

DELIVERING INNOVATION IN RAIL: THE CONNECTED PASSENGER FORUM

EXECUTIVE SUMMARY

DATE: 22 NOVEMBER 2016

VENUE: NEW ARMOURIES SUITE, THE TOWER OF LONDON

PREFACE

Our team at Panasonic Business was very pleased to host our first forum for the rail industry. The day was a resounding success. The attendees represented different areas across the industry, and working together, identified the top innovation priorities the industry needs to address. The output of the event can be found in this report.

Panasonic will continue to focus on delivering innovation in the rail industry building on the work done in the forum. We will build a series of webinars delving deeper into each of the priorities to demonstrate how a solution from us can help you achieve your priorities, so look out for invitations to these webinars.

Thank you to all of those who took part in this event, I look forward to the opportunity to work with you and your industry moving forward.

Tony O'Brien (TO)
Managing Director, Panasonic Business

ORGANISATIONS REPRESENTED AT THE FORUM

- AD Comms
- Angel Trains
- Arriva Rail North
- Arriva Trains
- British Transport Police
- Cass Business School
- Department for Transport
- Digital Railway
- Docklands Light Railway
- Eversholt Rail
- East Midland Trains
- First Rail Holdings
- London Midland
- London Underground
- Macquarie European Rail
- Merseyrail
- Naviga Consulting
- Network Rail
- Panasonic Business
- Perspectiv
- Rail Industry Association
- Transpennine Express
- VivaRail

EXECUTIVE SUMMARY

The Forum explored the key problems facing the rail industry in order to meet the vision of customers loving their train experience.

Our aim was to get a shared understanding of the top problems that the industry collectively thought needed to be addressed. 9 key technical and social challenges were identified and these are included in this report.

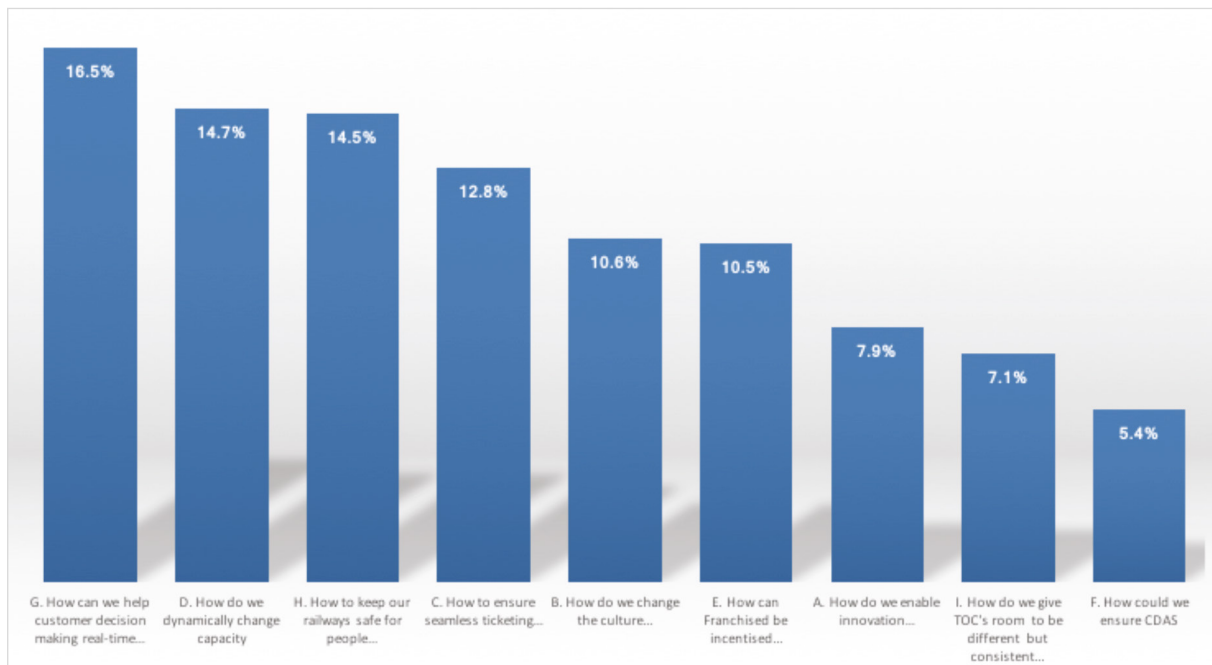
The List of 9 Problems...

Below is the list of the important problems identified that rail industry face in providing 'a train experience that the customer would love'.

