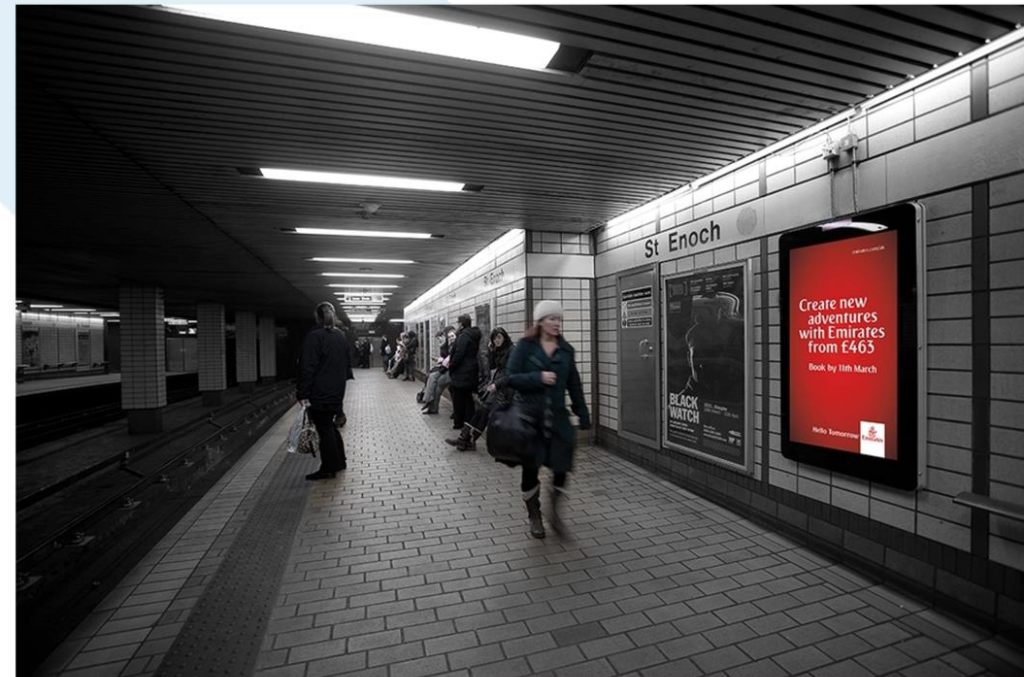# HARP

VISUAL COMMUNICATION SOLUTIONS

If you would like Harp Visual Communications Solutions
to help you deliver your Video Wall,
please call us on 01329 844005 and ask for our new business manager.
We look forward to showing you the bigger picture.

Tel: 01329 844005
Website: www.harpvisual.com
Email: sales@harpvisual.co.uk

Digital Signage

CONTENTS

Harp can offer expertise in both enclosures and thermal management of these vibrant displays, as well as the provision of complete turnkey solutions. Harp's unique offering is two fold. Firstly its knowledge of displaying media in sealed enclosures for keeping the screen and PC cool so that they do not overheat or deform. Secondly, the deployment of such displays into usable networks where information can be uploaded centrally.

The company's sound engineering knowledge, coupled with its vast expertise in thermal dynamics takes full advantage of the very latest heat exchange and A/C techniques whist maintaining the rugged looks that Harp's outdoor IP65/66 enclosures are famous for.

As part of the deployment service, Harp can manufacture, deliver, install and commission systems. This includes all site surveys, structural calculations, risk assessments and method statements for the physical installations plus a project management service which coordinates electrical, software and communication elements.

Once these systems are installed Harp has a scheduling/ monitoring suite which keeps an eye on all of the displays. Each display reports every four hours and alarms triggered if a screen does not make contact. If the screen cannot be reactivated remotely then an engineer is dispatched to solve the problem.

Harp's impressive range of totems are, as you would expect, rugged yet extremely stylish. They feature non-reflective, vandal-proof glass and have the option to be either interactive or passive.

Harp totems are manufactured in various sizes and can be supplied for either wall-mounting or standalone use. Stand-alone totems are configured with either single or dual, high brightness, back-to-back LCD Screens. These units can be supplied as required for internal, sheltered or external applications. External totems include a sophisticated temperature control systems which effectively protects the display from extreme weather conditions.

