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who are we?

Scotia UK is one of the country’s most innovative providers of presentation and communication solutions working with many of the world’s leading players in visual communication; names such as 3M, Sony, Panasonic, NEC, Smart and Polycom.

Scotia UK opened its first office in Glasgow in 1963 as Scotia Office Machines Ltd selling accounting machines under the name of Scotia office Machines Limited. Throughout the 60’s and 70’s, Scotia’s bread and butter was the supply of accounting machines and everyday stationery products.

By the end of the 70’s the firm had begun its move into technology based hardware products such as dictation equipment and overhead projectors.

The 80’s saw the company focus increasingly switch into presentation and communication solutions - installing equipment in a number of schools, universities and large boardrooms. By 1990 the company name was changed to Scotia UK plc and a push was made south of the border with the opening of a distribution centre in Gateshead and an additional office in Suffolk.

Like the systems we design, install and maintain, Scotia UK is dynamic, responsive and capable of making a real impact on the way you do business.
what we do

Technology is at the heart of effective communication. But it is not a solution in itself. For that you need the knowledge and the expertise of people like Scotia UK.

We provide a full service offering, so that the system you buy is the system that suits your needs best. Our turnkey solutions encompass system design, equipment sales, installation and integration, training and after sales support.

The right system begins with the right brief. That’s why Scotia UK will first discover exactly what you require from your technology, where it’s required and what budget you have available. Only then will we make the best recommendations.

Any proposal we present will outline the nature of the technology being proposed and clearly show how it will integrate with the surroundings in which it will be used. Whether this is an existing location or somewhere new, we are happy to work alongside other specialist contractors, such as architects, designers and builders, to ensure that the system is a “natural fit” with its environment.

Turning blueprints into reality is, of course, a fundamental aspect of any Scotia UK contract. That’s why, for every project, we appoint one of our own consultants to manage the whole installation process. They will ensure a seamless delivery of technology that will make a real difference to your business.
our solutions

Individual products and services offer individual answers. Only solutions can give you the full picture. At Scotia UK, we work very closely with our clients to find answers to all of their visual communication needs. Some already know exactly what they’re looking for - and can brief us accordingly. Others only have an idea of what they want to achieve - but are not sure how they go about getting it.

For both sets of clients - and those in between - Scotia UK will help you get the job done. Our advice and expertise is as comprehensive and as impressive as the products we supply. So if you’re looking for answers to your visual needs, just ask the questions.

We’ll give you the solutions.
products

Today technology has advanced so far that there is almost a product to cover every functional requirement of the modern presentation environment. That is why it is often confusing and time consuming for customers to know just what they need as they work their way through a jungle of information. That is where Scotia UK can help you in the selection of the right product, for the right job, at the right price.

Fear not this product minefield - with almost half a century of experience and training in the audio visual arena we can promise you that we only sell and install products that are tried and tested. You won’t find any unbranded products of unknown origin in the Scotia UK portfolio.
digital signage

Perfect for waiting rooms, receptions or showrooms, digital signage helps you to keep customers informed and entertained. With digital signage, you can communicate key messages with real impact on a combination of plasma screens, LCDs and projectors. The system can run any number of images, movies, live TV, web pages and news and can be updated as often as you require.

The beauty of digital signage is in the immediacy of its impact. When we see an image move on a screen our eyes are instantly drawn to it, we register the image or the text in a fraction of a second and as a result the message is imparted. Your Digital Signage has then fulfilled its task.

That coupled with the ease of use and speed with which a display can be changed makes Digital Signage an obvious winner over printed materials. The sheer cost of printing information or advertising for a business or educational establishment can be staggering over the course of the year. With Digital Signage it is a one off investment that can capture the attention and imagination of your target audience.

But perhaps the most exciting benefit of digital signage is its sheer ease of use. Effective, impactful imagery can be created using a huge range of standard, colourful templates and these can be adapted to incorporate your own messages without any special training or expertise. Scotia UK would be delighted to provide an interactive demonstration of the system’s capabilities so that, at a glance, you can see just how eye catching this system can be.
IP solutions

An IP solution can offer many distinct and attractive advantages to any business or educational establishment. The first and foremost of which is that it utilises a valuable resource that is already in place, your network.

