Profitable Cross-Border E-Commerce Industries

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SUMMARY

AS GLOBAL TRADE GROWS, ALL STAKEHOLDERS IN ONLINE INDUSTRIES ARE FACING NEW CHALLENGES, FOR INSTANCE, HOW TO MAKE CROSS-BORDER E-COMMERCE PROFITABLE. GLOBAL E-COMMERCE HAS BEEN GROWING, ON AVERAGE, 19% EACH YEAR AND IN CHINA, E-COMMERCE SALES GREW 130% IN 2011. ACCORDING TO JP MORGAN, BY 2015, E-COMMERCE WILL HAVE GROWN TO $1.4 TRILLION. IN DEVELOPING, EMERGING, AND MATURING MARKETS, MOBILE E-COMMERCE IS PROVIDING CONSUMERS WITH NEW PAYMENT METHODS TO PURCHASE GOODS AND SERVICES ONLINE. MOBILE E-COMMERCE IS EXPECTED TO GROW AT A FASTER PACE THAN E-COMMERCE AND JUNIPER RESEARCH PREDICTS THAT BY 2014, 580 MILLION CONSUMERS WILL PURCHASE GOODS AND SERVICES ONLINE WITH THEIR MOBILES.

This paper focuses on the ways in which five industries profit from the opportunities as presented by e-commerce. Consumers are being provided with a growing variety of alternative payment methods, which service a domestic market. We believe that cross-border e-commerce and m-commerce require card payment methods which offer global consumers worldwide coverage. More than half (52%) of global online consumers indicate they use credit cards as a common payment method and we do not expect this to change in the near future. Device independent, online card payments are accepted worldwide. Card issuers and the financial institutions involved in securely routing consumers’ payment transactions, have acquired decades of expertise in risk management; adapting their processes to new compliancy rules and changing regulations. If we look at the five industries, which are highlighted in this white paper, we see ONLINE RETAIL sales figures soaring high. The size of China’s online retail market is expected to triple over the next three years. The Compound Annual Growth Rate (CAGR) of online retail sales has reached an average of 13% in the past five years, with the emerging markets in the lead (China, 78%). We believe that those retailers who understand that the battle is fought on social media platforms, will be most
successful in winning the hearts and minds of a growing league of socially engaged global online shoppers who expect to be serviced via multiple channels, wherever they are, from anyplace, at anytime, anywhere, anyway.

The MUSIC INDUSTRY has been transformed by e-commerce, offering consumers the convenience of buying music tracks and CDs as digital downloadable data. As more countries apply stringent legal measures to counter digital music piracy, the sales of legal subscription-based digital music is bound to grow. Regardless of the business model, digital music will be purchased and paid online, presenting card payment solutions providers with exciting business opportunities.

Another e-commerce industry which benefits from the subscription-model is THE GAMING INDUSTRY. As Games are increasingly being played and paid online and as business models change, online gaming is becoming another lucrative online business segment in which games are transformed from products to services. Europe is still leading in terms of the amount of players, followed by Asia with the most paying gamers. Multiple device gaming is trending and so is F2P (Free-to-Play), a business model in which revenue is obtained from the sales of virtual goods. In 2012 the number of smartphone and tablet gamers in the USA, passed the 100 million mark, that is 43% of the population aged 10 to 65. This business segment grew with 52% over a period of 6 months.

As CLOUD COMPUTING evolves, Software Piracy is expected to decline. Online card payment solution providers and Acquiring Banks can profit from changing business models, by seizing the momentum offered by subscription-based Software as a Service (SaaS) sales. Card Processors, Acquiring Banks, Payment Services Providers and ISOS can establish their position in the Value Chain, if they understand this growing market.

THE TRAVEL INDUSTRY will equally benefit immensely from e-commerce as a growing amount of both leisure and business travelers choose to plan, book and pay their trips online. User Generated Content is becoming a great business enabler, particularly for the online travel industry, as travelers engage socially, sharing their travel experience online. The online travel is expected to grow to $313 billion by the end of 2012, representing 30% of the total travel market. In 2013, one third of all payments made for travel & tourism purchases will be made online.

Even though online travel is considered high-risk by most acquirers, because of the credit risk exposure linked to such future sales, we believe that the online travel industry can mitigate risk by adapting its business model.

BY CONNECTING TO AN ACQUIRING NETWORK IN WHICH PAYMENT SERVICE PROVIDERS, GLOBAL CARD PROCESSOR, AND GLOBAL DISTRIBUTION SYSTEMS (GDS) ENSURE SECURE PAYMENT, WHILE ACQUIRING BANKS ACCEPT LIABILITY, IN A PAYMENT ECO-SYSTEM IN WHICH ALL STAKEHOLDERS CAREFULLY DEFINE RESPONSIBILITIES, RISK CAN BE MITIGATED WHILE PROFIT CAN BE SHARED.

THIS WHITE PAPER WILL PROVIDE ACQUIRERS, IPSPS AND ISOS, WHOSE CUSTOMER BASE IS EXPANDING CROSS-BORDER, WITH VALUABLE INSIGHT INTO THE VARIOUS E-COMMERCE INDUSTRIES.

Regional trends are highlighted and we look at risk types related to these specific industries. We will see how business models adapt, in anticipation of a changing market and how these new business models present exciting business opportunities for global Card Processors, international Payment Service Providers, ISOS and Acquiring Banks, reaping the fruits of profitable cross-border e-commerce, by sharing knowledge and by connecting to one innovative and secure eco-payment network.
2 PROFITABLE CROSS-BORDER E-COMMERCE

/ RETAIL / MUSIC / TRAVEL /
/ GAMING / SOFTWARE /
2 ONLINE RETAIL
FROM MULTICHANNEL TO OMNICHANNEL STRATEGY

INTRODUCTION

IN THE US, ONLINE RETAIL (E-RETAIL) SALES FIGURES ARE EXPECTED TO REACH $279 BILLION, IN 2015. CHINA CURRENTLY HAS 130 MILLION ONLINE SHOPPERS, WHO WILL TRANSFORM CHINA INTO THE BIGGEST E-MARKETPLACE IN THE WORLD. CHINESE ONLINE RETAIL GENERATED $121 BILLION IN 2011, UP WITH 66% FROM 2010. THESE FIGURES ARE EXPECTED TO TRIPLE OVER THE NEXT THREE YEARS, WITH E-RETAIL SALES REACHING $360 BILLION BY 2015. THE GLOBAL COMPOUND ANNUAL GROWTH RATE (CAGR) OF ONLINE RETAIL SALES REACHED 13% OVER A PERIOD OF JUST 5 YEARS, WE SEE EMERGING MARKETS TAKE THE LEAD.

ONLINE RETAIL SALES GROWTH FOR THE TOP FIVE MARKETS IN THE E-COMMERCE INDEX
CAGR, ONLINE RETAIL SALES 2006 - 2011

CHINA
BRAZIL
RUSSIA
CHILE
MEXICO

Source: Euromonitor
Online multichannel excellence has become an imperative for success. Internet retailer expects mobile e-commerce in the US to grow with a 99% to nearly $21 billion in 2012, growing nearly 10 times faster than e-commerce. In 2012, m-commerce sales will account for about 9.2% of all U.S. e-commerce and online retail is one of the fastest growing m-commerce industries in the world.

With e-commerce and m-commerce thriving, 56% of online retailers in a 2011 Forrester Survey said they plan to invest in innovative e-commerce technology. Driven by the need to sell into multiple foreign markets, 25% of surveyed e-business executives, plan to change their e-commerce payment platform within the next 2 years. Online retailers understand the business opportunities through profitable cross-border e-commerce, once best practices in multichannel sales are achieved and an omnichannel strategy has been implemented. These are very promising figures for global card processors, international Payment Service Providers (iPSPs), ISOs and Acquiring Banks, indispensable in the value chain. Global acquiring networks are the highway for e-commerce expansion across the various regions.

A growing global internet generation (Generation Z) of online shoppers gravitates towards social media engagement. User opinions expressed in blogs and online product reviews can help online retailers improve their products and services. 70% of social network users shop online, while 53% of these individuals follow a brand via social networking (source: Nielsen). Retailers need to consider these facts, before adapting their business model. Listening to the needs and concerns of your target-audience becomes a key-strategy to reach out to your consumers.

Different studies have indicated that online shopping offers consumers a much broader spectrum in a greater variety of product lines, the freedom to compare products, services and prices and increased comfort. Experienced online shoppers select online retailers which do not charge for shipping. According to PwC, online retailers can gain an additional margin opportunity of up to 10% by offering their customers free shipping. Those online retailers who understand that the battle is fought on social media platforms and blogs, by listening to their key audience in the world’s largest retail markets, will be most successful in winning the hearts and minds of a growing league of socially engaged global online shoppers. Suppliers and retailers will have to partner with global Card Processors which connect them with a network of international Payment Service Providers and Acquiring Banks in the different regions. Only then, will e-commerce and m-commerce offer retailers’ global expansion, through profitable and secure cross-border e-trade between the different regions.

### 2.1. BUSINESS MODELS AND ONLINE PAYMENTS

**FROM MULTICHANNEL TO OMNICHANNEL**

Online shoppers worldwide want to search, compare, review and buy products and services across a variety of channels. Whether card transactions are made via tablets or mobiles, consumers want the freedom of choice combined with the comfort, offered by a multi-channel shopping experience. Unlike traditional multichannel shoppers, this consumer uses all...
channels simultaneously. In addition to other channels, mobile payment methods enable consumers to compare prices and access product reviews in real-time while on the move, transforming mobile phones into key business enablers in an omnichannel retail consumer experience. Omnichannel retail allows consumers to experience the brand, not a channel within a brand. Whether purchases are made offline or online, they are researched through multiple channels. IDC Retail Insights Report estimates that omnichannel shoppers spend 15%-30% more than multichannel shoppers. Retailers will have to transform their business model from multichannel “connecting the channels” to omnichannel “blending the channels” Sales. This requires investment in ICT solutions, third party partnerships with global CNP payment solution providers and smart alignment between sales and marketing strategies.

Global adoption of smartphones, tablets and other innovative digital devices are great business enablers for multichannel online retail growth. It allows consumers to shop anywhere, at any time from any device; to research a brand or product online, to read user reviews on blog-sites and via social media, to scroll through e-catalogues, where potential customers compare prices and having the freedom to decide where to buy which product in which (online) store. Freedom and comfort is what consumers aim for.