Harp's totems are engineered and built locally to the very highest of British standards. They use quality, high grade stainless steel and the very best commercial 24/7 LED back-lit panels. Harp totems are designed to incorporate various optional extras, such as Near Field Recognition, QR Coding and face recognition systems for gauging footfall, gender and age.
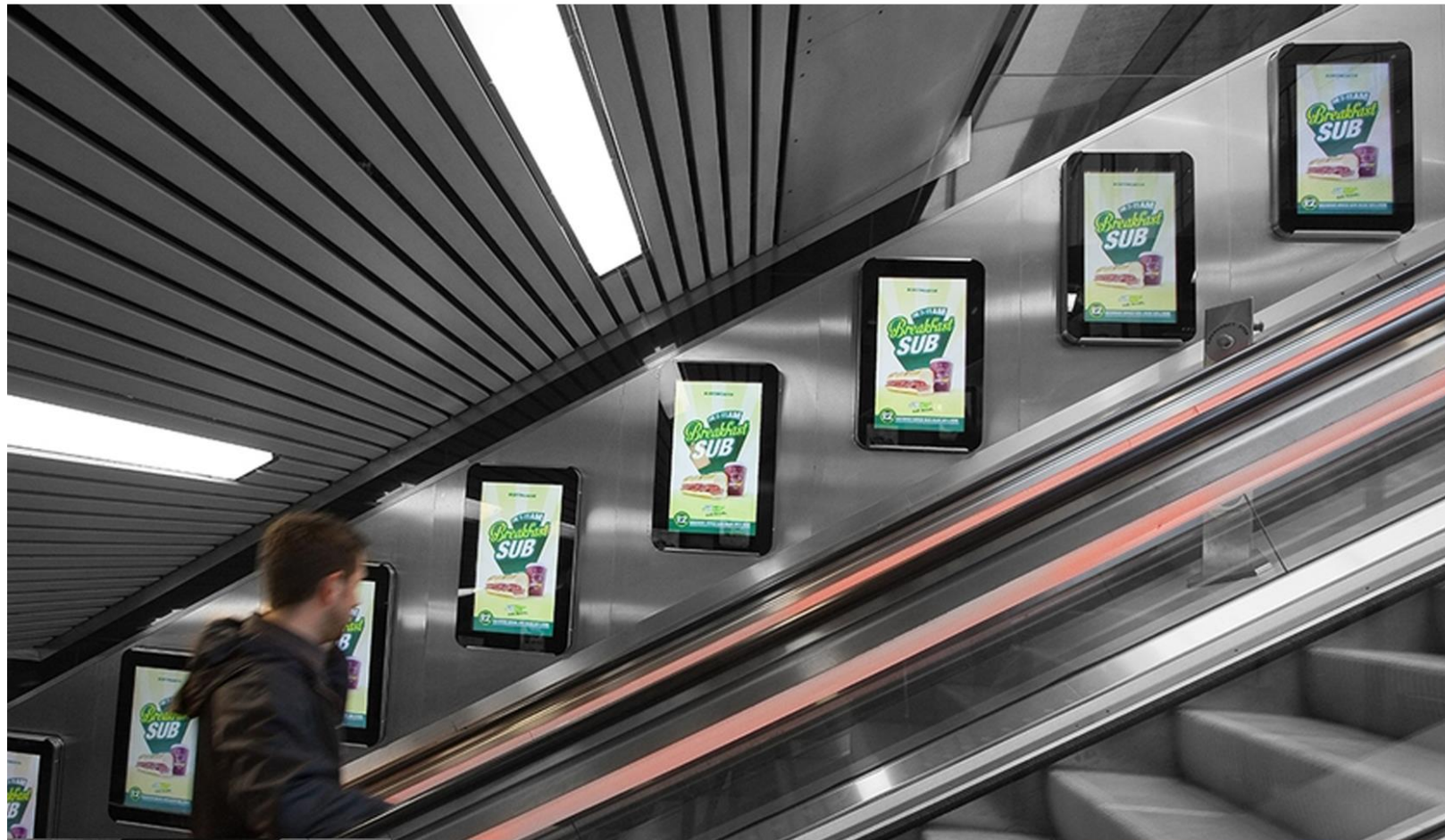
Options

Exposure: IP32 to IP65

Brightness: 300 to 5000 cd/m2

Temperature: -20 to +40°C

Screen Size: 32" / 49" / 55" / 65" / 75"

Images: VUE Cinema Leicester Square, Devonshire Squa Heathrow Express, Dundee, London City Airport.

