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“VIA Rail Canada is pleased to have been invited as a contributor to the Amadeus Rail Report - The Changing Face of Rail Travel. It’s an excellent report and reads like a “State of the Union” on the rail travel industry providing a broad perspective on the challenges facing the rail industry and identifying key areas of opportunity for rail companies to pursue.”

Via Rail

“Amadeus has hit the nail on the head with its report. The conclusions are 100% correct, particularly the suggestions on industry-wide solutions, standardisation and the future requirements of e-ticketing.”

Dutch Rail
Foreword

These are fascinating times for the global rail industry. High-speed rail lines are being built across the world, market deregulation in Europe is acting as a catalyst for industry growth and travellers themselves are increasingly choosing rail; for comfort, for speed and also for environmental reasons.

At Amadeus we believe it is the right time to take the pulse of the rail industry; to find out what rail companies and travel providers are thinking in terms of the industry’s evolution and how they might best adapt.

We are delighted to now present our in-depth study ‘The Changing Face of Rail Travel’.

To compile the report we carried out extensive interviews with major rail providers between the months of February - May 2011. We believe that our findings make for some very interesting reading for all those directly and indirectly involved in the rail industry.

‘The Changing Face of Rail Travel’ focuses on these four key themes.

- current trends shaping the rail industry
- the challenges facing the rail industry
- changing relationships with partners
- future requirements that rail companies have identified they will need to fulfil

We have conducted this study in order to create a snapshot of what is a fast-changing landscape and to identify the challenges and opportunities that this presents for rail companies and their partners. As our research has demonstrated, these are multifarious. We have carefully studied the responses given to us and we have set out to highlight the prominent and recurring issues in this document.

Amadeus is committed to collaborating with rail companies as they tackle these new challenges and we are actively supporting the European Commission in developing a logical common infrastructure to enable common ticketing and multi-modal transportation in Europe.

We would like to sincerely thank everyone who has has given their time to participate in this study. We do not know of course how the rail industry will look in five, ten or twenty years’ time – but we hope that this report will provide some idea of the journey the industry can expect.

Diane Bouzebiba
Head of Rail, Amadeus IT Group
The report includes:

- **The current situation** and the changing face of rail travel
- **The main issues and challenges** for the sector, based on importance, immediacy and impact
- **The changing relationship** between the different partners involved
- **The future requirements**

The methodology included face-to-face and telephone interviews with internal and external stakeholders between March and May 2011 as well as desk research.

A total of 16 interviews were conducted with Amadeus staff. Representatives were drawn from different areas of the Amadeus Rail business to explore internal perceptions of the sector as a whole, looking at both high speed and established rail.

A total of 22 interviews were conducted with individuals outside of Amadeus representing both high speed, established and new entrant rail companies.

Main findings include:

- **Current situation – what’s happening in the rail industry**
  - Rail companies can see increased demand from both leisure and business travellers, with business travellers increasingly turning from short-haul air travel to railways.
  - Deregulation provides opportunities for expansion – but new entrants to the market could pose challenges for established carriers.
  - High-speed rail is increasingly recognised as an alternative to air travel, and there is significant investment in the development of high-speed networks worldwide.

- **Main issues and challenges**
  - Deregulation will increase competition between rail companies and on routes – and new entrants to market might adopt previously-unseen business models.
  - Rail companies need to move from a nationalistic distribution model to an industry-wide solution.
  - Rail companies need to make the customer their priority – and improve the overall travel experience.

- **Changing relationships**
  - Technology partners can help ease the changes the rail industry is experiencing.
  - Some governments recognise the importance of rail – but others are yet to follow.
  - Partnerships with other industries could provide new revenue streams.

- **Future requirements**
  - Smartphones provide an on-the-go channel to the traveller.
  - Technology standards will ease the transition to a deregulated rail industry.
  - Rail companies need to provide e-tickets, as airlines already do, if they are to offer a serious alternative to air travel.
Methodology

Below is an outline of the methodology used to deliver this report.

**Interviews**

From March to May 2011, 38 face-to-face and telephone interviews were conducted with both internal and external stakeholders. Desk research was also conducted in order to help inform the focus of the study and develop the questions.

Internal stakeholders were drawn from different areas of the Amadeus Rail business to explore internal perceptions of the sector as a whole, looking at both high speed and established rail. These were conducted in the form of a workshop scenario.

External interviewees were drawn from a variety of backgrounds representing both high speed and established rail companies. These organisations are listed at the back of the report.

The views and opinions expressed in each of the interviews were considered in the context of knowledge, insight and the ability to influence others.