An IP solution allows an existing network infrastructure already available throughout your building to deliver high quality TV and video throughout, without the need for a separate video cabling system.

The advantages of this are obvious in an existing establishment saving complication, additional expenditure and giving an added extra flexibility to your network by allowing you to connect professional, broadcast and consumer AV equipment to your LAN and create a stream of high-quality digital media available to every device on the network.

Stream bitrates from 128Kbps to 15Mbps allow distribution over wired, internet and WAN network infrastructures. You can then stream video, information, advertising, on demand services (films etc for the hotel industry), lectures, education programmes, digital signage, television channels etc. All of which can be controlled by centrally by you.
Tripleplay Services is a specialist digital television, signage and video streaming software provider offering products and services designed to meet the needs of enterprise customers including corporate users, education, retailers, hospitality, stadia and residential premises.

TriplePlay products are able to deliver television, on-demand video services and digital signage over IP using our open standards products which are designed for viewing on PCs / MAC and flat screen displays.

- **TripleTV**
  Delivery of live video (either broadcast television or internal content like a lecture) over the standard IP data network

- **TripleVOD**
  Access to stored video content distributed over the standard IP data network

- **TripleSign**
  Internal communications, messaging and promotion using digital displays
TripleTV head-end delivers high quality broadcast MPEG-2 content over an IP network to a TV via an IP Set Top Box (STB) or PC/MAC. A wide range of digital television and radio channels can be provided from a single server. The TripleTV system supports the acquisition of encrypted and free-to-air digital channels and analogue feeds. Each IPTV server will manage a number of individual interfaces which can support any input feed combination. These interfaces include:

- DVB-T for digital terrestrial signals (Free to Air or Encrypted)
- DVB-S for digital satellite signals (Free to Air or Encrypted)
- DVB-S HD for High Definition digital satellite signals
- ASI for digital encrypted satellite signals
- Analogue interface through composite video or s-video

The modular design of the TripleTV system means additional servers can be added at any time to increase the number of channels available.

Digital signals are acquired as RF MPEG-2 programme streams based on customers channel line-up. The TripleTV system removes the RF layer, replaces it with IP, assigns a multicast address and distributes it over the IP network as an individual multicast stream. Channel changing is controlled via requests made to the network elements from the STB or PC client.

Administrators can access the TripleTV web based management system from any point in their network through a secure log on process. The management system provides the following capabilities:

- Ability to determine which channels will be distributed over the network and on which multicast address
- Monitor any errors in channel acquisition
- Monitor system performance of the head-end
- Individual management and configuration of each interface
- Remote login capability for tier 2 and tier 3 support
TripleVOD, Tripleplay’s VOD system streams high quality MPEG-2 and MPEG-4 content to a TV set via STB or PC/MAC via unicast with full video remote control functionality e.g. visual fast forward, rewind, pause and stop. A user can request, view and control (pause, stop, rewind, etc) a piece of film content at a time that suits them. Content can be controlled via an authorised log in (LDAP integration) or if a payment is required by using a PMS integration.

TripleVOD can support multiple streams of either Standard Definition or High Definition. An individual VOD system can support up to 70 concurrent Standard Definition streams depending on the hardware configuration. The system is modular in its design allowing a customer to add additional servers to meet increases in demand.

The VOD system captures content access data and system usage information e.g. when a piece of content is accessed or the number of times a user presses pause. This information can be output as a CSV file and compared with the buy information held within the subscriber management system for billing or audit information. Access to the data contained within the VOD system is by a web based management system.
Tripleplay’s digital signage solution provides the ability to display a combination of video, text, images and live TV to displays via IP Set Top Boxes (STBs). By using a STB as the player device, the problems associated with a PC based solution are removed i.e operating system crashes, failure of moving parts such as hard disks and fans due to heat and dirt ingress.