Harp Visual Communications is well versed in the supply of innovative signage systems for the its extensive client base. One such system is designed to enhance the customer experience whist traveling on escalators, airport moving floors or walking down long, monotonous walkways.

Using a technological composition of strategically placed screens, several programmed sensors and Harp's innovative software, movement and content are perfectly synchronised to give passengers impressive and uninterrupted access to timed video content and enhancing their escalator or moving floor journey.

Options

Resolution: 1080 x 1920

Materials: Section 12 compliant

Power: 24 Volt operation

Screen Size: 20" / 32" / 36"

Safety: Toughen laminated / Safety Laminated

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Images: Buchanan St, St Enochs, Hillhead Station. Glasgow.

It is very important that sufficient time is given to the initial planning phase, to ensure that the finished solution is right first time. To facilitate the process (for both the designers and end users of the room), Harp generates real-look 3D renderings of the room to show how the needs of operations staff, managers and customers will be met, and how the elements will look together. Human ergonomics are the first considerations - the size of character a person can read at what distance, how many people form key viewing groups and where they can be seated.

While much technology is available to choose from, some hi-tech hardware is capable of more than is actually required, and using it can result in costly over-engineering. For example, although the brightness, clarity and colour uniformity of screen images are important, it is pointless to try and show high resolution pictures which the eye cannot resolve from a distance and large groups cannot get close enough to see.

The physical environment has to be carefully controlled. Automatic daylight following lighting, audio levels, ventilation, air ionisation and humidity all need to be considered to keep staff comfortable and productive.

Harp design process:
• Define exact requirements • Draft a proposal • Fill in design detail • Test and prove the design • Build the system •Customise the solution.

Palladium, London
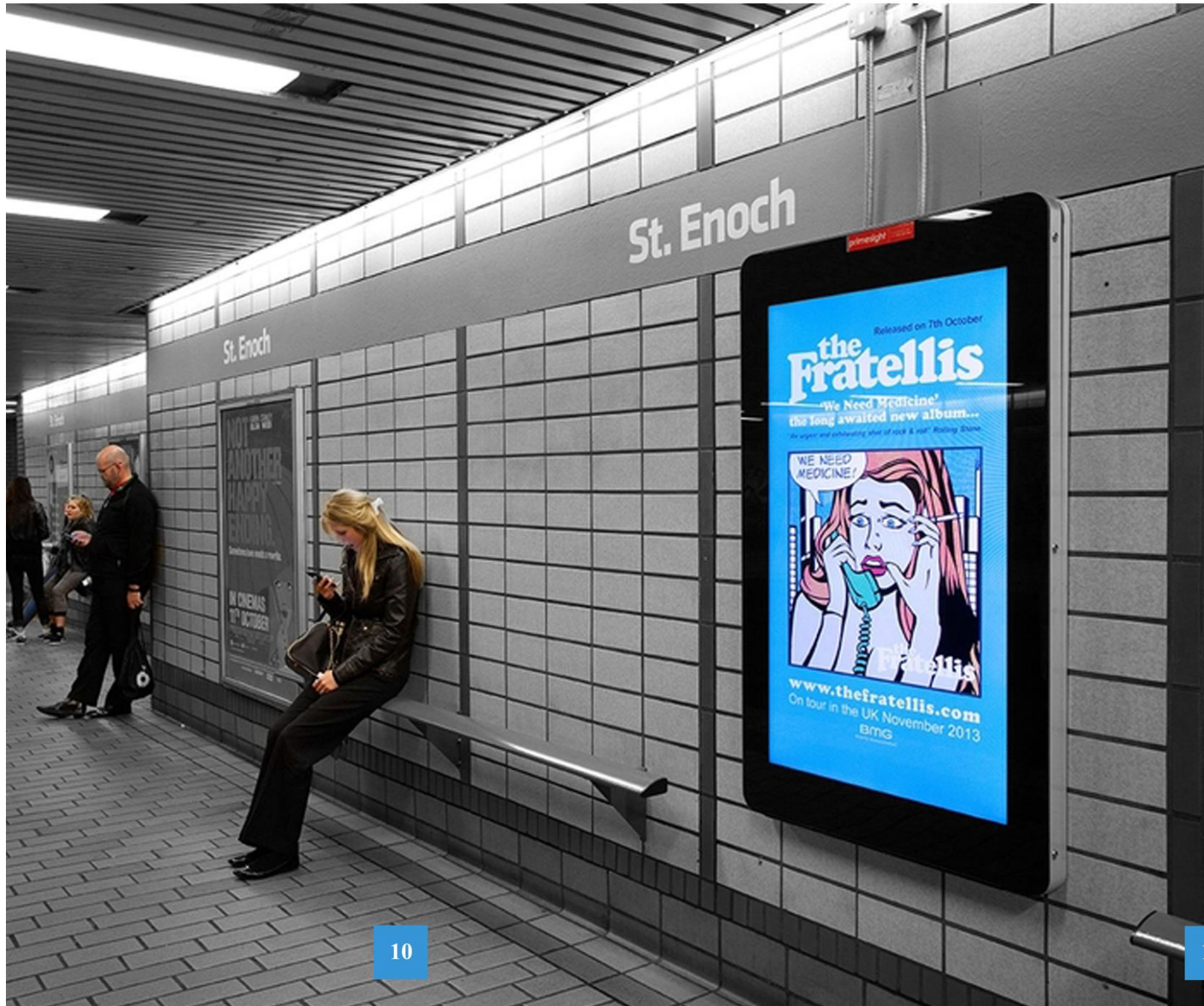
Harp's undoubted class in dynamic digital signage arena is further showcased in its classy 55" wall mounted units.