THERE IS A REMARKABLE CONSISTENCY IN E-CONSUMER PURCHASE BEHAVIOR ACROSS ALL TERRITORIES AND DEMOGRAPHICS, WHETHER CONSUMERS LIVE IN A MATURE, A DEVELOPED OR IN A DEVELOPING MARKET. CONSUMERS ARE BECOMING EXPERTS IN MULTICHANNEL SHOPPING, BUYING ACROSS A GREAT VARIETY OF RETAIL PRODUCT CATEGORIE-
2.2. REGIONAL TRENDS

2.2.1. TRENDS IN THE ASIA-PACIFIC REGION (APAC)

Asia and the Pacific are culturally, historically and linguistically extremely diverse. This reflects in an online retail landscape, varying from developing India, to maturing markets such as South Korea and Japan. China and India are giants in terms of population volume, but there are enormous challenges to overcome. Even though internet penetration is still relatively low, China already has the highest amount of internet users in the world, while South Korea and Japan, where online retail has developed through e-commerce and m-commerce, have developed ahead of Europe and the US. These markets have developed to such extent, that consumers are comfortable to make online payments through contactless QR-codes, NFC and other innovative mobile payment methods. Notwithstanding its maturity-level, Japan’s online retail market is still growing at 12% a year. 70% of Japanese internet users already shop online, which means future growth in Japan will have to come from greater spending per person.

South Korea is amongst the countries with the highest internet penetration in the world, with broadband internet and an early introduction of 3G services at relatively low pricing, thanks to South Korean government initiatives. Consumer confidence index of 99.0 and high disposable income stimulate online retailing in South Korea, where “Generation Z” scrolls through social networking sites and blogs as research tools to support smart online shopping. B2B sales transactions helped boost South Korea’s e-commerce, which is expected to reach $236.9 billion in the first quarter of 2012. Online sales, contributes 8.5% of total retail sales in South Korea.

Global research and advisory firm Forrester, expects online retail in Japan, South Korea, and Australia to grow at rates more in line with those of the US and developed e-commerce markets of Europe. These three APAC markets are attracting increased investment as a growing number of both domestic and foreign players launch new online offerings in these countries. Australia and New Zealand are especially appealing for US, Canada and the UK, due to the fact that they share a common language.

A BILLION FINGERS CLICKING
ONLINE PERCENTAGE OF TOTAL RETAIL MARKET

China currently has 130 million online shoppers. Chinese e-commerce grew with a 130% in 2011. Online retail generated $121 billion in sales in 2011, 66% growth, compared to 2010. The size of China's online retail market is expected to triple over the next three years, with sales reaching $360 billion by 2015. China’s middle-class is estimated to grow from 200 million to 800 million people over the next 20 years and by 2015, 700 million Chinese Internet users - twice the online population of Japan and the U.S. combined.
2.2.1. will surf the worldwide web, engage in social media and search for attractive deals. China is becoming the biggest online market of the world.

Chinese online shoppers, including those in Hong Kong, are quite unique when compared to online shoppers in other countries. Chinese multichannel shoppers purchase 60% of their clothing, footwear, books, music and films online, while figures in the rest of the world lie around 45%. 60% of Chinese online shoppers directly buy from Brands, bypassing Retailers. Interestingly, Chinese online shoppers seem to skip online shopping via PC and move straight to online shopping on mobile devices. 58% reported using smartphones to browse social media sites.

Chinese consumers distrust official news sources and local advertisement agencies and rather rely on recommendations from peers. 90% of Chinese online shoppers use social media during their selection and decision-making process and over 40% of online shoppers in China read and post reviews online — about twice the percentage of online shoppers in the US, says Boston Consulting Group. Retailers and PSPs with plans to expand their footprint into China and Hong-Kong should consider the impact of social media and integrate this factor into their business plan/model.

ACCORDING TO A 2012 MCKINSEY SURVEY, THE MOST POPULAR CHINESE SOCIAL MEDIA SITES ARE:

- Qzone
- Sina
- Weibo
- Tencent
- Weibo
- Renren
- Kaixin

QZONE HAS BEEN DEVELOPED BY MARKET LEADER TENCENT AND IS SIMILAR TO MYSPACE. IN MARCH 2011, QZONE HAD 480 MILLION USERS. TENCENT WEIBO AND SINA WEIBO EACH OFFER THE SAME TYPE OF SOLUTIONS, TARGETING DIFFERENT MARKETS.
They combine features, similar to Facebook and Twitter and allow users to micro-blog and to create their own Web pages. Sina Weibo currently has 368 million users, which post 100 million messages each day. Just like Facebook, Renren first started off as an exclusive social media site for students, but Renren has managed to spread across different audiences. In Q1 of 2011, Renren had 160 million registered users. Kaixin started off as an e-gaming site, targeting office workers, but Kaixin has developed into a social media site similar to Facebook.

Alibaba, Baidu en Tencent are Chinese market leaders, each in their own market segment: e-commerce, search and messaging. In China, C2C transactions between individuals still represent 87% of online retail. 90% of those transactions are executed via Alibaba-owned Taobao, China’s answer to eBay. An average of 48,000 products per minute was sold via Taobao in 2010 alone, more products than those sold by China’s top 5 “brick and mortar” retailers combined. Most Chinese transactions are processed by Alipay, a payment system very much comparable to PayPal. Alipay also processes over 20% of B2C sites. The second largest B2C Retailer is China’s equivalent of Best Buy, called 360buy.com, which generated $5 billion in sales in 2011.

**PERCENTAGE OF SHOPPERS FOLLOWING BRANDS THROUGH SOCIAL MEDIA**

0 % 10 % 20 % 30 % 40 % 50 %

HK
China
US
UK
Switzerland
Germany
Netherlands
France

Source: PwC Survey

Individual brands increasingly set up shop, selling directly to consumers. This offers challenging opportunities for global payment solution providers which provide online retailers with multi-currency conversion, risk management tools and a payment network which connects East with West, throughout one payment platform, in partnership with acquiring banks within the different geographical regions.
Online Retail Growth Rates in China

Source: iResearch

Business-to-consumer (B2C) Retail is catching up with C2C, which has long dominated China’s online transactions landscape. **AK KEARNEY ESTIMATES THAT B2C TRANSACTIONS WILL MAKE UP 40% OF THE MARKET BY 2015.** International online retailers in the consumer technology arena (Apple, Dell, SonyStyle and Office Depot) already operate in multiple Asian markets.

India’s online trade is expected to grow five-fold in 2016, due to its sheer number of inhabitants, a growing middle-class and the interest global brands show for a country in the early stage of e-commerce development. Low banking penetration, a rather high mobile penetration, a large rural class with poor access to a developing infrastructure is delaying India’s e-commerce boom. These factors could prove to become the perfect conditions for m-commerce to pick up speed in a country in which 100 million surfs the web and 30 million Indians search for online bargains. The travel industry has benefited most from e-commerce ($8.4 billion/ 77% share of the total e-commerce market) and online retail is soon expected to follow in its footsteps. Having said this, Giants such as China and India are still developing, compared to leaders such as Japan and South Korea and “the tigers” Hong Kong, Singapore and Taiwan.

2.2.2. Trends in Europe

Europe’s multilingual, multicultural landscape is rather complex for international retailers, with ambitions to expand their global footprint, but the European Commission has taken measures to reduce this complexity by unifying initiatives such as SEPA. The big advantage of the European market is that the EU enjoys a very high
credit & debit card penetration, combined with a high banking penetration, a high internet- and a high mobile penetration. This has created the perfect online payment landscape for e-commerce to thrive. In Germany, Switzerland and France, more than 50% of consumers shop online. Even though the Western European average still lies around 40%, the percentage of consumers which shop online in the UK and in the Netherlands is expected to have reached 70% by 2015. In most of Western Europe, making online payments transactions from PCs, tablets or mobile phones has become a welcome alternative to the traditional “brick and mortar” shopping in busy department stores.

According to Forrester estimates, online retail sales in Western Europe will have increased by 7.84% over 2014, from $169.31 billion (€123.92 billion) to $182.53 billion (€133.64 billion). The projected compound annual growth rate (CAGR) for Europe over 2010-2015 is 12.47%.

### E-RETAIL SALES IN EUROPE 2009 - 2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales in Billion Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>68.7</td>
</tr>
<tr>
<td>2010</td>
<td>81.3</td>
</tr>
<tr>
<td>2011</td>
<td>91.9</td>
</tr>
<tr>
<td>2012</td>
<td>103.1</td>
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</tr>
<tr>
<td>2014</td>
<td>123.9</td>
</tr>
<tr>
<td>2015</td>
<td>133.6</td>
</tr>
</tbody>
</table>

European Union online retail sales will grow from US $112.1 billion in 2010 to $184.6 billion by 2015, a compound annual growth rate of 10%. Forrester Research predicts. The number of online shoppers in the 17 EU nations will grow from 275 million to 303 million in that period. Source: Forrester Research, February 2011

Total UK online retail spending is set to grow with 15% in 2012, reaching £31.2 billion. Consumers aged 55+ are an underestimated audience, while this group may well outpace all other age groups between 2011 and 2016. Smart online retailers can benefit from this undervalued age group, by targeting 55+ consumers through marketing campaigns which highlight the convenience and transparency of online shopping, and e-groceries. This accounts especially for rural European areas, where credit card and internet penetration is high. Verdict forecasts a 31.9% rise to almost 10 million online shoppers aged 55+ between 2011 and 2016.
Online retailers have to bear in mind that the 55+ age-group is more concerned about fraud and ID-theft than any other age group. A Verdict Research survey further reveals that 7.4% of all surveyed 55+ online shoppers use a tablet.

Scandinavian market leader IKEA is a perfect example of a European retailer which has quickly adapted its business model, across the different age-groups. IKEA has understood the power of multichannel marketing, distributing hard-copy catalogues, combined with a transparent website, online catalogues and tools by which their audience view, reviews and plans their home interior. Their website provides both online and in-store buyers with detailed and updated information regarding product availability. As we expect department stores to become showrooms, as an extension of online sales, IKEA has set an example for other European retailers who are converting their stores into fulfillment centers.