The interviews were conducted by Philip Martin and Alexander MacDougald from Amadeus Rail.
The Changing Face of Rail Travel

A renaissance for rail

Rail companies can see increased demand from both leisure and business travellers, with business travellers increasingly turning from short-haul air travel to railways.

Deregulation provides opportunities for expansion – but new entrants to the market could pose challenges for established carriers.

High-speed rail is increasingly recognised as an alternative to air travel, and there is significant investment in the development of high-speed networks worldwide.

There are a range of reasons that corporate travel by rail is increasing. Business travellers are increasingly recognising the time and comfort benefits of travelling by rail, where there is no queue for security and it is possible to work on the train (particularly if the rail carrier provides on-board wi-fi, as many are now choosing to). It was posited by a number of interviewees that where, in the past, rail travel would not be considered for a business trip if the journey duration was over two hours, it is now viewed as an alternative to air travel for journeys of up to four hours long. The EC White Paper, Roadmap to a Single European Transport Area, anticipates that by 2050, the majority of passenger transport over 300km will be by rail. Several interviewees also noted that many corporations’ environmental policies and corporate social responsibilities include a commitment to ‘green’ travel, including travelling by rail where appropriate, and believe that this may also be driving the trend. Whilst increasing business travel by rail will undoubtedly lend the rail industry a new lease of life, it also brings additional hurdles to overcome: business travellers have different expectations, particularly with regard to ticketing and distribution (for example, e-ticketing).
Deregulation

Deregulation provides opportunities for expansion – but new entrants to the market could pose challenges for established carriers.

The European Commission’s vision to create a single European market for rail has far-reaching implications for rail companies, and could prove the catalyst for a radical modernisation of the railway industry. Deregulation on cross-border rail services was implemented in 2010, and deregulation on EU domestic passenger traffic is planned for 2017. At the moment, due to the political processes involved, the situation is moving slowly and it is not yet clear how the European railway industry landscape will look post-deregulation. One thing is certain – deregulation will enable new entrants to market, and foster/encourage competition on railways that were traditionally the preserve of one, national carrier. Rail companies, especially legacy carriers, will need to improve their distribution systems, which are currently out-dated when compared to those of other industries, if they are to effectively differentiate from, and compete with, their new counterparts.

Deregulation will also offer new opportunities, especially to the larger, well established carriers. However, it will not be without its pitfalls. With huge infrastructure investment required, smaller carriers may be unable to compete with those who already have international operations of some kind, and there is a danger that carriers will focus on higher-yield, intercity lines that are more lucrative, at the expense of the regional services that national carriers are obliged to provide.

High Speed Rail

High-speed rail is increasingly recognised as an alternative to air travel, and there is significant investment in the development of high-speed networks worldwide.

High-speed rail is increasingly being positioned as a viable alternative to air travel, not only because it is more environmentally friendly, but also because it is arguably more comfortable and often takes travellers into the heart of the city or town they are travelling to, rather than to an airport on the city’s outskirts. High-speed rail travel also mirrors the experience of business-class air travel.

Governments and private companies worldwide have noted this, and high-speed rail is currently the subject of investment programmes around the world: China’s Ministry of Railways has revealed plans for the construction of two high-speed lines between Zhengzhou and Xuzhou, and Hefei and Nanning. In February 2011, the US government called for $8 billion of funding for its high-speed programme in 2012, and the EC’s White Paper, Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system sets out an ambition: “by 2050, complete a European high-speed rail network. Triple the length of the existing high-speed rail network by 2030”. There has been expansion of high-speed networks in Europe in recent years, particularly in Spain and Italy. One interviewee was of the opinion that by 2020, high-speed rail will be the travel mode of choice for short-haul travel within Europe.

However, some interviewees voiced concern that whilst investment in high-speed rail in China, for example, might increase rapidly, in Europe and the USA there might be greater restrictions as governments carefully examine their budgets.
Economic climate

Rail companies need to increase revenues without alienating their customers.

The economic difficulties of recent years have had an impact on rail companies, particularly in Europe, where some rail companies have seen their commuter, regional and long-distance routes suffer. Rail companies face the enormous challenge of increasing turnover in passenger travel (increasing sales substantially as a result of high speed lines), and at the same time lowering the cost of sales (otherwise it is unaffordable for the traveller).

EC White Paper

A Single European Transport Area will use trains to cut carbon emissions.

