e.CITY compact

Scalable multimodal real-time information displays

Special information

Trade

PUBLIC TRANSPORT

/// Flexible information design

/// Modular structure

/// High display comfort

/// Barrier-free use

/// Attractive support conditions

smΛrt STATIONS

WHAT DOES MULTIMODAL MEAN?

A display system that shows the entire mobility experience at a location in real time.

Depending on the display technology and the programming behind it, formats can be selected that combine as much information as possible in one display.

e.City compact opens up attractive entry options for multimodal display.

COMBINATION OPTIONS:

Special content Marketing information in screen partition
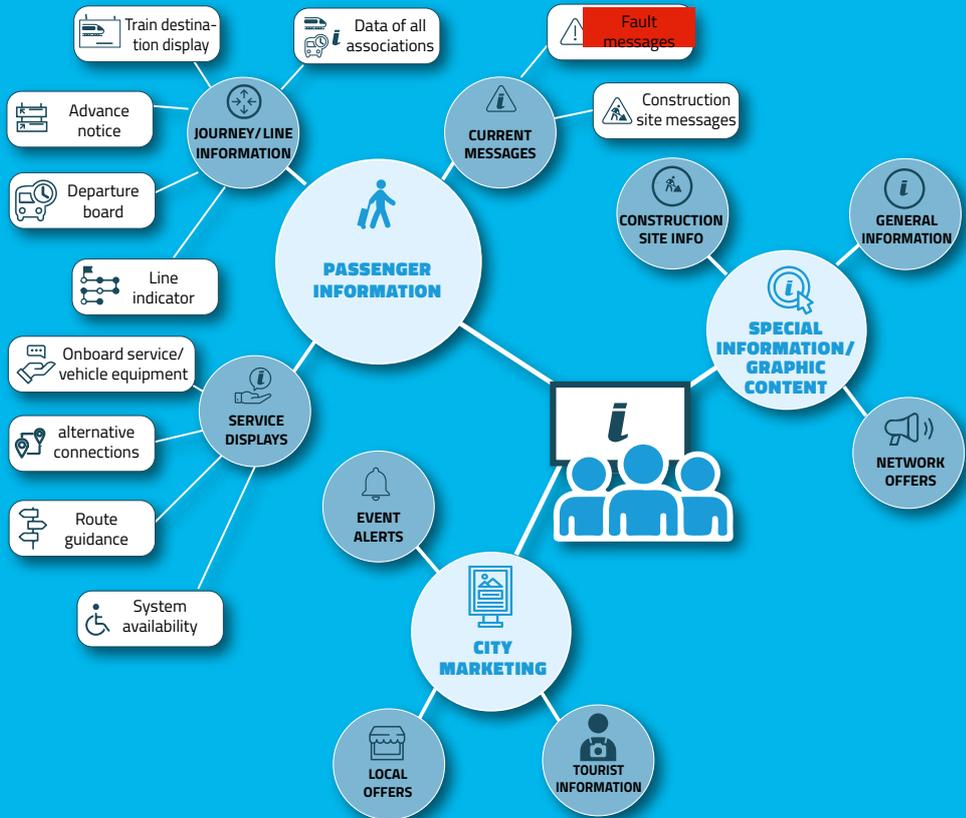
Line display with construction site message

Ticker messages

Special graphic information (hygiene instructions)

DISPLAY OPTIONS:

- Train destination display
- Data of all associations
- Fault messages
- Construction site messages
- Advance notice
- **JOURNEY/LINE INFORMATION**
- **CURRENT MESSAGES**
- **CONSTRUCTION SITE INFO**
- **GENERAL INFORMATION**
- Departure board
- Line indicator
- **PASSENGER INFORMATION**
- **SPECIAL INFORMATION/ GRAPHIC CONTENT**
- Onboard service/ vehicle equipment
- alternative connections
- **SERVICE DISPLAYS**
- **NETWORK OFFERS**
- Route guidance
- **EVENT ALERTS**
- System availability
- **CITY MARKETING**
- **LOCAL OFFERS**
- **TOURIST INFORMATION**

Departure data of regional and supra-regional transport companies (Darmstadt railway station - smart.SCREEN embedded in wall display case)

Departure data of different transport and mobility companies (Smart-City model station Charlottenburg)

WHAT ADDED VALUE DOES e.CITY compact CREATE?

Construction site information and Rerouting information Wiesbaden station

CUSTOMISED INFORMATION

The display can be detailed to create the optimal solution for your requirements. What should be shown, what additional information can be integrated in order to have all location-relevant information at a glance?