Russia is not part of the EU, but with 60 million internet users and 15 million potential online shoppers, Russia has the largest online population of Europe. With a very high mobile penetration, but an underdeveloped financial and logistic infrastructure and a population of which only 20% possesses a credit card, m-commerce offers Russians the ideal payment solution for an online retail market, expected to grow to $16 billion by 2016. Russia is also an interesting market for alternative cash-based payments, such as VISA Qiwi and WebMoney.

Trends in Latin America (LATAM)

B2C e-commerce in Latin America is still developing, with sales reaching $36.82 billion in 2012 (source: eMarketer).

Consumers in Latin America are some of the most active internet users when it comes to entertainment sites and social networks, but Latin Americans are still reluctant to purchase products online. eMarketer estimates that only 31.7% of internet users in Latin America will make online purchases in 2012. So far, the travel industry and the entertainment industry (e-Tickets) have benefited most from e-commerce and m-commerce, followed by computer electronics, clothing & footwear and books.

Brazil has a large internet population, a very high mobile penetration and an increasingly accessible broadband infrastructure, which accounts for the fact that over 50% of Latin America’s e-commerce sales come from online shoppers in Brazil, Latin America’s largest economy. The top products sold online included tickets for entertainment or travel, purchased by 30% of respondents, computer accessories (22%), clothing/footwear/accessories (22%) and books (16%). B2C e-commerce sales in Latin America, is expected to grow from $43.34 billion, in 2013 to $62.42 billion in 2016.
Despite Brazil’s dominance, Argentina and Mexico will be the driving forces behind Latin America’s e-commerce growth throughout the forecast period, though Brazil will continue to record double-digit increases through 2014. This is partly due to the fact that LATAM has a very high Social Media penetration. 114.5 million Latin Americans regularly visit a social networking site in 2011, representing 96% of the entire online population in the region. Five of the top 10 markets ranked by Facebook.com reach are in Latin America. Venezuelans have a strong preference for Twitter, while Facebook is generally popular all through LATAM and Brazil ranks as the 6th largest market for the Google+ globally. Social media penetration stimulates e-commerce and m-commerce as a whole, as users share reviews and tips about special deals with their online peers, via Blogs, Facebook and Twitter. The popularity of social media networks offers e–retailers great business opportunities, once they have put a solid multichannel marketing strategy in place.

**FORRESTER’S FORECAST: ARGENTINA ONLINE RETAIL SALES**

<table>
<thead>
<tr>
<th>Amount</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6 BILLION</td>
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</tr>
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<td>3.9 BILLION</td>
<td>2016</td>
</tr>
<tr>
<td>4.5 BILLION</td>
<td>2017</td>
</tr>
</tbody>
</table>

Source: Forrester Research Online Retail Forecast, 2012 To 2017 (Latin America) Note: US$1 = ARS 4.35 (based on 2012 exchange rate)
An analysis of consumer preferences regarding purchasing at international versus local e-commerce websites revealed that consumers in Argentina have the strongest preference to shop at local websites with 3 out of 4 consumers preferring this option. More than half of consumers in Brazil and Colombia also preferred shopping at local websites, while slightly more than half of consumers in Mexico, Chile and Peru preferred international websites for online shopping (comScore).

Mexico has the fastest growing internet penetration in the world, with an online population, double that of Argentina’s has the fastest growing internet penetration in the world, but its online retail industry is still developing, due to slow technological adoption, a developing infrastructure, challenges related to delivery and a relatively low credit card penetration. Chile, on the other hand, has a very high card penetration. Average Chileans own four credit cards and 70% of Chileans and Uruguayans shop Online. Chilean leading retailers Falabella and Cencosud own 40% of Chilean online retail. In Brazil B2W and Magazine Luiza own 30% of Brazil’s online retail market.

MercadoLibre is Latin-America’s answer to e-Bay. It is an e-commerce payment platform which facilitates transactions between persons and businesses. Created in Argentina, MercadoLibre now has operations in twelve Latin American countries and Portugal. Brazil remains the most advanced and largest e-commerce market. Brazil represented more than half of MercadoLibre’s total revenues of $83.7 million in Q1 2012.

Online retailers worldwide need to consider the huge opportunities offered by a LATAM Market in which one common Spanish language interconnects most of Latin America. This reduces the scope of challenges which large online retailers, interested in cross-border e-commerce have to face in multi-lingual markets across Europe and Asia. In a highly monopolized market, emerging online retailers can make a difference by partnering with global Card Processors with a network of internationally connected payment service providers, within one worldwide acquiring network of connected Banks in the different regions. An online payment expert in card processing with knowledge of local legislation and the ability to provide consumers with a variety of payment methods, with multi-currency options, will help such online retailers connect and grow their footprint within Latin America and beyond.

In the US, online retail (e-Retail) sales figures are expected to reach $279 billion, in 2015. U.S. online retail spending reached a record $161.5 billion in 2011. In the final quarter of 2011, online retail spending in the US reached $49.7 billion, 14% up against the last quarter of 2010. Forrester projects that US online retail sales in 2015 will grow from $278 billion in 2014, to $327 billion in 2016. The top-performing online product categories were: Digital Content & Subscriptions, Jewelry & Watches, Consumer Electronics, Toys & Hobbies, and Computer Software. Each category grew at least 18 percent vs. year ago (source: comScore).
E-RETAIL SALES IN US 2011 - 2016
IN DOLLARS

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (Billion)</th>
</tr>
</thead>
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<td>202</td>
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<td>278</td>
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<td>2015</td>
<td>304</td>
</tr>
<tr>
<td>2016</td>
<td>327</td>
</tr>
</tbody>
</table>

Source: Forrester; Online consumers will increase their spending 62% by 2016, according to Forrester Inc.

In an analysis of data retrieved from U.S. retailers ranked in Internet Retailer’s “Mobile 400” Guide, US mobile commerce (m-commerce) sales will grow 98.6% this year over 2011 to reach $20.85 billion. Giant online retailer Amazon tops the chart; its mobile sales will reach $4 billion in 2012. Apple Inc. conquers the second place in the chart, hitting $1.17 billion in web-only sales of apps, music, video and e-books. Internet Retailer projects that in the US, 281 retailers are on track to grow their combined mobile sales by 83.2% to $7.99 billion, from $4.36 billion in 2011.

SMARTPHONES AND TABLETS PLAY AN IMPORTANT ROLE IN THE GROWTH OF ONLINE RETAIL, where consumers increasingly use their smartphones to check prices, read customer review and product features and purchase products. According to a Javelin Strategy & Research report, tablets accounted for about $5 billion of mobile purchases. Even though m-commerce increasingly dominates online retail sales figures, there are retail categories which attract more e-commerce than m-commerce traffic; online computer & electronics (16% growth), online apparel & accessories sales (12.30%), food & drugstores (2.31%), hardware & home improvement (2.42%) and office supplies accounting for 4% in e-commerce sales.

By 2020, successful online retailers will have to be fully digitally integrated, data mining consumer understand purchase behavior of their audience, employing social media, and leveraging two-way communication channels with their workforce. Social media will have become a powerful business enabler and supply chains will be transformed at the back end, leading to fast home delivery, less working capital, greater efficiency and higher profit-ability.

American and Canadian online retail will have boomed through business models promoting its convenience and efficiency in urban and in rural areas, miles away from crowded business centers. Customer loyalty will be achieved through social media strategies and inbound marketing and traditional retail department stores will be transformed into strategically-located showrooms. American and Canadian online retailers should analyze consumer behavior in maturing markets such as South Korea and Japan and in giant Emerging Markets, such as China and Brazil. This can provide them with key-indicators, to understand
how other markets will develop within the next decade.

Canadians would rather prefer domestic online shopping, but Canadian retailers have struggled to provide consumers with multichannel shopping options. During an economic recession, American online retailers grabbed the opportunities offered by entering into the Canadian market. eMarketer estimates that by 2015, Canadians will spend $30.0 billion (CAD30.9 billion) on online retail. 75% of Canadians live within 100 miles of the US-Canadian border. Even though shipping costs are high, 60% of Canadian online shoppers have purchased goods cross-border, from US online retailers. This may account for the fact that 37% of the world’s cross-border power shoppers live in Canada. Canadian retailers should invest in omnichannel strategies and partner with experts in card payment solutions; a global Card Processor, which allows Canadian retailers to expand both domestically and cross-border, through one global acquiring network of banks and iPSPs.

Credit Card payments remain preferred payment method in both the US and in Canada and with m-commerce outgrowing e-commerce, innovative start-ups which provide consumers with ease-of-use secure mobile payment methods which involve credit cards will prove to be very successful. Tablets are also attracting new shoppers, who prefer to scroll through a screen larger than smartphones, but easier transportable than laptops.

According to a study conducted by Empirix and the Customer Experience Foundation in September 2011, only 54% of US companies had an overall mobile strategy in place and only 41% of US companies had invested in 2G technology.

US ONLINE PAYMENTS MIX

Source: Javelin Strategy & Research, 2011
2.3. RISK MANAGEMENT

THE YEARLY LEXISNEXIS® TRUE COST OF FRAUD STUDY PROVIDES AN INSIGHT INTO THE VARIOUS WAYS IN WHICH FRAUD AFFECTS U.S. MERCHANTS, CONSUMERS AND FINANCIAL INSTITUTIONS.

FRAUD DEFINITION

For the purpose and scope of this study, Fraud is defined as the following:

- Fraudulent and/or unauthorized transactions
- Fraudulent requests for a refund/return: bounced checks
- Lost or stolen merchandise, as well as redistribution costs associated with redelivering purchased items

Their research does not include information on insider fraud or employee theft.

In 2012, e-Merchant Executives agree that an increase in Card-Not-Present (CNP) fraud is partially responsible for a rise in chargebacks. Large merchants are now paying $2.4 p/$1.00 of chargebacks incurred.

Interestingly, Credit Card Fraud has dropped to 60% of total fraudulent transactions in 2012 compared to 65% in 2011. Financial Institution executives identified a variety of continuing fraud types, such as counterfeit cards, CNP fraud, skimming and merchant account take-over. Merchant account takeover is an emerging fraud technique used by scammers who gain access to merchant’s account through which they conduct fraudulent transactions. This method is very rewarding for the perpetrators and has a major impact on business.