These well tried and tested units are both aesthetically pleasing and virtually inde-structible. The enclosure is crafted out of the very bets heavy stainless steel. The shaped, anti-reflective glass is heavily armoured and the unit houses the very best and brightest 24/7 displays.

Harp wall-mounted units are universally installed in the London and Glasgow under-ground systems where they have been proved to be a very well received, revenue generating asset.

Options

Screen Size: 49" / 55" / 70

Resolution: 1080 x 1920 / 4K

Materials: Section 12 compliant

Power: 240 Volt operation

Safety: Toughen laminated / Safety Lami-nated

Image: St Enochs, Glasgow

Harp Visual Communications are experts in the supply, installation and maintenance of prestigious video walls, the associate bespoke bracketry, the various video processing equipment, content and the content management system.

The functionality and ultimate health of the installed video wall, its content and more importantly, the content delivery, is constantly monitored by Harp engineers in the control room facility in Hampshire. Any downtime is therefore minimised by tmely remote intervention or, if required, the dispatch of an engineer as soon as a fault is detected, which is more often than not before the client has noticed the issue.

Harp has a very impressive list of dynamic signage video wall installations for a range of well known clients including Reuters, BBC, multiple Catapults, Audi and various universities.

All of these high profile installations are extremely mission critical for the client, and as such carry the most stringent of SLA arrangements whose strict KPI's, Harp always complies with and inevitably achieves.

Options

Technology: LED, LCD or Rear Projection

Resolution: HD / 4K /8K

Processing: On board Image Processor

Image: Connection Places Catapult, London.

Harp offers an installation and maintenance service for all of its products ensuring that each is fitted and commissioned in the most efficient and effective manner. All of Harp's installation engineers have safety passports and are well versed in construction site rules and procedures.

Harp will totally project manage complex installations, providing relevant expertise in the
shape of structural, electrical and data installation engineers where needed.

Safety is paramount on these projects as most are public facing and often in areas to which the public have access during the installation. A project manager conducts a full site survey and generates risk assessments and method statements before any work commences.