The content is all stored in a central server on site, with each end device drawing on content as required, which removes the need to manage content to multiple end devices on a site, ensuring that global changes are implemented quickly and confidently.

The system can operate as a stand-alone application displaying text and images or be integrated with Tripleplay’s VOD and IPTV system to provide a media rich environment for delivering a range of services including:

- Information
- Messages
- Advertising
- Corporate Branding
- Promotions
- Live TV
- Recorded video

Web based technology and HTML interfaces are used for configuration and management, providing the following features:

- Play list creation and content scheduling control
- Configuration of different screen layouts to a group of devices e.g. live TV video to some screens,
- mixture of live TV video and tickertape
- Different play lists and content to individual or multiple devices, group of devices, locations and
- Support for different user profiles e.g. scheduler, content management, organisational manager
- Ability to run local based promotional offers through the display
- Display and management of multiple content types e.g. text, tickertape, images, live video, stored video
- Broadcast of local information or live video feeds
In terms of information and entertainment there are a number of issues facing most modern and established stadia and sporting facilities of all sizes.

From technical issues such as moving from standard definition to high definition to upgrading from coax/analogue to IP/digital delivery, not to mention different video channels for different audiences.

It is not just about live match day TV but recorded, paused, targeted, tagged, promotional video, streamed video, advertising revenues and enhancing the whole stadia experience to maximise revenue opportunities with highest level of choice and reliability and providing a competitive advantage by offering integration with other services at the stadium, Signage, hospitality portal, in-house custom channels, sports analytical software.

Clubs can use IP solutions from TriplePlay to provided recording systems for training ground and an ability to interface with analytical software to present video content in an easy to use interface for players and other coaching staff.
TriplePlay The Training Ground Solutions

TriplePlay The Stadia Solutions
Brighton & Hove Albion FC Leading the Way

Brighton and Hove Albion Football Club (BHAFC) is a leading English Championship club, which has recently completed a £93 million development of their 22,500 seated venue, known as the Amex Community Stadium. This state-of-the-art development is one of the most interesting new buildings on the south coast of England since its summer 2011 opening and is the winner of the Structural Steel Design Awards 2011.

The brief was to provide an end-to-end video platform and deliver all their communication and data services through a site-wide IP network.

Brand New Stadium, Brand New Challenge

Designing and building a new stadium is all about conceiving an entertainment space and experience to suit audience needs. And in the age of video and digital media, when developing a venue worth £93 million, boasting 22,500 seats, nine stunning lounges, five concourses, as well as outside space for team building activities, the delivery of television, video and information services becomes a key requirement.

In particular, BHAFC considered it paramount that fans within the concourse area had the optimum viewing experience and a screen to look at wherever they were standing.

The club was looking for an end-to-end video delivery platform that was flexible enough to provide all of its current and future requirements. Additionally, the solution needed to be tailored to the various target audiences who visit the stadium for matches and other events, including conferences, team building days, dinners, graduation ceremonies, corporate receptions, private parties, civil ceremonies and wedding receptions.

The Amex Stadium project had a fixed end date and the venue had to be ready for its first live football match, whilst respecting a fixed budget and tight milestones.

“We couldn’t have asked for more and kicked off the new season in our brand new high tech stadium with an IPTV system that has met our needs perfectly.”

Martin Perry, Chief Executive, Brighton and Hove Albion Football Club
TRIPLEPLAY’S SOFTWARE SOLUTION TO MEET BHAFC’S REQUIREMENTS

After an open tender process, Tripleplay Services was appointed to provide the complete end-to-end IP television and digital signage platform for the stadium, which included the supply and provision of the television sets, the television and signage IP distribution system and the server platform.

Tripleplay’s system was delivered over the stadium’s core data network using multicast for live video and standard IP protocol for on-demand content. Television screens were installed in all parts of the ground ranging from the concourse areas, executive suites and Corporate Hospitality to staff areas, the club shop, restaurants and bars. The television channels and digital signage information had to be zoned into several areas of the complex to provide different services to users of the club’s facilities.