According to Fraud The Facts 2012 (Financial Fraud Action UK, 2011), 65% of all card fraud in the UK ($341.9 million) was due to CNP Fraud, while $34.8 million was due to Card ID theft. The total fraud losses on UK-issued credit cards in 2011 represented $527.8 million. These figures are representative of Fraud loss in Europe’s card-oriented market.
Cybersource’s Online Fraud Report 2012 revealed, that 2011, 56% of all surveyed merchants used an automated screening system. The same survey reveals that the merchants surveyed rejected 2.8% of orders due to suspicious payment fraud. 75% of these merchants manually reviewed 27% of the orders reaching their websites.

Merchants should not underestimate the impact of Fraud on customer loyalty, as surveys indicate that 33% of consumers who fell victim to Fraud will avoid this merchant in the future, not to mention the reputational damage a merchants risks when defrauded consumer share their negative experience via powerful social media channels.

Joint actions between card schemes, payment solutions providers, Acquiring Banks, risk management solution providers and government agencies have made it possible to decrease Credit Card Fraud in the UK by 7% in 2011. Online merchants should improve business processes, related to Risk Management and invest in innovative technology. By partnering with international Payment Service Providers with in-house expertise of the risk related to CNP Payments or by partnering with a Global Card Processor with connections in the various regions and knowledge of local compliance laws and anti-Fraud regulations, an online retailer can reduce complexities involved with Fraud prevention. A global acquirer with relationship with banks worldwide, applying one proven underwriting protocol and enhanced due diligence (EDD) as required by regulators and card schemes, will help online retailers grow their business cross-border, while mitigating risk.

2.3. You avoid certain merchants
You installed antivirus anti-spyware or a firewall on your computer
You receive email or mobile alerts about your credit card or checking account
You use online banking
You avoid online registration requiring personal information
You installed antivirus anti-spyware or a firewall on your computer
You spent less money
You turned off delivery of paper statements or bills
You put fraud alerts on your credit reports
Source: Javelin Strategy & Research
3 PROFITABLE CROSS-BORDER E-COMMERCE

/ RETAIL / MUSIC / TRAVEL / 
/ GAMING / SOFTWARE /
3 THE DIGITAL MUSIC INDUSTRY

CHANGING LEGAL LANDSCAPE, REQUIRES SECURE CARD PAYMENT SOLUTIONS IN AN EXPANDING MARKET

INTRODUCTION


Ten years later, digital music revenues have soared to an estimated US$ 5.2 billion. In 2011, record companies saw sales of digital music grow with 8% globally. Digital music has become a branch of the digital entertainment industry, which has benefitted tremendously from e-commerce. In order to scale-up and reach larger audiences, we have seen a number many strategic partnerships launched between Telecom giants and Digital music Service providers

As Piracy is losing ground through legal acts implemented worldwide, legal download of music through a growing amount of trendy digital music service providers’ offers global consumers access to libraries which contain millions of songs, legally downloadable at a reasonable price, on a variety of devices, such as mobile phones, laptops, iPods and iPads. The need for digital music is universal. People search for music and the appreciation of music crosses geographical boundaries. In order to pay for these downloads, whether subscription-based or through payment-per-album, online payment solutions are required.
We believe that global Card Processors, international payments service providers and Acquiring Banks can play a crucial role in the value chain, by offering digital music service providers secure PCI DSS Compliant payment solutions and multi-currency processing, which enables them to sell their services beyond their own region, through profitable cross-border e-commerce.

3.1. BUSINESS MODELS & ONLINE PAYMENTS

Consumers pay online with their credit cards from their PC, laptop or Smartphones to buy digital music per song, per album, or by signing up with a digital music provider, which offers customers periodical subscription-based access to musical libraries with millions of songs.

Some consumers prefer to search and buy albums. According to data and sales tracking system Nielsen SoundScan, digital album volume sales has grown steadily in recent years, with US and UK digital album sales in 2011 up by 19% and 27%. In the US, digital album sales already account for 31% of all albums sales and in the UK this percentage lies around 24% by sales volume.
3.1. DIGITAL ALBUM VOLUME SALES GROWTH IN 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>+19%</td>
</tr>
<tr>
<td>UK</td>
<td>+27%</td>
</tr>
<tr>
<td>France</td>
<td>+23%</td>
</tr>
<tr>
<td>Global (Est.)</td>
<td>+23%</td>
</tr>
</tbody>
</table>

Source: Nielsen Soundscan, Official Charts Company/BPI, GfK, and IFPI estimates.

In some markets we see over half of their revenues derive from digital channels. This is especially true for the US (52%), South Korea (53%) and China (71%). Sales of single tracks have gone up in the US, UK and especially in France (23% according to GfK).

APPLE HAS BEEN A GREAT DRIVER, DIGITALIZING AND TRANSFORMING THE MUSIC INDUSTRY THROUGH ITS DEVICES AND THROUGH ITUNES. IN 2011, 28 ADDITIONAL COUNTRIES WERE GIVEN ACCESS TO ITUNES, WHOSE MARKET HAS REACHED 50 COUNTRIES, INCLUDING THE ENTIRE EUROPEAN UNION. CONSTANTLY INNOVATING, APPLE OFFERED ITS USERS THE POSSIBILITY TO STREAM FROM A “CLOUD”, INCLUDING SMARTER WAYS TO ENHANCE USER EXPERIENCE IN TERMS OF THE WAYS IN WHICH THEY MANAGE AND STORE THEIR MUSIC. LEADING THE WAY, APPLE LAUNCHED ITS ITUNES MATCH SERVICE IN NOVEMBER 2011. USERS ARE BEING GIVEN ACCESS TO THEIR MUSIC LIBRARIES FROM THE FULL RANGE OF DEVICES FOR FIXED PRICE OF $25 A YEAR.

The subscription model attracts consumers through free but limited access, which offers users ways similar to which software vendors offer free trial periods. Free Premium (Free-Premium) gives users the opportunity to search and listen to music, while advertisements provide the vendor with revenue, after which a substantial percentage of users will ultimately pay for a periodical subscription which gives them unlimited access to millions of songs, without being disturbed by advertisements.

The number of digital music subscriptions has increased with 65% in 2011, exceeding 13 million. Notwithstanding the business model or the payment method, downloading legal musical content requires secure online payment solutions, crucial to process card transactions between subscribers and digital music provider.

ESTIMATED PAYING SUBSCRIBERS TO MUSIC SUBSCRIPTION SERVICES GLOBALLY

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>8.2 Million</td>
</tr>
<tr>
<td>2011</td>
<td>13.4 Million</td>
</tr>
</tbody>
</table>

Source: IFPI estimates.
3.2. REGIONAL TRENDS

3.2.1. TRENDS IN THE ASIA-PACIFIC REGION

WITH A POPULATION OF 1.3 BILLION, CHINA IS THE BIGGEST POTENTIAL ASIAN MARKET, WITH A GROWING MIDDLE-CLASS, EAGER TO RELISH THE ADVANTAGES OF DIGITALIZED MUSIC. UNFORTUNATELY, CHINA IS ALSO THE COUNTRY WITH ONE OF THE HIGHEST DIGITAL PIRACY RATES IN THE WORLD. FEDERATIONS AND INTERNATIONAL FORUMS SUCH AS IFPI AND IACC, WHICH DEVELOP STRATEGIES TO TARGET PIRACY AND CORRUPTION HAVE EXPRESSED THEIR APPRECIATION FOR THE WAYS IN WHICH CHINA HAS SHOWN ITS COMMITMENT TO FIGHT PIRACY. THE STAKES ARE HIGH. CONFIDENT ABOUT THE FUTURE, THREE INDUSTRY LEADERS: SONY, UNIVERSAL AND WARNER, STRUCK A PARTNERSHIP WITH CHINA’S LARGEST INTERNET COMPANY, Baidu, which had already signed a licensing agreement with EMI.

A global Card Processor, connected to Acquiring Banks all over the world will seize the opportunity to grow its footprint in the largest market of the world, while enabling Chinese digital music service providers to expand into other regional markets.

One successful example is Soliton Music, partnering with Payvision. Soliton offers millions of Asian consumers a subscription-based, music platform combined with social networking functions, compatible with iOS/Android smartphones, Smart TV, DVD Player, web browser and other portable devices. CMHK Soliton Music is provided by China Mobile Hong Kong, which allows subscribers to enjoy music download and streams, share celebrities and friends’ playlists, including innovative functionalities, such as voice recognition. In March 2012, Soliton Music partnered with global card payment solutions provider Payvision, offering Soliton a PCI DSS Compliant, secure payment platform, and a transparent interface to service credit card processing. This partnership streamlines Soliton’s payment and back-end processes and is exemplary for the ways in which profitable cross-border e-commerce brings stakeholders from different continents together, connected through one global acquiring network.

South Korea is another great example of an Asian country in which the digital music market benefited enormously from a smooth collaboration between all stakeholders, within a sound legal landscape which anticipated the consequences of digital music piracy and acted...
in time. The South Korean government began to update its Copyright Law in 2007, requiring online service providers to filter illegal content on request from rights holders. The measures which South Korea has taken to tackle digital piracy are implemented by the Korea Copyright Commission (KCC). 70% of infringing users stop on receipt of a first notice and three quarters of the remaining 30% stop after a second notice. These legal measures have led to a significant market growth including an estimated 3 million subscribers of digital music service providers. The most popular service is MelOn, followed by MNET.

KKBOX is a major digital music services provider in Hong Kong and Taiwan, where Omusic also launched an ISP bundled service, while in APAC, we also witnessed 7digital announce its services in Australia and New Zealand, Malaysia and Singapore. 7digital is now available in 37 countries worldwide.

3.2.2. TRENDS IN EUROPE

In Scandinavia, the subscription-based model has been extremely successful. Swedish subscribers accounted for 84% of digital revenues in 2011, subscriptions in France increased with 90% in the same year (SNEP).