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Image: Luton Bus Way.
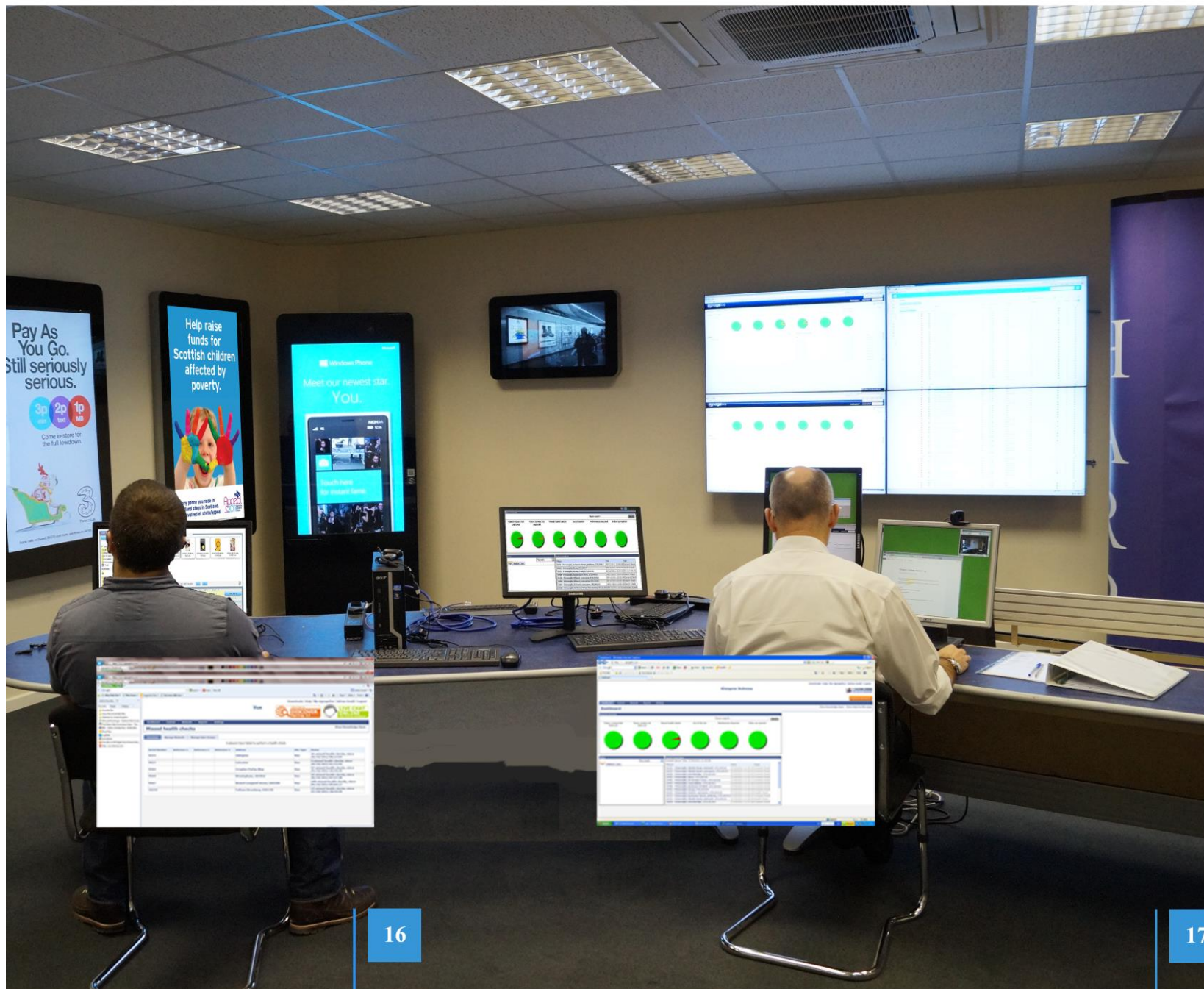
With so many mission critical video walls in the Harp installed base, the company is charged with not only making sure that all screens are functioning correctly and are colour balanced etc, but also ensuring that the correct content is being delivered and displayed to the correct screen at the correct time.

Client content is delivered and scheduled online on a common timeline basis, using a unique delivery system pioneered and unique to Harp.

By having such a sophisticated and reliable schedule monitoring system, it is possible to produce all the relevant statistics needed to demonstrate to the client the playout times, downtime etc. of each screen and the campaign it
relates to.

Key features

Monitoring 24/7 365 days a year

Heart Beat Monitoring every 4 hours

Alarms from displays

On-line diagnostics

Image freeze detection

Image black screen detection

Display Failure detection

Client view screens.