The cloud-based system makes it possible to go new ways in terms of display technology and to run different displays per location – just as required for optimal visitor management.
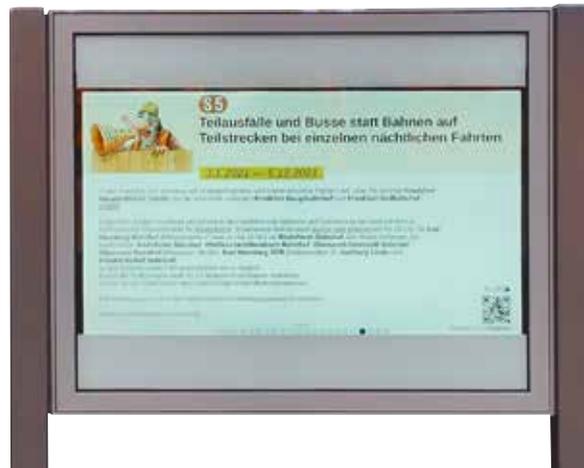
Line overview with system availability in real-time, Stuttgart region

Special information at Frankfurt Central Station

Departure notices and special information in Stuttgart city centre

MORE VISITOR-FRIENDLINESS, MORE PERSPECTIVES

With a flexible, durable and efficient solution for digitising and networking existing (transport) services in your region, you show that your locality is dynamic and thinks in a networked way. Residents and visitors alike are encouraged to (re)experience and discover (e. g. for city marketing). The perspectives of your visitors are broadened if you add new hints to „ordinary paths" with new information. This can increase the number of visitors to certain locations immensely; you thus control the profitability on site.

At the same time, you commit to environmentally friendly public transport models and link your municipal digital strategy with tourism and mobility.

WHAT DOES THAT RESULT IN?

A display system that goes beyond the „standards":

- From the classic intermodal public transport departure board to a mobility hub, e.g. with the availability of rental bicycles at the next station.
- Visitor routing at special events with departure information of shuttle services
- Incident reports, advertising or city marketing
- News, tourism information or event highlights.

All this from just one information point, combined in one display – and individually configurable for several locations, even during operation.

FLEXIBLE IN CONFIGURATION, ...

The technical implementation is always thought out in terms of location. This means monitor size and height, as well as assembly can be selected as the conditions on site allow. A comprehensive portfolio is available for this purpose.

INSTALLATION OPTIONS:
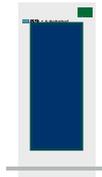
Integrated or complete solutions

Integrated into an existing wayfinding system

Integrated into a display case

Design as a stele

Multifunctional display case in Stuttgart

(left) Departure notices and special information at Frankfurt Central Station

BVG line indicator at Kaulsdorf Nord underground station

... FLEXIBLE IN USE, ...

CONVERSION OR REPLACEMENT OF PARTS IN OPERATION THROUGH EXCHANGEABLE COMPONENTS.

Exchange modules enable a longer product life by replacing susceptible or damaged components. They are resource-saving and give the application a high degree of flexibility. Screens can be removed or retrofitted whenever the function of the location changes.

OPTIMAL OUTPUT FOR A WIDE RANGE OF APPLICATIONS

TFT displays have the advantage that many details can be shown in colour with a high luminosity. This allows a greater variety of displays than with LED or e-ink displays.
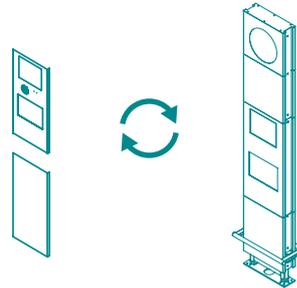

/// 100,000h Running capacity

/// Outdoor capable

/// Vandalism-proof

CONVERSION OPTIONS

Interchangeable solution Stele / Pylon

Interchangeable display case

RETROFIT OPTIONS

W-LAN Hotspot

Beacon for additional information via mobile phone

Security camera

Air quality meter

Touch-screen monitor with real-time driving data

USB charging station

... AESTHETIC IN THE OVERALL CONCEPT!

← **Toiletten** *toilets*

Static display modules, powder-coated aluminium panels, can be designed in various RAL colours, foiled lettering

DESIGN OPTIONS:

ADAPTABLE IN APPEARANCE AND FORM

Depending on the type, the enclosures can be adapted to your design and surfaces can be provided with inscriptions.
All RAL colours can be implemented.

Advance notice integrated in signage system – Smart City train station in Charlottenburg

Screen displays can be switched easily.

Even if the flow of information is interrupted, there are functional one display modes.

Display 19"

Dynamic display: min. 19" monitor with real-time travel data

Taster

Voice output for accessibility

Fahrplanauskunft

Display case module

Steles in the Offenbach entrance area

THE CHOICE OF TECHNICAL CONCEPT ...

