working closely with Intel engineers to integrate the additional features offered by Intel AMT into its proprietary software platform for the service. During this process, Intel provided sample processors, helped Telefónica On The Spot Services conduct several demos of the new remote management features, and assisted with the software optimization process. To help Telefónica

On The Spot Services arrive at a more effective solution, Intel shared a dedicated software evaluation kit it jointly developed with Microsoft to provide a standardized hardware platform for comparing the performance of different software configurations.

In addition to supporting the integration of Intel AMT into Telefónica On The Spot Services support platform, Intel also helped determine the cost savings the increased remote management capabilities Intel AMT could produce for the service by reducing the number of situations requiring on-site maintenance.

Greater efficiency

Telefónica On The Spot Services has deployed the new hardware at several trial client sites and is planning to offer the technology more widely in the coming months.

By incorporating the Intel Core i5 vPro processor into the hardware for its digital signage service, Telefónica On The Spot Services can offer more flexible and effective support to existing clients and increase the appeal of the service to new prospects. By adding the ability to remotely power the hardware on and off and enabling support staff to access processes beneath the operating system, a greater range of maintenance functions can be carried out remotely.

With the new hardware, engineers now need to make fewer site visits, which typically cost 10 times as much as providing the same support remotely. This can help clients significantly reduce the TCO of the service.

The overall performance of the digital signage service has improved with the addition of the Intel Core i5 vPro processor, with uptime levels maximized as a result of the more comprehensive support Telefónica On The Spot Services can provide.

Extending the service

Besides allowing Telefónica On The Spot Services to improve its service offering to existing clients, the enhanced remote management functions of Intel AMT offer the potential to open up new applications for the service. In particular, the ability to remotely collect up-to-date information

Spotlight on Telefónica On The Spot Services

Telefónica On The Spot Services is a subsidiary of Telefónica Group that focuses on delivering audio, visual, and multimedia content to enhance the customer experience, strengthen branding, and drive purchasing decisions. With over 40 years' experience of providing background music services, it now employs 150 people, with offices in Spain, Portugal and Argentina, delivering music services to over 43,000 sites and music download portals in over 15 countries. Its digital signage service uses screens based in-store, which it supplies either directly or through reseller partners. Telefónica On The Spot Services can provide tailored content and ongoing support as the needs of the client determine.

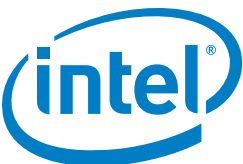
on what content has been displayed boosts the appeal of the digital signage service as an advertising platform, an area that Telefónica On The Spot Services is eager to develop.

The Intel Core i5 vPro processor also features on-board compatibility with Intel KVM technology, giving remote engineers live access to what is being displayed on screens. This allows Telefónica On The Spot Services to offer advertising clients proof of play through live access to the screens on which their videos are playing, providing additional value over traditional broadcasting formats.

Going forward

By enhancing its digital signage service with the Intel Core i5 vPro processor and Intel AMT, Telefónica On The Spot Services has been able to improve the support it can offer clients while simultaneously reducing operating costs. The additional features included in the technology offer the potential to extend the range of the service to new market segments such as advertising, further boosting its revenue potential.

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¹ 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>

² Intel® Active Management Technology 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 or certain capabilities may be limited over a host OS-based VPN or when connecting wirelessly, on battery power, sleeping, hibernating, or powered off. System Defense only works with select Intel® vPro technology brand verified LAN cards. For more information, see <http://www.intel.com/technology/platform-technology/intel-amt>

³ Intel® KVM technology is only available with dual-core Intel® Core™ i5 vPro™ processors and i7 vPro™ processors with Intel® Active Management technology activated and configured and with integrated graphics active. Discrete graphics are not supported.

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