Image: Harp's Monitoring Suite, Southampton.
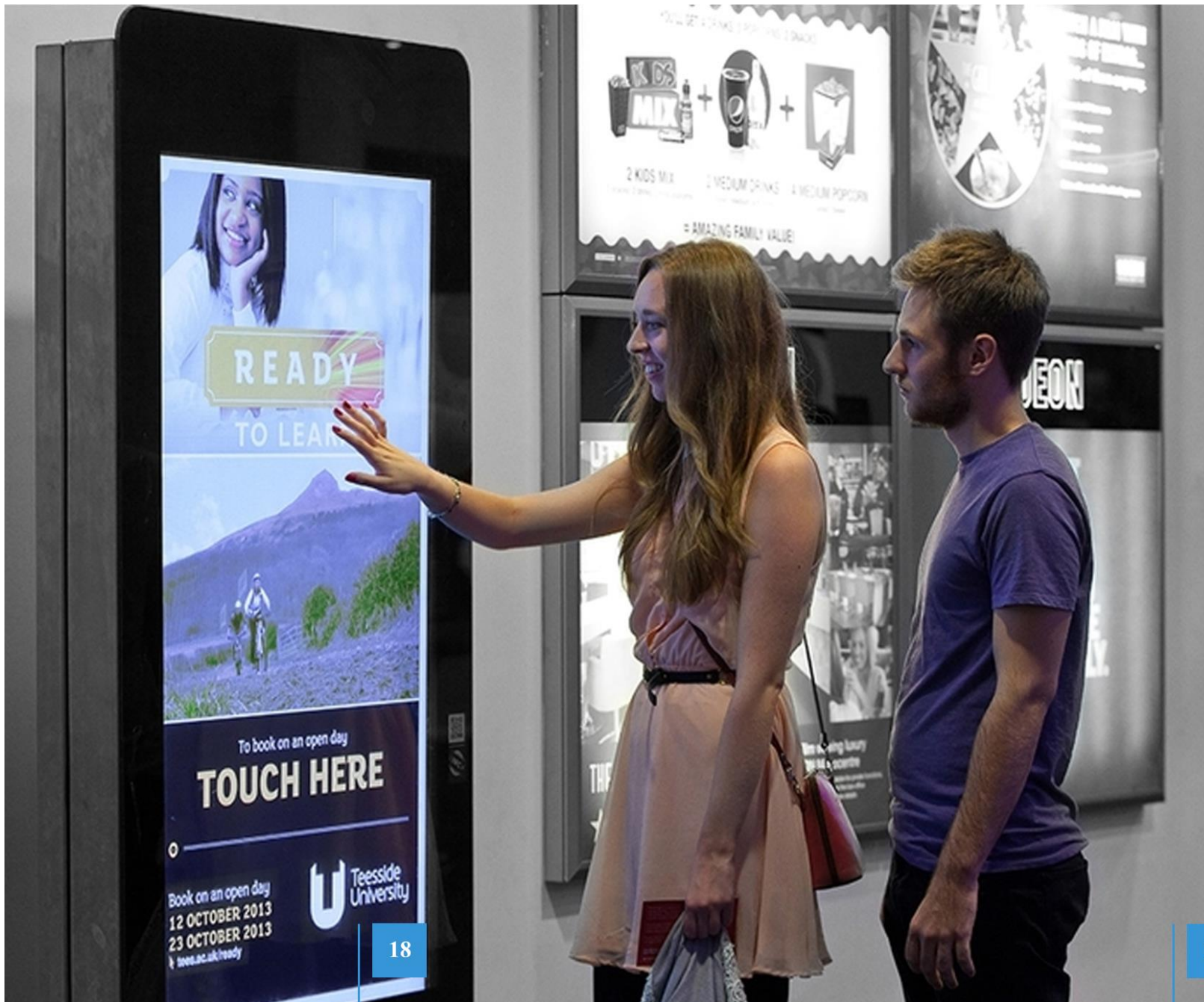
Facial Recognition

As part of the signage package Harp have integrated the Fraunhofer Shore facial recognition software into its enclosures so that it can ascertain whether the viewer is:-