Deezer is a digital streaming service that was established in France in 2007 and is expanding globally, servicing the UK in partnership with Orange (Everything Everywhere). Deezer also offers its users integration with Facebook, enabling artists and fans to legally share their music. Partnering with Social Media is one way to upscale and reach a global audience. Partnerships with ISPs and Telecom companies have proven to be a successful strategy through which these companies expand their geo-footprint. Deezer has the ambition to expand its services into 80 countries across Africa, APAC and Latin America, by the end of 2012. Similar partnerships were launched by Spotify, tying up with Virgin Media and with Telia and Telenor in Scandinavia and by Cubo Musica which partnered with Play Me and Telecom Italia. As Ireland’s largest ISP, Eircom operates its own MusicHub service, offering subscription and downloads and using its reach.

In Austria and Germany, JUKE, Rdio and Simfy offer digimusic, while WiMP has paying subscribers across Norway, Sweden, Denmark, Germany and Portugal. WiMP partnered with Scandinavian Telenor and Norwegian Canal Digital to offer the service bundled with a TV subscription and it partnered in Portugal with Portugal Telecom.

3.2.3. TRENDS IN LATIN AMERICA

iTunes has expanded into 16 Latin American countries and US-based Rdio, launched its subscription-based services in Brazil, in partnership with local mobile operator Oi. With a population of 200 million, Brazil is the world’s fifth largest telecom market. Selling consumers downloadable music via Mobile apps is booming business in a country with one of the highest mobile penetration in the world. Latin-Americans love to listen and share music on their phones and with legislation catching up on piracy, Brazilians are increasingly willing to pay for it. Terra Networks, S. A., is the Hispanic answer to Spotify. As part of Telefónica Group, Terra operates in Spain, the US and in 16 Latin American countries. As part of Terra, Terra Music focuses on musical preferences of the Latin – Spanish and Portuguese speaking-market. Brazilian payment services provider Braspag, seized the opportunity, by entering a partnership in which Braspag processes Terra’s card payments.
Telecom giant America Movil partnered with Warner Music, Sony Music, Universal Music, and Emi Music to introduce its online music store dubbed ‘IdeasMusik’ in February 2012, offering consumers an online catalogue currently including 16 million songs. Google Music is Google’s answer to iTunes, offering millions of Android tablet and smartphone users access to a growing library of millions of songs. Google Music can take advantage of Google+ Network through which a user can share his enthusiasm about a purchased song ($1) with its network. Google Music plans to expand into Latin America in the end of 2012.

3.2.4. TRENDS IN NORTH AMERICA & CANADA

Digital growth has helped revive the US music market. Rhapsody announced in December 2011 that it was the first US streaming subscription service to amass more than one million paying customers. Muve Music was built specifically for mobile phone use. By the end of 2012, Muve Music expects to be the number two subscription music service in the US. Muve Music is an example of a new subscription service that is being hard bundled into a wireless rate plan.

European Market leader Spotify has 15 million users of which 4 million are paying subscribers, a number which is growing steadily after Spotify recently expanded into new markets, including the US. New major players are following. Google launched a new music service in the US, Google Music, in November 2011 for the Android platform. Consumers can purchase individual songs or albums which are then delivered to the cloud from where they can be streamed to multiple devices.

Subscription services reach out globally, by integrating with social media networks. By partnering with Facebook, users sign up in order to share their playlists with their social network. The “freemium” business model, supported by advertising, is an acquisition method which converts free users into “premium” members who make online payments for unlimited access. For the subscription-model, this process is crucial to achieve sustainable growth.

In Canada, Galaxie launched a subscription based mobile streaming service, focusing primarily on the Canadian market, offering a great variety of channels, including a Galaxie mobile app.

In December 2011, rara.com announced the launch of a streaming service in more than 20 countries worldwide, including Canada and the US. Omnifone, which provides Blackberries and Sony devices with streaming, manages the music database. Rara targets consumers who are still listening CDs, by offering them simple access to digital music through their internet browser, either on their PC or their Mobile. Customers pay a monthly subscription, without a freemium option.
3.3. RISK MANAGEMENT

Since the birth of digital music, the music industry has seen its sales figures drop because of widespread unauthorized peer-to-peer and non-peer-to-peer piracy. Music fans all over the world share non-licensed content files on BitTorrent networks. According to IFPI/Nielsen, almost 30% of global internet users regularly access unauthorized services. Around 50% prefers to share non-licensed musical content via peer-to-peer (P2P) networks.

The other half uses streaming sites, smartphone apps, cyber lockers or blog sites. In some countries, piracy outgrows the legal market, for example in China, Spain and Brazil. Musicmetric reported 405 Million digital music downloads through the first half of 2012. During this period, BitTorrent Inc. worked with artists to deliver 124 Million legally licensed digital music downloads.

Breakdown of Top 10 Countries for All Downloads

<table>
<thead>
<tr>
<th>Country</th>
<th>Downloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>96,681,133</td>
</tr>
<tr>
<td>UK</td>
<td>43,263,582</td>
</tr>
<tr>
<td>ITALY</td>
<td>33,158,943</td>
</tr>
<tr>
<td>CANADA</td>
<td>23,959,924</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>19,724,522</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>33,158,943</td>
</tr>
<tr>
<td>SPAIN</td>
<td>10,303,633</td>
</tr>
<tr>
<td>INDIA</td>
<td>8,964,360</td>
</tr>
<tr>
<td>FRANCE</td>
<td>8,398,550</td>
</tr>
<tr>
<td>PHILIPPINES</td>
<td>33,158,943</td>
</tr>
</tbody>
</table>

Source: MUSICMETRIC

Worldwide, regulators are imposing new laws to contain piracy. There are several strategies which require internet service providers (ISPs), advertisers, mobile service providers and search engines when it comes to fighting piracy.

New legislation which restricts illegal downloads, will boost the legal digital music industry and this will subsequently have a very positive impact on the great business opportunities digital music offers merchants. Payment Services Providers and acquirers in the card payment sector.
3.3. BLOCKING INFRINGEMENTS WEBSITES

Collaboration with ISPs is required to block websites which offer illegal download. Thanks to close cooperation between IFPI, law enforcement and the payment industry, rogue sites are finding it more difficult to secure the merchandising services of companies such as Visa, MasterCard, PayPal, the Paysafecard Group, as well as phone payment services.

France became the first country in Europe to introduce tiered response legislation in 2009. Internet subscribers, whose accounts had been used to infringe copyright, were warned in 2010 by Hadopi. This French Agency notifies the criminal court, once a warning has been ignored three times in one year. The impact was felt immediately, when the use of unauthorized P2P networks declined with a 26% since notices started being sent in October 2010 (IFPI/Nielsen). French iTunes sales increased with 22% immediately after the implementation of this legislation.

### THE ESTIMATED ‘HADOPI EFFECT’ ON ITUNES

<table>
<thead>
<tr>
<th></th>
<th>SINGLE TRACKS</th>
<th>DIGITAL ALBUMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCREASE IN SALES IN</td>
<td>+26%</td>
<td>+42%</td>
</tr>
<tr>
<td>CONTROL GROUP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INCREASE IN SALES IN</td>
<td>+48%</td>
<td>+67%</td>
</tr>
<tr>
<td>FRANCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFFECT OF HADOPI (FRANCE MINUS CONTROL)</td>
<td>+23%</td>
<td>+25%</td>
</tr>
</tbody>
</table>

Source: The Effect of Graduated Response Anti-Piracy Laws on Music Sales: Evidence from an Event Study in France. (Figures are rounded).

A similar approach to counter piracy has been adopted in the rest of Europe. The EU reviewed its Enforcement Directive. The Commission ruled out the exemptions from liability that ISPs enjoy under the e-Commerce Directive when it comes to their obligation to tackle digital piracy. Blocking of illegal sites has a significant impact on the legal digital music business. Data from comScore shows that Belgium initiatives to impose ISPs to block illegal download sites reduced the service’s audience by 84%. According to IFPI/Nielsen, legal actions had a similar impact (74%) in Italy.

In March 2012, Spain implemented the Sustainable Economy Act, also known as the “Law Sinde”. ISPs are obliged to block access to websites, blogs and forums that provide links to copyright infringing content.

In Asia, South Korea successfully implemented the same legal strategy, including a copyright law, which requires ISPs to block the illegal distribution of infringing material. The Malaysian Communications and Multimedia Commission (SKMM) blocked ten websites for violating the Malaysian Copyright Act (1987) and India’s Department of Information Technology ordered Indian ISPs to block copyright-infringing websites.

New Zealand implemented the Copyright Amendment Act in September 2011, which resembles the graduated response program in France. Digital sales in New Zealand immediately increased with 35% in 2011 (RIANZ).

### COPYRIGHT ALERT SYSTEM

The US struck a collaboration-deal with major ISPs who signed up for a Copyright Alert System that will issue escalating notices and warnings to subscribers. A Copyright Information Centre will support this initiative by offering all stakeholders a well-resourced education programs.
3.3. SEARCH ENGINES

Websurfers end up on illegal download sites through Search Engines. Ipsos MediaCT indicated that around 50% of users of unauthorized digital music services, found these websites through search engines. Collaboration between Legislators and Search Engines is therefore crucial.

ADVERTISERS

Digital pirates offer digital music files for free, while using advertising revenues as their principal source of funding. In October 2011, the US Congressional International Anti-Piracy Caucus urged America’s three main Advertising associations a letter, asking them to take action to curb advertising on illegal websites.

Similar initiatives are to be expected in the different regions around the world and will ultimately help the music industry and all major stakeholders regain their leading position in the market. A growing amount of global consumers is streaming and downloading licensed artist content via major providers such as iTunes, Spotify, Deezer, 7Digital. Artists have discovered the benefits of engaging with their fans via Facebook and Twitter, networks like SoundCloud, Last.fm and YouTube, which allow musicians to reach a global audience.