CLUB BENEFITS FROM A CENTRALISED MANAGEMENT SYSTEM

Tripleplay provided a centralised management system that would allow the administrators to obtain and control the status of the 200 plus screens dispersed throughout the stadium complex. This was achieved through the use of system TV features of the screens using the TripleCare serial interface which was connected to the set-top box. From the Tripleplay web management interface, the status of each screen could be interrogated and switched on and off. This not only saved time, but provided an environmental benefit by ensuring that screens were only being used when required, thereby saving power and increasing the longevity of the screens. Another requirement achieved by Tripleplay’s Product Suite was integration of emergency override into the building management system in case of an incident.

Furthermore, as different users with various roles within the club were required to alter the digital signage screens and other aspects of the system according to the event and target audience, Tripleplay had to ensure that there was a consistent and easy-to-use interface across all of its systems. This helped to minimise training needs and skills transfer, whilst ensuring that users could quickly become familiar with its platform. The web-based management system allowed authorised users throughout the stadium to access the system on any workstation.

“The flexibility of the platform has enabled us to manage our content and target information to specific audiences, at different locations, at different times within the stadium. We couldn’t have asked for more and kicked off the new season in our brand new high tech stadium with an IPTV system that has met our needs perfectly,” says Martin Perry, Chief Executive, Brighton and Hove Albion Football Club.
Chelsea Football Club (Chelsea FC) is one of the leading football clubs in Europe based in Fulham, West London. Founded in 1905, the fan base has ever since increased worldwide. The club wanted to improve the match day experience and provide a high quality television product throughout the year to reflect the status of the club. Their objective was to replace the existing coax Television distribution network around Stamford Bridge stadium by a state of the art solution that would meet the fans media expectations and develop new revenue opportunities.

Hard to Maintain Coax Network didn’t Meet Media Expectations

Chelsea FC were looking at using IP delivery of television as a replacement to their coax TV distribution network due to the need to constantly balance and calibrate the analogue television signal around the stadium and deal with the influence of noise and ingress which were affecting the television viewing experience. They wanted a system that could simplify the management of television distribution throughout all their premises in Stamford Bridge rather than have different TV head end systems in different locations within their stadium, hotel and their training ground. They wanted a platform that would future proof them as television services evolved and would allow them to easily add new features as requirements were identified. Providing high quality pictures without compromising flexibility and reliability were key requirements. Whilst the existing coax distribution network delivered television services it required constant maintenance to ensure that there was a consistent quality feed. With their recent investment in an IP network they wanted a solution which could leverage this technology and IP Television delivery was identified as a logical choice. They also needed to consider their investment in Samsung television sets and wanted to maximise the TV sets capabilities rather than having to change them out.

During the process of finding the right solution, Chelsea FC decided that they should look at developing new revenue streams which would incorporate the television service being provided around the stadium’s facilities. The adopted IP television solution should be capable of providing digital signage services to selected screens as well as additional video streaming services. They wanted a solution that would seamlessly integrate into their IP television system and allow different content to be displayed within the merchandising stores, hotel, and hospitality and exhibition area. This way they could generate additional revenue streams through new advertising and sponsorship, selling products in the club shop and promoting forthcoming fixtures and events at the ground. Whilst providing digital signage offered new revenue and service options they didn’t want to lose focus on the match day experience and thereby wanted a platform that would allow them to control what content and television channels could be displayed at different locations of the stadium at different times.

Ideally, the adopted solution had to integrate IPTV and Digital Signage services in a single platform and have remote management of all the end points in the network. All this should be simple and intuitive to do, whilst reducing maintenance and support costs to a minimum. They wanted a platform that could easily be extended through software modules when new requirements where identified.
Engaged Fans and Visitors

Chelsea FC adopted Tripleplay’s IP Television and Digital Signage solutions. Tripleplay presented an end to end thin client solution for providing Standard and High Definition TV feeds and Digital Signage content to the screens throughout the premises. A standard High Definition IP set top box (STB) was used as the client device which provided remote management, high reliability and future proofing. The STBs were screen agnostic and therefore worked with any existing or new screens.