In March 2011, the European Commission published a White Paper, *Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system*. The White Paper outlines its vision for a Single European Transport Area and this includes a number of ambitions for the rail industry. The White Paper includes commitments to cutting carbon emissions, and foresees that this could be possible through the increased use of rail travel over air travel. As detailed above, the paper also includes an ambition to complete a European high-speed rail network by 2050, and promotes an intermodal transport network. The White Paper outlines its vision of “true internal market for rail services”, which involves, amongst other things, the opening the domestic rail passengers market to competition, including mandatory award of public service contracts under competitive tendering.

In May 2011, the European Commission announced new regulation to “facilitate pan-European rail journey planning and ticketing, by forcing a standardisation of rail passenger data on fares and timetables”. As we will see in the course of this report, such standardisation is not currently in place in the European rail industry, but is certainly needed.
2. Main issues and challenges

Topline summary

- Deregulation will increase competition between rail companies and on routes – and new entrants to market might adopt previously-unseen business models.
- Rail companies need to move from a nationalistic distribution model to an industry-wide solution.
- Rail companies need to make the customer their priority – and improve the overall travel experience.

Competition and new business models

Deregulation will increase competition between rail companies and on routes – and new entrants to the market might adopt previously-unseen business models.

Deregulation heralds a new age of competition for the European railway market, which will radically alter the way in which individual companies will operate. The opening of competition will add extra impetus to the need to find profitable business practices in an industry where fixed costs and entry costs are very high. The experts interviewed for this report had a range of interesting opinions on the way in which competition will reshape the rail industry, and these are discussed below.

This competitive environment will foster new entrants to the market, some of whom will have very different business models from legacy carriers. There may be new entrants with a low-cost approach to the market that doesn't currently exist: following this model, the rail company will start with one route and one train, making this profitable before adding one more train and one more route, and growing little by little in this way. However, these companies will bring a very specific offer to the market. As in the air industry, they will concentrate on certain routes and will create an offer that is different from legacy railways. The ‘big bang’ model of massive investment in rolling stock, infrastructure and the creation of a nationwide network will not be the sole model of new entrants.

Competition could manifest itself within the rail industry via two main models. The first is open access – where anyone is free to operate a train between point A and point B, which one interviewee described as “real competition”. The other is the franchise model – where a tender is put out for lines in a region, there is competition for the tender, then a train company is selected and will run trains in the area for a set number of years, as in the UK. Under this model, the interviewee asserted, there is no real competition on the same lines – only when tender is made. The kind of competition the rail companies will face will be determined by the business model – and it’s not yet entirely clear what this will be in each area.

One interviewee also discussed the possibility of new entrants to the market from outside Europe. They noted that, although for the rail industry five years is not a long time, they expect that within the next five to ten years, Chinese rail companies will take the lead, competing outside as well as within China for tenders and new developments. This could prove to be another challenge for established players in the European market.

Another of the challenges that competition presents to legacy rail carriers is the need to renew the train stock, in order to avoid a situation where there are the older trains of the legacy carriers, compared with the ‘next generation’ trains of the new entrants to the rail market.
Distribution – evolving to an air-like model

Rail companies need to move from a nationalistic distribution model to an industry-wide solution.

A number of interviewees commented on a trend specific to the rail industry, which is that railways still think in a very nationalistic way with regard to distribution – and every national distribution system is different. Although it was opined that the mindset regarding rail distribution is changing, interviewees also commented that this is happening at a gradual rate as railways are afraid of the costs associated with building a new distribution system.

As rail companies start to shift their focus from the national to the international, there is renewed impetus to upgrade and diversify their distribution systems and strategies. As one interviewee noted, it is increasingly important for rail companies to be present on all channels, both direct and indirect, that are strategically important for their business – in order to secure both business and leisure customers.

It will be necessary to make the traveller aware of the global network, and explain to them that they can go anywhere in Europe, even if there is no direct train. There is a growing requirement from the European Commission to ease customers’ access to this global network. However, this network has implications – distribution, after-sales and being able to interconnect distribution systems. For the ‘global network’ to truly work, the set up needs to be such that at the station in any given country, you can buy a ticket composed of multiple segments using multiple operators.

The issue at the moment is that the traveller needs to use multiple websites or needs to make multiple bookings even on a single website in order to make a multi-operator or multi-leg journey at the cheapest prices. This will become more complex and convoluted as deregulation introduces more and more operators and more and more websites. There is a tangible need for a solution that can plug into all the various booking systems and operators’ systems; with the intelligence to book and integrate a through-journey on any given route and compare different operators and that can compare different prices operating on the same route. The GDS could provide a solution to this problem.