We will see the digital music industry grow through collaboration models between record labels, digital music service providers, major telecom companies, and card payment solution providers who will connect these stakeholders with Acquiring Banks in the different regions, realizing profitable cross-border e-commerce.
PROFITABLE CROSS-BORDER E-COMMERCE

/ RETAIL / MUSIC / TRAVEL / 
/ GAMING / SOFTWARE /
4 ONLINE TRAVEL

30% OF GLOBAL TRAVEL & TOURISM SALES IS CONDUCTED VIA ONLINE PAYMENTS

GLOBAL TRAVEL & TOURISM INDUSTRY

Source: Oxford Economics/WTTC

INTRODUCTION

According to the World Travel and Tourism Council estimates, the Travel & Hospitality Industry will generate over $15 trillion in revenues by 2017. Travel & Tourism creates 260 million jobs worldwide, making the Travel industry one of the world’s largest industries, accounting for 9% of global GDP. The online travel segment (e-travel) was valued at nearly $256 billion in 2010 and is expected to grow to $313 billion by 2012, already representing 30% of the total travel market. In 2013, one third of all payments made for travel & tourism purchases will be made online. These are promising figures for profitable cross-border e-commerce.
We believe that the travel & tourism industry can learn from developments in the retail industry, which faced similar challenges and was forced to change to a multichannel business model, in order to service an audience which increasingly prefers to purchase products, goods and services online. Online purchases for which credit cards payment remains preferred worldwide accepted payment method and will remain preferred payment method, as long as online travel is perceived as high-risk.

Card Payment processing has been an integral part of e-commerce and payment solution providers have gained decennia of experience in connecting e-merchants with a secure payment gateway, which routes card payment transactions cross-border over domestic card networks, reducing costs while sharing profit. Although online travel is not perceived as high-risk by card schemes, it is considered high-risk by acquirers. Reason why online travel needs to adapt its business model to prevent fraud, by connecting to an acquiring network in which Payment Service Providers, together with the Global Card Processor ensure secure payment, while Acquiring Banks accept liability, in a payment eco-system in which all stakeholders carefully define responsibilities, while sharing profit.

ONLINE TRAVEL PENETRATION IS HIGHEST IN THE US AND WESTERN EUROPE, FOLLOWED BY APAC AND LATIN AMERICA. WORLD TRAVELERS CAN BE DIVIDED INTO THREE CATEGORIES: LEISURE TRAVELERS, BUSINESS TRAVELERS AND AFFLUENT TRAVELERS (INCOME OF $250K).

Google Trends estimates, that the Internet is the first information source for both business and leisure travelers, in an industry in which 83% of leisure travelers plan their trips online.

WORLWIDE UNIQUE VISITORS (MM) TO TRAVEL SUBCATEGORIES
VISITORS AGE 15+ HOME / WORK LOCATION

Source: ComScore

The decision-making process is increasingly influenced by pricing, reviews, pictures, blogs and videos shared by co-travelers via social media channels, after which a growing number of travelers book their trip through online payment transactions.
The World Travel & Tourism Council (WTTC) estimates, that business travel accounted for 33% of growth in global trade over the past decade, improving global corporate productivity tenfold and creating millions of jobs worldwide. Online booking has become standard procedure for a growing amount of internet users in developed regions, particularly in those countries where credit card penetration and internet penetration is highest. A majority of Western Europeans, Americans and Canadians, Japanese and South Koreans review, compare and book their airline tickets, hotel reservations, cruise – and business trips online, by paying with their credit card, coupons, mobile apps or e-wallets, benefiting from a variety of customer loyalty programs.

As online travel bookings in the emerging markets of Asia Pacific and Latin America accelerate, partly stimulated by massive adoption of mobile payment methods, combined share for Europe and the US will fall to 73% in 2012 and continue to decline thereafter. The developing markets are quickly catching up. Goldman Sachs predicted that the emerging BRIC markets (Brazil, Russia, India and China) could well represent 35% of the global aviation market by 2020, and up to 50% of the global aviation market by 2050.

4.1. BUSINESS MODELS AND ONLINE PAYMENTS

THE ONLINE TRAVEL INDUSTRY IS COMPLEX. IN A WORLD WHICH SPENDS A LARGE AMOUNT OF TIME ONLINE, AIRLINES, TRAVEL AGENCIES AND SUPPLIERS WILL NEED TO ADAPT THEIR BUSINESS MODEL TO SERVICE
TRAVELERS, WHO SURF THE INTERNET FOR REVIEWS, PICTURES, VIDEOS, BLOGS, OPINIONS AND PRICES, SEARCHING FOR THE BEST DEALS ON THEIR PC, TABLET OR SMARTPHONES, RATHER ENTERING A TRAVEL AGENCY TO SCROLL THROUGH HARDCOPY BROCHURES.

Consumers appreciate the variety of payment methods offered, but surveys indicate that travelers are concerned about risk. Card schemes and financial institutions have acquired decades of expertise in risk management and fraud prevention, which is why credit card payments remain consumer’s preferred payment methods.

The online travel industry will have to include Payment Service Providers and Global Card Processors, connected to a worldwide network of Acquiring Banks, in the Value Chain. Together, they can provide travelers with secure, PCI-DSS compliant online card payment solutions. A global Card Processor which partners with Payment Service Providers, ISOs, MSPs and Acquiring Banks in the different regions, competitive FX rates, interchange optimization, multi-currency- and dynamic-currency conversion (DCC*) and risk management protocols, resulting in a comprehensive, cost reductive online payments strategy.

Source: PhocusWright
As travel supplier websites generate an estimated 63% of Travel & Tourism sales worldwide, Online Travel Agencies (OTAs) are losing ground and will have to adapt their business model. Low-cost airlines have excelled in establishing customer loyalty by engaging with their audiences through dynamic, user-friendly websites, competitive pricing and profitable third party ancillary services. The results of PATA analysis of the low-cost carrier (LCC) market in APAC, revealed that low cost carriers adopt highly web-centric models, which are very attractive for young internet users.

THE TRAVEL INDUSTRY TRADITIONALLY FOCUSED ON OFFERING LOW-PRICING, but as e-commerce and m-commerce revolutionizes the travel industry, online travel will have to adopt the e-Retailing mindset, in order to reach out to consumers who select on much more than pricing alone. Travelers today buy a traveler’s Experience, consisting of a variety of elements which they expect modern-day travel suppliers to provide them with. As the travel industry began to shift from a price-focused to an experience-focused packaging, Travel suppliers discovered the profitability of selling commission-based ancillary services as a profitable business model. Travel suppliers see their revenue grow, by earning 10% – 30% commission when they include travel insurance, ferry trips, car rental, and hotel deals in a competitive package deal. This type of lucrative horizontal cross-sales will increasingly be integrated into online travel business models in the future.

3rd-PARTY ANCILLARY SERVICES WILL BECOME INCREASINGLY IMPORTANT FOR TRAVEL SUPPLIERS

Source: Forrester

Market leader Amadeus has taken this shift from price-based to total travel-experience-based approach a step further and developed an intuitive search solution for online travel agents, called Amadeus Extreme Search. This solution uses the traveler’s natural thought process and guides travelers to their ideal travel experience. The underlying technology, leveraging the Amadeus Massive Computation Platform, processes billions of results based on travelers' queries. For innovative computer engineers, online travel is a perfect industry for the Semantic Web.

We believe in a future in which Ontology-based e-Tourism Planners will connect destinations, combining a tailor-made where, what, how and when, leading to a travel-experience, customized to specific traveler’s preferences and needs.
Groupon and Expedia have chosen for yet another strategy, joining forces to create Groupon Getaways with Expedia, a solution which offers consumers highly compelling travel discounts, gathered from a growing database of 135,000 hotels worldwide. Their joined network presents the Hospitality industry with a powerful marketing channel to reach out to over 50 million Groupon and Expedia members in the US and Canada.

Mobile applications are a very lucrative business. Market leader TripAdvisor developed a multi-platform, multi-lingual app which can be used to search restaurants, attractions, resorts and accommodations. Immediately after it was launched, it was downloaded an average of 25 times per minute. TripAdvisor App is the world’s most downloaded travel app after Google Earth.

Customer Loyalty programs and membership programs reward customers’ loyalty and encourage recurring purchases. It costs a company 10 times more to acquire a new customer, than to sell to an existing one. The Air Miles reward program is a perfect example of a very successful loyalty coalition.

Miles & More is the largest traveler loyalty program in Europe, with over 20 million members in 2011. It offers rewards to passengers of the Star Alliance, the world’s first and largest airlines alliance. The program was launched by Lufthansa in 1993 and 13 European airlines participate in Miles & More.

AirPlus International is yet another interesting global provider of a full-service business travel payment solution, initiated by Lufthansa AG in collaboration with Bayerische Landesbank. Card members are being offered a range of integrated services, adding to business travelers’ convenience.

Air France and KLM enhanced their frequent flyer program, Flying Blue, in 2012, enhancements which include the launch of the Flying Blue Store which enables members to spend their Award Miles on e-retail products or on other online travel services.

These are only but a few examples of online travel customer loyalty programs including indirect profitable third party ancillary.

---

**TRAVELERS ENROLLED IN LOYALTY PROGRAMS**

<table>
<thead>
<tr>
<th></th>
<th>Leisure travelers</th>
<th>Business travelers</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOTEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NONE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0 % 10 % 20 % 30 % 40 % 50 % 60 % 70 % 80 %

Source: IpsosMediaCT
4.1.2. MOBILE ONLINE TRAVEL

ONLINE TRAVEL WILL BENEFIT ENORMOUSLY FROM GLOBAL MOBILE PENETRATION, EXPECTED TO REACH A STARTLING 90% IN 2014, WHEN OVER 6.5 BILLION MOBILE USERS WORLDWIDE WILL BE ABLE TO MAKE MOBILE PAYMENTS (SOURCE: GARTNER). 34% OF SMART-PHONE USERS AND 18% OF AMERICANS WHO SURF THE WEB, HAVE USED THEIR MOBILES TO BOOK A TRIP THROUGH M-COMMERCE. US MOBILE TRAVEL SALES WILL GROW 149.5% TO $2.57 BILLION (INTERNET RETAILER).

MORE TRAVELERS USE MOBILE FOR TRAVEL INFORMATION
PERCENTAGE OF TRAVELERS WHO USE A MOBILE DEVICE TO ACCESS INTERNET FOR TRAVEL INFORMATION

LEISURE TRAVELERS

BUSINESS TRAVELERS

Source: IpsosMediaCT

According to Travel industry research authority PhoCusWright, travel bookings through mobile payments are expected to triple by 2013 and the amount US mobile users researching travel options with their mobiles is expected to grow by 51% in 2012. The growing popularity of Tablets is going to be another great business enabler for the online travel industry.
As the world is turning mobile, the boarding process is facilitated by mobile passes. In 2010, airlines issued 160 million mobile boarding passes. By 2013, Juniper Research estimates this will amount to 480 million, or 1 in 7 boarding passes. 30 airlines already offer mobile boarding passes; half of these also offer mobile ticket booking and purchasing.