Tripleplay’s centralised and fully integrated platform allows the TV feeds and the digital signage content and playlists to be distributed to the end devices. There are several areas throughout the complex and these can all broadcast bespoke content and relevant television services to their different user base requirements be it corporate customers, general fans, training staff and marketing teams.

As the IP television solution removed the quality of signal issues, it allowed Chelsea FC to focus on providing different and more tailored services to different audiences and maximise the return on the investment of the system. There are over 300 screens throughout the stadium, plus 192 rooms in the hotel, and 40 screens in the training grounds all supported by a single TV system. Live TV feeds between the training grounds and stadium have ensured there is constant information between all parties especially for press conferences. Real-time information about other matches, merchandise and season ticket offers, advertising and sponsorship information, just to name a few can be easily integrated and displayed on these screens through the system.

A large selection of TV channels are available throughout the network such as Digital Terrestrial, Satellite, Premium and Chelsea FC’s Match Day channels and any of the 300+ TVs can broadcast them. The system has the ability to record any IP Television channel being broadcast on the network for analysis at a later date. A live feed was installed between the training ground and stadium to allow staff to be better informed of what was going on at the club which proved especially useful during press conferences.

High Quality TV Feeds, Targeted Advertising and High Return on Investment

As soon as the system went live it was quickly noted by all stakeholders that the image quality was impeccable and the audience was actually paying attention to the content. Correctly targeted information and advertising supported by the digital signage solution, allowed Chelsea FC to achieve its objectives of increasing their products and merchandising sales. As the platform was now centralised, day to day operations became simpler allowing staff to focus on a wider range of activities. Tripleplay’s solution delivers the following benefits:

IP Media Solution delivers high quality TV feeds: replacing the coax television distribution network by delivery over IP enabled Chelsea FC to distribute high quality picture to all the TV sets throughout the premises successfully engaging the audience in the content.

Easy to update digital signage provides new revenue stream and a quick return on investment: Digital signage screens can be used anywhere on the premises reinforcing Chelsea FC’s brand and offering third-party advertising and sponsorship opportunities. The content can be quickly updated to feature new trends and promotions or to cross sell upcoming events.

Centralised Platform allows remote operation of end points: All elements of the system are managed and monitored remotely through a web based console. This enables Chelsea FC to react quickly to solve any issue, update any data or to provide emergency information.

Fully integrated Media Platform leverages investment in IP network: Tripleplay’s architecture and standards based software approach delivers a single platform to fully support Stamford Bridge’s stadium, hotel, training grounds and conference centre media requirements. It allows the same picture to be shown at the same time on every screen or to broadcast different channels and Digital Signage content to different areas.

AT A GLANCE

INDUSTRY
• Football, Corporate Hospitality

KEY CHALLENGES
• Constant balancing and calibrating of coax signal;
• Poor picture quality;
• High maintenance and support costs.

IMPLEMENTATION HIGHLIGHTS
• Broadcast bespoke content and relevant television services to corporate customers, general fans, training staff and marketing teams;
• Over 300 screens throughout the stadium, plus 192 rooms in the hotel, and 40 screens in the training grounds;
• Live feeds from the training grounds, press conferences and from the match can be broadcasted live or stored on the system.

PLATFORM OVERVIEW
• Centralised and fully integrated platform allows the TV feeds and the digital signage content and playlists to be distributed;
• Screen agnostic platform works with any existing or new screens;
• Large selection of TV channels like Digital Terrestrial, Satellite, Premium and Chelsea FC’s Match Day channels.

KEY BENEFITS
• IP Media Solution delivers high quality TV feeds;
• Easy to update digital signage provides new revenue stream and a quick return on investment;
• Centralised Platform allows remote operation of end points;
• Fully integrated Media Platform leverages investment in IP network.

PROJECT HIGHLIGHTS
• Implementation: 1 month for initial system and a further 6 months to connect all the television sets.
• Tripleplay Products: TripleSign, TripleTV, TripleVOD and TripleCare.