Such a solution will create new opportunities for revenue growth: in the opinion of one interviewee, most train companies focusing on their core routes currently underestimate the potential for interlining, multi-leg journey, and other operator journeys. The technology already exists to make this vision a reality – but someone needs to take ownership of the issue.

Creating a customer-focused business

Rail companies need to make the customer their priority – and improve the overall travel experience.

Until recently, the focus for rail companies has not always been on the customer; this is in part because a lack of competition on a national scale often meant rail companies did not need to “win” customers from another provider or work to retain them. However, as the competitive landscape changes, a number of interviewees cited the creation of a customer-focused business and an attractive offer for the customer as critical for success.

A number of interviewees also remarked that rail companies will need to increase efficiency in order to deliver on customer expectations and create this customer-focused business. This efficiency will also be necessary if rail companies are to compete in a market that is increasingly populated by new entrants, who will have more flexible business models than established carriers. Technology will have a key role to play in achieving this.

Meeting the traveller’s technology expectations

The customer interacts with other industries all day – rail companies should match their technology experience.

Consumers are now accustomed to having all the information they require in an instant at the touch of a button, as well as being able to make purchases on the go via their smartphone or tablet computer. Rail companies need to examine the daily environment of their customers, in order to understand their use of technology and the services that the customer is used to receiving from companies in other industries. As one interviewee noted, rail companies can’t rely on outdated technology if the customer can buy a cinema ticket or use an airline boarding pass on their smartphone. The rail customer is also a customer to other industries, and they will benchmark rail companies’ capabilities against any other industry that they meet.

It is not enough to simply upgrade legacy systems – the rail company will need to think innovatively about the way the customer interacts with other industries at every point in their day, and implement solutions that address the customer’s real needs.
3. Changing relationships

**Topline summary**

- Technology partners can help ease the changes the rail industry is experiencing.
- Some governments recognise the importance of rail – but others are yet to follow.
- Partnerships with other industries could provide new revenue streams.

**Technology partners**

*Technology partners can help ease the changes the rail industry is experiencing.*

A significant number of interviewees predicted that external technology suppliers will become increasingly important to rail companies as the industry modernises and rail companies look for ways of improving the passenger experience. External technology providers will be able to help rail companies deliver the passenger information systems, distribution and ticketing technology that will be essential to this process.

Some interviewees also remarked on the importance of a close and trusting relationship with the external technology partner, so that the two companies work collaboratively together as colleagues. This, they felt, would lead to greater productivity and the sharing of responsibility for long-term projects.

Some of the experts interviewed voiced a desire to emulate the airline industry’s relationship with technology providers, remarking that the openness of technology in the airline industry is a significant advantage.

**Government**

*Some governments recognise the importance of rail – but others are yet to follow.*

Many rail companies are dependent on governments, at least in part, for some funding or for contracts in certain regions, and so work closely with both national and regional governments on this. In some countries, there is government acknowledgement of the importance of rail travel. There are pro-rail policies, political support for the rail industry, and funding dedicated to the improvement of rail infrastructure and the provision of high-speed rail; as a result, the rail carriers enjoy a good working relationship with government. In other countries, however, rail companies struggle to get rail travel onto the political agenda.

It is clear that government investment in rail networks differs greatly across countries and regions. Investment in areas like China is much higher than in Europe, for example. On the one hand, this is good, but on the other, it’s clear that there are, and will be, restrictions on companies that rely on government investment.
Intermodality – airlines and other transport providers

To build an intermodal future, rail companies need the technology that will allow them to interline with airlines and other travel providers.

The European Commission’s whitepaper promotes increased integration of rail with other modes of transport, such as air, coaches and buses. To some extent, intermodal products – such as air and rail – already exist, but these will become increasingly available and will help to differentiate rail companies’ offer to their customers.

As one interviewee remarked, not every airline has codeshare partners in every region – therefore there will always be areas where it makes sense for rail and air carriers to team up, and is in the business interests of both parties. Intermodality will, however, require flexibility and the ability to not only compete when necessary, but also work together when necessary. It will also require upgraded distribution and ticketing systems. As another interviewee remarked, rail companies’ relationships with airlines could change from one purely of competition to one of collaboration.

Partnerships with other industries

Partnerships with other industries could provide new revenue streams.

Some interviewees mentioned their ambitions to develop alliances with companies in other industries such as telecommunications, consumer goods, entertainment, and tourism. This is with the view to not only generate revenue (through cross-selling ancillary services from these companies), but also to learn from their expertise in rapidly growing and evolving industries. Relationships with these companies can also help rail companies to understand their customers’ needs, and to understand how other industries have met these effectively.