Alternative payment methods are popping up; travelers pay with vouchers and mobile wallets or via contactless payment methods, such as
4.1.2. NFC (Near Field Communication). Start-ups like Jumio, Payleven, Stripe, Square and iZettle allow smartphone users to make payment transactions before and during their trip. On airports, where every second of delay counts, secure payment solutions which add speed and convenience to the traveling experience have huge potential in the travel industry.

Notwithstanding the growing variety of alternative payment methods, consumers have a strong preference for payment methods which involve credit cards. Cards are issued by financial institutions with decades of experience in fraud prevention and credit cards are accepted worldwide.

4.1.3. SOCIAL MEDIA

Hotel Digital Marketing Firm HeBS Digital, believes that 2012 is the Year of SoLoMo (Social, Local, and Mobile). The travel industry will benefit immensely from increasing social, local and mobile engagement of a growing amount of consumers, who share their travel experience online.

User Generated Content (UGC) is a great business enabler, particularly for the online travel Industry. Travelers post pictures, comments, review hotels and holiday destinations online as people all around the world search for information, before they book a trip (on-or offline). Consumers exchange opinions via Facebook, Twitter or Blogs. Consumers do not rely exclusively on descriptions of travel agencies and hoteliers but include UGC in their decision-making process. Over 75% of travelers turn to social networks, to find attractive deals and discount on airlines, car rental, bed & breakfast, hotels and all-inclusive packages.

Web 2.0 / Social Media had a profound impact on the way Aviation, Cruise, Hospitality and Business Travel is being marketed. Reviews, opinions, real-time photos and videos drive business. Frequent Flyers rank good customer service higher than low pricing and 82% of frequent flyers are active on Facebook. Airlines have anticipated this new reality, as there are 191 airlines regularly posting tweets on twitter. Airline tweets volume increased with 51% from March to July, 2011. Marketing departments in the online travel industry have become aware of the fact that social media engagement can reduce PR costs with 24%.

Of travel companies, 65% plans to invest in social media strategies, focusing on channels such as Facebook, Twitter and YouTube.

4.2. REGIONAL TRENDS

4.2.1. TRENDS IN THE ASIA-PACIFIC REGION

In Asia Pacific, Travel & Tourism is expected to make a direct contribution to GDP of US$523 billion in 2011, and to directly support 63.9 million jobs. (Source: WTTC)

Even though internet users in the APAC region represented 41% of the total global internet population, a minority visits and books through online travel websites.
Compared to other APAC markets, Chinese internet users do not frequent an online travel website as often as for example Australian, Indian or Japanese internet users.

China has the lowest online travel penetration, online travel bookings in 2011 totaling only 11% of the total market. Chinese travelers have limited access to the global online ticketing distribution system (TravelSky Internet Booking Engine) and the Chinese government imposes specific restrictions on online travel.

Contrary to other online travel markets, Online Travel Agencies (OTAs) attract more visitors than Airline websites. Chinese outbound tourism grew with 70% in the first six months of 2012, surpassing $105 billion in 2013, of which more than $15 billion will be made online.

Goldman Sachs predicts that China could become the largest aviation market in the world by 2019. The Chinese middle-class is growing rapidly, and so is its desire to travel abroad. The Chinese online travel market is expected to grow with 500% between 2008 and 2013, fuelled by rapid adoption of the internet for commerce and a range of high-profile investments and partnerships among the country’s leading internet and online travel firms, according to PhoCusWright.

In 2011, Baidu (China’s “Google”) became the majority shareholder in Qunar, the leading Chinese online travel search & planning site, while leading ISP Tencent and e-commerce giant Alibaba have also aggressively invested in online travel.

India is rather unique, as it has a very large population, a relatively low internet penetration, but an online population of which a quarter pays online, which has led to a $4 billion online travel sales. By 2020, about 50 million Indians are expected to travel overseas, of which a majority will have booked its trips, using online payment methods, most probably through mobile payments. The Indian e-commerce market is expected to increase 50 percent in 2012, as a result of sustained growth of the online travel booking industry and new business models for the insurance and mutual funds sectors, according to a recent survey. According to First Data, rail and air ticket bookings have accounted for 81% of the travel market share.
TRENDS IN EUROPE

PhoCusWright estimates that by the end of 2012, Europe will have become the largest online travel sector. The total economic value of Travel & Tourism generates $1.5 billion in GDP and 28 million European jobs. Major European beneficiaries are: France (15% of total regional Travel & Tourism GDP), Spain (13%), Italy (11%), the UK (11%) and Germany (10%).

The highest levels of e-booking can be found in some of the smaller Travel & Tourism markets such as in Scandinavia, where almost three quarter of travelers book their trips online, but on average, over half of the Western European travelers have booked a trip or a hotel online. The UK tops the online travel charts. According to Google, 80% of travel products in the UK are researched, planned and booked online, the highest figure in the world.

Approximately 96% of UK consumers book their air travel ticket online, according Kantar Media’s 2012 “Online Shopper Intelligence–UK Travel” Survey. 65% of UK travelers bought their ticket straight from the airlines’ websites, instead of from an OTA. Apple’s iOS 6 includes a new feature called “Passbook”, which allows iPhone and iPad users to board and check-in via NFC technology. This application can be used to check into flights, hotels, car rentals, cruises, trains, buses, and so forth. Lufthansa is the first airline to make the Passbook functionality available for its customers.

PhoCusWright’s reports, that nearly a quarter of Eastern Europe’s total travel market will be booked online by 2013, when online travel payments will amount to $21 billion. The Russian online travel market plays a big factor in Eastern European online travel growth figures. As one of the emerging BRIC markets, Russia’s online travel penetration will climb from 10% in 2011 to 18% by 2013 and eMarketer predicts that Russian online travel will grow with 21.5% in 2012, to over $2.5 billion.

Social media is a great online travel business enabler, as Russians actively engage in local and international social media, such as VKontakte, Odnoklassniki, YouTube, Facebook and Twitter. Russia will host the Winter Olympic Games in Sochi in 2014 and the FIFA World Cup in 2018, large scale events which have a great impact on the Russian Travel & Tourism industry and as such on the development of online travel and m-travel in the region’s largest travel industry.

ONLINE TRAVEL SALES IN RUSSIA, 2010-2016
(IN $ BILLIONS)

Source: eMarketer 2012
4.2.3. TRENDS IN LATIN AMERICA

Tourism has always been an important industry in a region with a rich history and culture and an impressive flora and fauna. A rapidly expanding middle class and a booming generation of young internet users, frequenting travel websites, will ensure double-digit online travel growth through 2012.

Credit card payments are the number one preferred online payment method throughout Latin America. Card penetration varies considerably, in a region with great differences between the immature, developing market in the rural areas, versus an emerging market in Latin America’s overpopulated urban areas. Options to pay in retail outlets, supermarkets, department stores and quick-payment kiosks are very popular in LATAM. PhocusWright concludes that Banks are becoming strong partners, providing the middle class new access to credit, and working with online travel industry players to create and promote loyalty programs.

Latin America has some of the highest mobile penetration in the world, with consumers often using more than one mobile. This offers great business opportunities for those online travel providers which provide travelers with mobile payment methods. The largest online travel markets in LATAM are Brazil, Argentina and Mexico followed by Colombia and Venezuela. Brazil alone accounts for 42% of the region’s online travel sales.

Seizing the momentum, Expedia expanded into Brazil, offering travelers a one-stop shop and a choice between 300 airlines and 155000 worldwide hotels, as well as holiday packages, establishing relationships with Brazilian airlines and with 1500 Brazilian hotels.

Brazil will be hosting both the World Cup and the Olympic Games in 2014 and 2016, which will boost Brazilian Travel & Tourism over the next decade. By 2021, Travel & Tourism’s total contribution to GDP in Brazil should be more than $291 billion. Brazil could well become the world’s 4th largest Travel & Tourism economy over the next decade.

4.2.4. TRENDS IN NORTH AMERICA & CANADA

North American online travel bookings will represent almost a third of worldwide volume by the end of 2012, according to yStats “Global Online Travel Report 2012” report.

Domestic and international leisure travelers spent $564 billion in 2011, a number which exceeds the value of Great Britain, China, India and Brazil’s Travel spending combined. M-Travel bookings are expected to have tripled by 2013 (source: PhoCusWright), which means that a majority of mobile users will research, plan and pay for their holidays and business trips with their smartphones.
Digital check-in is becoming standard procedure for the customers of most US airlines and mobile check-in is gaining ground. By Q2 2012, 45% of all North American check-ins were conducted either online or through a mobile device, with the amount of passengers checking in with their mobile doubled, from 2011 to 2012.

eMarketer estimates, that by the end of 2012, 37.8 million North Americans will research their trip online, of which 16 million will actually book and pay their traveling expenses via their mobiles. By 2016, these numbers will have exploded to 74.3 million online travel researchers and 36.7 million actual m-travel bookers. From 2010–2016, total US online sales of leisure and business travel will rise from $119.2 million to $151.9 million.
Senior airline executives worldwide are very much aware of the great potential of mobile device for the travel industry and are planning integration an implementation of select mobile services in the near future.

**IMPLEMENTATION OF SELECT MOBILE SERVICES PLANNED BY SENIOR AIRLINE EXECUTIVES (2012)**

<table>
<thead>
<tr>
<th>Service</th>
<th>Implemented</th>
<th>In evaluation</th>
<th>By the end of 2015</th>
<th>No plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHECK-IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEND MOBILE BOARDING PASSES TO MOBILE PHONES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTIFICATION ABOUT FLIGHT STATUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISSING BAGGAGE COMMUNICATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE-BOOKING FROM IRREGULAR OPERATIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCESS TO ENTERTAINMENT ON-BOARD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTILIZE NFC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3. **RISK MANAGEMENT**

Travel is considered as high-risk by acquirers, but is not defined as such by the card schemes. The reasons for which online travel is considered as high-risk by Payment Service Providers and by Acquirers alike are:

- The financial risk: plane tickets can be expensive, amounting to high chargebacks.
- Future Sales: travelers often book their trips long before they travel, funds which Agencies use, to finance their business

Traditionally, travel has high chargeback and fraud rates due to poor fraud management by the issuers and the merchants. Not only airlines and travel agencies suffer losses due to fraud, hotels became the single most breached sector for credit card data theft in 2009, representing just over a third of all major breaches.