HIGH-RESOLUTION INDUSTRIAL DISPLAYS FOR DISPLAY DIVERSITY AND USER COMFORT

TECHNOLOGY	LED-Matrix	TFT	E-Ink	Explanations
Installation options	-	+++	+	TFT displays can be used in extreme, flat or mini formats thanks to an infinite number of formats and constructions. The system determines the application.
Display quality and visibilty	-	+++	+	TFT displays can output colour moving images with reader-friendly resolution. Sharp contrasts, comparable to LED, are achieved with up to **2,500 cd/m²** (nits). The **pixel density** can be as high as 40 ppi.
Display options	-	+++	++	TFT displays are suitable for viewing without restrictions. Without circuit programming, fixed grids and via simple interfaces, the content can be selected to meet the requirements of the location.
Content configuration	-	+++	++	Systems with TFT displays can be configured as desired, similar to an app - depending on the desired display. the layout can be created from scratch to meet the requirements at the location.
Operational capability	++	++	+	TFT displays are suitable for outdoor use and are easy to read even at high brightness. Their **temperature range** goes from **-20°C to + 60°C**. Specific additional components such as ventilation or extra backlighting can extend these capabilities even further.
Durability	++	++	?	TFT displays achieve a guaranteed service life of 100,000 hours, similar to LEDs. They are standardised mass products of high quality, which are at least equal to other technology solutions in terms of maintenance intensity.
Power consumption	++	++	+++	Energy-saving TFT displays enable all the advantages of modern information systems with low energy consumption.

... IS CONSISTENT WITH A SMART IT CONCEPT ...

NO COMPLEX IMPLEMENTATION, LOTS OF SUPPORT IN ONE TARIFF!

IT-KONZEPT	Comparative projects	e.CITY compact	Explanations
Purchase and implementation of software/ central OS	**required**	**not necessary**	Control and administration services are provided as web services if required or are part of the service fee. Here, too, the structure is modular and is adapted to the respective requirements. This structure offers maximum flexibility in the event of changes in requirements, infrastructure or personnel.
extensive IT infrastructure	**required**	**not necessary**	You neither need to maintain a costly IT infrastructure nor train employees. The e.CITY compact control system runs efficiently and saves resources, like an app in the cloud.
Support	**limited**	**includes all activities that keep the system running**	The e.CITY compact service fee covers all common problems and is therefore economical for your operation: All activities – from programming, to display changeover, to fast response time in case of unforeseen events – are covered like a „flat rate"! You get the most comprehensive service on the market for your service fee thanks to a lean concept
Development and adaptation	**not included or subject to surcharge**	**included in the product**	
Interfaces	**proprietary interfaces**	**Open standards without restrictions**	The use of open standards enables a multitude of links without complex structures and subsequent barriers.
Expenditure for updates	**complex partial updates**	**centralised update management**	The e.CITY compact system is able to easily apply changes due to its central setup (backend).

... AND THEREFORE IDEAL FOR AN EFFECTIVE START!

Compared to other dynamic information systems, smart.STATIONS thinks before it is used. This means:
– no superfluous additional solutions,
– smart IT programming,
– fast implementation and installation,
– cost-efficient in acquisition and operation due to transparent price and service models and retrofitting capability.

COST RATIOS

Comparative projects

Installation

Hardware

Possibly reprogramming

Support costs (e. g. uploads)

Licence fee

Initial project costs
(incl. software sales)

e.CITY compact

Installation

Hardware

Service fee (may include reprogramming, covers all other support services)

Initial project costs
(without software sale)

DB Intermodal project at Südkreuz station – Departure indicator

PUTTING THE USER AT THE HEART OF THE APPLICATION ...

AT TRAFFIC JUNCTIONS
as a departure indicator for various companies, as a malfunction indicator or diversions recommender.

AT CENTRAL LOCATIONS
for the orientation of wayfinders, linked with location information and daily updates