The European Commission’s whitepaper promotes increased integration of rail with other modes of transport, such as air, coaches and buses.
4. Future requirements

**Topline summary**
- Smartphones provide an on-the-go channel to the traveller.
- Technology standards will ease the transition to a deregulated rail industry.
- Rail companies need to provide e-tickets, as airlines already do, if they are to offer a serious alternative to air travel.

**Mobile**

*Smartphones provide an on-the-go channel to the traveller.*

The majority of interviewees cited mobile as an area of technology that will be particularly important in supporting their businesses in the future, particularly the ability to make bookings and facilitate mobile ticketing, as well as providing information to the passenger via this means.

Thanks to the boom in smartphone and tablet computer adoption, the consumer is used to having their own IT infrastructure, as one interviewee described it, in their pocket. Passengers expect the ability and flexibility to do things on the move, and until rail carriers enable this, they will fall short of passenger expectations.

**Standardisation**

*Technology standards will ease the transition to a deregulated rail industry.*

There is currently a lack of industry-wide standards across IT, distribution and ticketing schemes in the rail industry, which one interviewee identified as a “real problem”. The introduction of standards will make things easier and more comfortable for the passenger, as it will make processes easier, such as making changes to tickets and interlining with other rail carriers – eventually providing the interconnectivity that airlines already offer. This will allow rail companies to compete more effectively with air travel, and provide a more efficient service that makes it easy for the traveller to book the journey they require, regardless of the rail carrier used for different stages on the way to their destination. New regulation from the European Commission, detailed in section one of this report, will go some way to achieving this.

**e-ticketing**

*Rail companies need to provide e-tickets, as airlines already do, if they are to offer a serious alternative to air travel.*

A significant number of interviewees cited e-ticketing as one of the areas of technology that would greatly support their business in the future, and some, in fact, already provide or are starting to implement e-ticketing, although this is not currently widespread.

The widespread implementation of e-ticketing would allow rail companies to compete more effectively with air travel (where e-ticketing is the norm), especially for the corporate travel market. Business travellers are accustomed to the ease and flexibility of e-tickets, and a failure to implement this could prove a barrier to capitalising on the potential of this market.

Consumers expect to be able to book and buy tickets for a range of industries online, and paper ticketing is out of line with most consumer’s expectations in an increasingly online world. Only once the whole company’s processes are e-based, can a rail company make the shift to online sales and online after-sales.

E-ticketing also creates efficiency in back-end processing, and so will play an essential role in the modernisation of the rail industry.
Passenger information and communication

*Improved communication with the customer is essential if rail companies are to create a customer-focused business.*

A number of interviewees remarked upon the need to provide real-time information to the passenger, via their mobile, smartphone or other means, before, during and after the journey – whether this is in relation to scheduling, fares or delays. The rail industry, the consensus was, is not the most up-to-date in providing this service and can be slow to communicate with travellers. An improvement in this area would enhance the traveller experience, improve customer loyalty, and allow rail companies to differentiate and provide a competitive service. This is particularly true in times of disruption. One interviewee remarked that rail companies could learn a lot from airlines, where end-to-end customer relationship management is more advanced.

A number of interviewees also cited another important factor for the future with regard to passenger communication – they stated that it will be important to be able to capture passenger feedback and to gather the information that comes from the passenger, as well as enabling the transmission of information to the passenger. Once this has been collected, some interviewees voiced a desire for the ability to analyse this information better, to maintain customer profiles and to analyse the traffic across sales channels.

Improved operational systems

*Operations could benefit from upgraded systems that would improve service to the customer.*

A number of interviewees noted that improvements to their operational systems would help to support their business in the future. In particular, some saw *revenue management systems* as crucially important for future success – the implementation of which would bring rail companies in line with what is currently best practice in the airline industry. Improved revenue management systems enable a rail company to keep an accurate track of which routes are generating the best revenue, who their most profitable passengers are and how are they booking, and what activities and events must be taken into account to help set realistic sales forecasts.

A number of interviewees also noted *Customer Relationship Management (CRM)* systems will be increasingly important – one interviewee thought that “rail companies can learn a lot in the area of customer relationship management...they can learn a lot from airlines when it comes to end-to-end customer relationship management and all the opportunities this presents.” This need for improved CRM systems is reinforced by the ambition, cited by several interviewees, to build a customer-centric business. Some interviewees also mentioned a need for improved *field service management systems.*
# Contributors

Thank you to the 22 participants from the following companies who contributed to this study:

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Thank you to all participating companies for your contribution.