Male or Female
Happy, Sad, Angry
Age Estimation

This information can be used to interact in realtime, play adverts aimed at a specific category or to store information so that analysis can be done at a later date to identify how many people and what types of people looked at the screen and for how long.
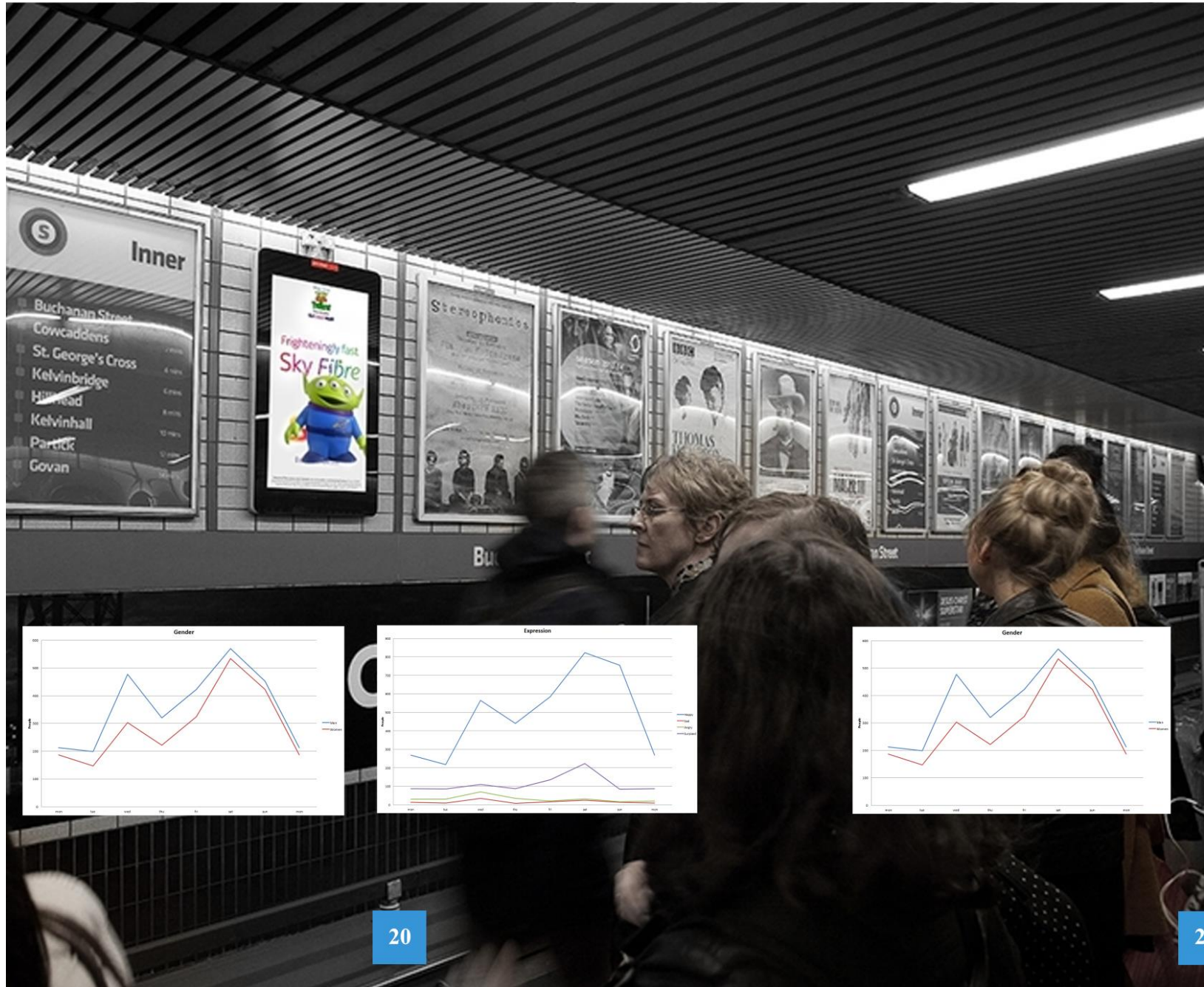

QR & NFC

 Enhanced communication access has been added to the displays so that QR codes or indeed NFC can be included, enabling viewers with smartphones to access web adverts.

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Image: Odeon Cinema, Newcastle.

Harp can supply as part of a package or independently an analytics package that will allow collection of data of who has looked at the screens. This data can then be presented in many formats, raw data or as a graphical analysis as shown opposite.

The information shown opposite was collected over a weeks viewing at a cinema in the North West of the england. Data disseminated can be presented in a more graphical form in this case showing the number and gender of people that looked at the screen, what expression they had when viewing and the age of the person looking. All this information can be used to format what adverts should be showing when and in addition tuning adverts for when a particular market segment comes forward to view the screen.

In the example it can be seen that more men than women view the screens at the cinema, majority of people are happy and a few even surprised. The most interesting data is shown by the changing of the age groups viewing the screen during different days of the week and which age groups look and dwell at the screens.

The analytics package consists of a camera to view the subjects, a PC with the Fraunhofer Shore facial recognition software and a 3G modem so that information can be sent immediately back to base for analysis.

Image: Buchanan St Station, Glasgow.