AT EVENT LOCATIONS
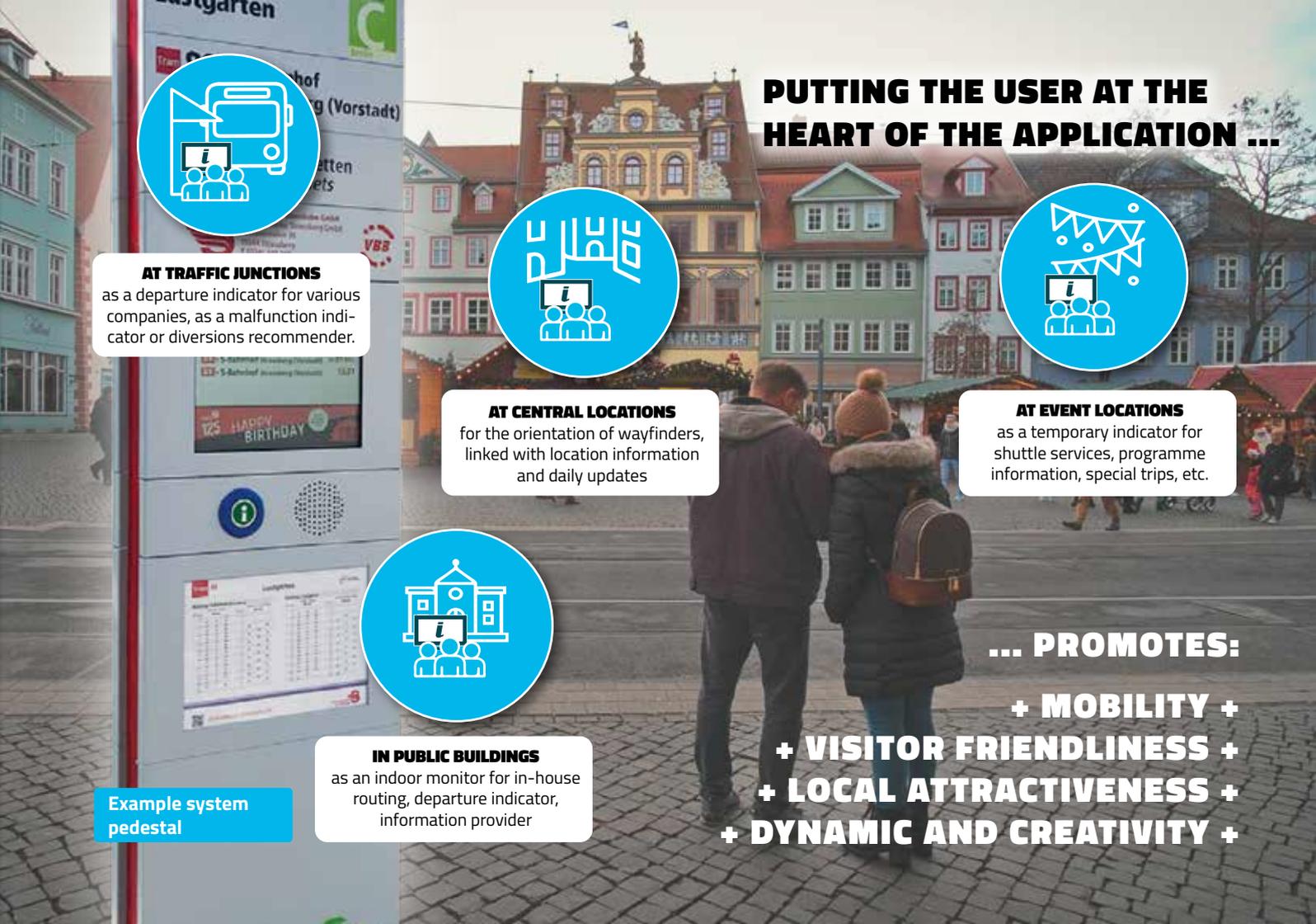as a temporary indicator for shuttle services, programme information, special trips, etc.

IN PUBLIC BUILDINGS
as an indoor monitor for in-house routing, departure indicator, information provider

Example system pedestal

... PROMOTES:

+ MOBILITY +
+ VISITOR FRIENDLINESS +
+ LOCAL ATTRACTIVENESS +
+ DYNAMIC AND CREATIVITY +

The partnership between the system integrator Schilderwerk Beutha GmbH and the passenger information system specialists Leitstreifen UG has been marketing dynamic display products under „smart.STATIONS" since 2014.

During this time, smart.STATIONS multimodal displays and dynamic wayfinding systems have been deployed in Germany's railway stations – including the Charlottenburg Smart City project.

THIS IS HOW YOUR DIGITISATION SUCCEEDS:

You and your possible requirements are decisive. Together, we extract the best possible display solution from the technical and local requirements. We extract the best possible display solution from the technical and local requirements by linking your data in a sensible, system-independent and efficient way. The focus is on the application and the benefit. The procedure is as uncomplicated as the finished system.

1. RECORDING OF THE SITE AND CUSTOMER-SPECIFIC REQUIRE-MENTS

2. CREATION OF THE SOLUTION FOR IT, DISPLAY AND INSTALLA-TION CONCEPT

3. DETAILING, CONCEPT, QUOTATION, ORDER PLACEMENT

4. IMPLEMENTATION, OPERATION AND SERVICE

Implementation within one month

TECHNOLOGY AND IT WITH A USER-FRIENDLY CONCEPT OF USE FROM A SINGLE SOURCE:

/// a simple, attractive and transparent pricing model for technology and IT

/// a worthwhile entry into the digitalisation of your infrastructure

/// high IT security

/// intensive support for the systems over their entire lifetime

/// high component availability for sustainable life-time or maintenance cycles

/// room to operate by leveraging your display options without recalculations

/// products that can be retrofitted, upgraded and deconstructed

SCHILDERWERK
BEUTHA GmbH

AHEAD WITH SAFETY