<p>A.</p>	<p>How to enable innovation rather than just workshoping it?</p> <p>Over the last 5 years or so, it has been recognised that there has been little innovation by the rail industry especially innovation related to the customer experience. This has been recognised by the Government who set up various funds and initiatives to identify opportunities to deliver innovative, creative and genuine problem solving ideas for the benefit of the industry and ultimately rail users. But, over the last 5 years, there has been more talk than delivery and questionable value for money. This "how to" shows an eagerness to deliver innovation now.</p>
<p>B.</p>	<p>How might we change the culture to test ideas and minimise risk?</p> <p>For all the right reasons, the highest priority in the railways is safety and the UK has a brilliant safety record. A feature of the UK rail industry is the franchise system which naturally creates a commercially risk averse commercial environment, especially when a franchise is coming to an end where the operators find it hard to justify trying something new when there is no guarantee they'll be around to see the benefit and get "pay-back". This "how might we" reflects a recognition that this needs to change and we need to create an environment where it's OK to try new things, make mistakes* but most importantly learn and make things better. We need to do more than just "maintain".</p> <p>(* in a safe way, without losing millions)</p>
<p>C.</p>	<p>How to ensure the ticketing system is seamless for the entire journey?</p> <p>It seems crazy that in 2016 the door to door travel experience can cover many public transport modes yet they are all effectively "silo" modes and one ticket does not cover all. The onus is on the traveller to work out how to join those silos using the best route and at the best cost. We have the component technology, data and apps to deliver a seamless journey experience but how do we join them together?</p>
<p>D.</p>	<p>How do we dynamically change capacity?</p> <p>At the moment, trains run to fixed timetables. Train formations (the number of cars per train) are also generally fixed. There are times when trains are over full (peak) and others where there are just a few people on a train (off peak). What if we could be much more flexible with timetables and train formations so that we match demand with supplies in real time, in a totally flexible way. Could we do away with timetables and fixed formation trains?</p>
<p>E.</p>	<p>How might franchises be incentivised mid-term to implement innovation and not be commercially penalised?</p> <p>This is linked to B above. In more detail, how might we design current and future franchises to seamlessly flow from one to another so that innovation initiatives continue? This recognises that trains stay in service for 30 years plus, but franchises are barely half that at best. Passenger needs don't change so improvements need to be continuous.</p>

<p>F.</p>	<p>How can we ensure CDAS systems are all compatible with Traffic Management?</p> <p>CDAS is the "Connected Driver Advisory Systems" and is like an advanced dash board for the driver that tells the driver what speed and driving style to use to maintain the timetable. The benefits include energy savings and increased passenger comfort. Traffic Management Systems are off train and look at the whole network. They look at disruption to the timetables (perhaps due to a defective train, poor weather, a passenger taken ill etc.) and implement a contingency plan to maintain traffic flow to minimise passenger inconvenience. In these circumstances, the timetable has gone out of the window. But, if the Traffic Management was connected in real time to the CDAS, the effect on the network and passenger delays could be drastically minimised and all would be better informed.</p>
<p>G.</p>	<p>How do we make customer decision making better in real time?</p> <p>Train passengers know that things can go wrong. They can deal with it if they have great information to allow them to work out their alternative options. There are so many apps using lots of freely available train data out there but, as touched on in C above, it is not joined up and does not come from a single trusted source - called the railway. The ideal scenario is that the railway knows all about your personal journey and proactively tells you that things are fine and if not, provides the best alternative for you. This information needs to be available via all media including smart phones, notice boards and staff to ensure customer have the information however they chose to consume it.</p>
<p>H.</p>	<p>How to keep our railways safe for people?</p> <p>The railways are rightly very proud of an excellent safety standard. If we look at D and F above, for example, how could we implement these things, without compromising safety? Conversely, we must not play the "safety" card blindly.</p> <p>Additionally, there is always room for improvement in terms of safety. How do we use modern technologies to do this?</p>
<p>I.</p>	<p>How do we give operators room to differentiate whilst also providing consistency for customers?</p> <p>On the one hand the public sees us as one big railway yet there are approaching 2bn passenger journeys per year. All can be different. So how do we "think global yet act local" delivering a personalised journey experience for each passenger? As mentioned above, the technology exists to do this (let's say the ingredients) but how do we join them together (what's the recipe)?</p>

These priorities were then prioritised using a tool called paired comparison analysis. The results can be seen in the graphic below



WHAT NEXT?

Panasonic deeply value collaboration – working together, combining vision and strategy for the future, based on understanding the real problems of an industry before beginning a process to determine if technology could provide solutions. The day revealed many, varied and intriguing challenges facing the rail industry in making the train experience a more satisfying one for the customer.

With the promise of sharing the feedback from the day, Panasonic hopes that trust across the sector can continue to develop as a foundation to collaboration. We envisage potential smaller group workshops addressing specific areas of the rail industry's needs and helping to find ways forward to these challenges. If this appeals for your business, please do get in touch.

CONTACT DETAILS

If you wish to speak to us directly, please call Keith Gillespie on 07887 411898, email keith.gillespie@eu.panasonic.com or visit our [website](#).

Panasonic
BUSINESS