As online card payments and mobile payments are globally adopted, replacing cash payments, customer identification is crucial to prevent risk in a travel industry moving toward online travel. All data on travel-related payments will be integrated, acting as a memory of expenditure and activity for individuals, groups and travel businesses. Online travel leaves digital "bread-
crumbs” which can become an important CRM and customer-profiling tool.

Traveler preferences can be stored for marketing analysis and for future use to the benefit and convenience of the individual traveler, but this data has to be handled carefully, according to strict compliance and privacy rules and legislation.

The travel industry has made great advances with Global Distribution Systems (GDS), which enable travel operators to easily access and makes changes to information on a traveler’s itinerary which is stored via the Passenger Name Record (PNR).

Originally created for the air travel business, PNRs are now also used for hotel bookings, rail and car rental, cruise and ferry, tours, event tickets and travel insurance. Notwithstanding privacy and security concerns, it’s clear that many travelers would benefit from the sort of system that allowed this information to be shared, but consumers’ concerns need to be addressed.

I AM INCREASINGLY CONCERNED ABOUT PEOPLE OR COMPANIES MISUSING MY PERSONAL DATA
HOW MUCH DO YOU AGREE OR DISAGREE

<table>
<thead>
<tr>
<th>Age</th>
<th>AGREE</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 - 29</td>
<td>69%</td>
<td></td>
</tr>
<tr>
<td>30 - 49</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>50+</td>
<td>81%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Amadeus

Even though travelers worldwide increasingly pay online, surveys indicate that a majority of these travelers are concerned about card fraud and ID theft. For these concerned travelers, credit card payment is perceived as the most secure payment method. Alternative payments are often restricted to specific regions, while credit card payments are globally accepted and a variety of security measures have been taken to protect card holders against fraud.
5 PROFITABLE CROSS-BORDER E-COMMERCE

/ RETAIL / MUSIC / TRAVEL /
/ GAMING / SOFTWARE /
5 ONLINE GAMING

CHANGING BUSINESS MODELS IN A GROWING MARKET, CREATE EXCITING OPPORTUNITIES FOR THE CARD PAYMENT INDUSTRY

INTRODUCTION

THE GLOBAL GAMES MARKET IS CURRENTLY ESTIMATED AT $68 BILLION AND IS DOMINATED BY EUROPE (31.3%), NORTH AMERICA (30.4%) AND APAC (28.4%). THE NUMBER OF (PAYING) GAMERS WHICH PLAY & PAY ONLINE IS GROWING EXPLOSIVELY. AS BUSINESS MODELS CHANGE AND ADAPT TO CONSUMERS’ PREFERENCES, THE ONLINE GAMING INDUSTRY OFFERS GLOBAL CARD PROCESSORS, PAYMENT SERVICES PROVIDERS AND ACQUIRING BANKS IN THE ONLINE PAYMENT INDUSTRY EXCITING BUSINESS OPPORTUNITIES.
The Gaming market used to be dominated by packaged games, products which were bought, licensed and installed, to be played at home, on personal computers (PCs). As the world digitalizes and as people worldwide spend an increasing amount of time on the internet, gamers have been switching from packaged to online games. Games have evolved from boxed products to experiences sold as free-to-play services. A growing variety of devices, enable gamers to play whenever they want and wherever they want, at home and “on the road”.

Changing consumer preferences require new business models. In order to understand the factors which contribute to market growth, marketing analysts have to look beyond the number of players per region and include the amount of time spent behind a game, the percentage of payers and the money which these gamers spend, whether on virtual goods or on monthly subscriptions.

Generation Z is spending an average of 12 hours a week online. This trend is observed on a global scale, as gamers engage with each other cross-border and cross-regional, through Social Media platforms and MMO gaming sites, on consoles, flat screens, tablets and on their mobile phones. As gaming is increasingly being played and paid over the internet and as business models change, online gaming creates exciting opportunities for the Card Payment Industry.

5.1. BUSINESS MODELS AND ONLINE PAYMENTS

As children, young adults and their parents spend more leisure time on the internet, gaming vendors have had to adapt their revenue model from one-time-sales to a subscription based business model, where gamers pay online for a periodical access.
including the option to pay for extra services for premium customers.

Freemium is another popular business model, which generates revenue through advertisements, while giving gamers free access to a gaming site. Game vendors have recognized the power of virtual goods, non-physical objects, animations and characteristics which enhance the gamers’ experience, either alone, or through engagement with other online gamers. Under this free-to-play model (F2P) business model, the online game operators give social gamers and Massive Multi-player Online (MMO) Gamers free access, but charge fees for virtual goods instead, fees which are most often paid by credit card.

Virtual goods are low-priced and revenue is generated through volume. Inside Virtual Goods estimates that the overall market for virtual goods in the US is headed towards USD 2.9 billion for 2012, half of which comprises of virtual goods on Facebook. Analyzers of the gaming market predict continued growth in the uptake of the F2P model.

Almost a quarter of US and EU gamers play on all multiple screen types. Other regions are expected to follow this trend. As gamers spend more time online, playing on multiple devices, the key to market growth should not only be measured and defined by the amount of players within the different regions, but must incorporate other key-factors to measure and estimate market growth, such as the time and money spent on gaming.

As we see the F2P gaming market growing, the ways digital goods are sold has to adapt to user needs. Players don’t like to interrupt their game each and every time they want to purchase virtual goods. Providing players with virtual currency, periodically charged to the gamer’s bank account via card payment seems to become the predominant business model for online and mobile games.

### MOBILE GAMERS PER COUNTRY

**PHONE & TABLET GAMERS AND PAYING GAMERS AGED 10 TO 50**

![Chart showing mobile gamers per country](chart.png)

Source: Newzoo, September 2012 Consumer Research

*Source: Newzoo, March/April 2012 Consumer Research Data*
Teenagers are restricted from purchasing virtual goods through online card payments, due to legislation related to privacy rules around child protection. Innovative solutions are being developed, which allow children to play & pay for games within the constraints of their parents’ allowances.

Virtual Piggy developed such a secure payment solution and its partnership with Payvision, a fast growing, independent Payment Solution Provider specialized in Global Card Payments for the e-Commerce market, is just one example of how credit Card Processors can become fundamental part of a value chain, by connecting the online gaming industry to a secure global acquiring network.

5.2. REGIONAL TRENDS

5.2.1. TRENDS IN THE ASIA-PACIFIC REGION

The Gaming market is dominated by China as the biggest market accounting for 32% ($4 billion) of the global market, followed by Korea with 23% ($2.9 billion). Industry analysts predict that business opportunities for near-future growth will be seen in Indonesia, Malaysia, the Philippines, Thailand, and Vietnam (Niko Partners 2010).

As the developing countries in East Asia enjoy improved broadband internet and as mobile penetration grows, a perfect landscape is created for a booming online gaming industry, particularly for the F2P business model. Interestingly, the Asian gaming market has the highest percentage of paying players in the world.

In the thriving Japanese F2P gaming market, social gaming is expected to grow with 30.7%, from $2.6 billion in 2011 to $3.4 billion in 2012. In comparison, the Vietnamese online game market is still in a developing phase, but the Vietnamese market has specific characteristics which contributed to the explosive growth of the Chinese online gaming market. Depending on the rules and regulations which the government will apply to the gaming industry, demographical factors and the government’s plan to expand broadband internet will have a positive effect on the online gaming industry.
5.2.1. MOBILE GAMERS: PLAYERS AND PAYERS
AS MUCH AS 47% OF THE ASIAN MOBILE GAMERS ARE PAYERS (2011)

![Chart showing mobile gamers players and payers distribution by region]

Source: Newzoo

5.2.2. TRENDS IN EUROPE

Europe as a whole has more than 110 million mobile gamers, 68 million in the UK, France, Germany and the Benelux alone. Even though Europe is leading, as the region with the largest gaming market in the world, Europe follows US footsteps in terms of specific mobile trends. Europeans increasingly play F2P games on multiple devices, with a strong preference for smartphones (42%), but whereas the use of handheld consoles is already decreasing in the US, these are still popular in Europe. As Amazon’s Kindle Fire HD Appstore will go live in more European countries, gaming on tablets will become increasingly popular, pushing back the usage of handheld consoles, just like it did in the US, where Kindle Fire was launched in March 2011.

Source: Newzoo Mobile Trend Report, November 2012
5.2.3. TRENDS IN LATIN AMERICA

Brazil is the 5th most populated country in the world, with a high mobile penetration and a young generation which is very active on social media. Social network gaming is a growing industry. The amount of Brazilian gamers increased with 20%, a growth ratio which doesn’t differ much from the US, but when we look at the amount of gamers willing to pay, we see an increase of 26% compared to 2011. Proof to the fact, that the Latin American gaming market is led by an emerging giant, which offers tremendous business opportunities, both for the online gaming industry and for all stakeholders involved in the online payment industry.

5.2.4. TRENDS IN NORTH AMERICA & CANADA

31% of Americans now have their TV connected to the web. TVs are rapidly transforming into interactive entertainment devices (Entertainment Screen). Almost a quarter of American and European gamers play on all four screens. Americans generally spend 26% more leisure time behind games, than in 2012. In 2012 the number of smartphone and tablet gamers in the USA, passed the 100 million mark. That is 43% of the population aged 10 to 65, a segment which grew with 52% over a period of 6 months, partly boosted by Amazon’s launch of its Appstore for Android apps in March 2011. The number of smartphone & tablet gamers has more than tripled since 2009 and mobile gaming in the US, generated $500 million this year. (Source: Newzoo Consumer Research 2008 – 2012)
TABLETS, HANDHELDs & SMARTPHONES
COMPETING OR COMPLEMENTARY

95M AMERICANS
SMARTPHONE, TABLET OR HANDHELD CONSOLE GAMERS

GROWTH OF SEGMENTS
IN 6 MONTHS: MARCH 2012 - SEPTEMBER 2012

Source: Newzoo, Mobile Trend Report, October 2012

5.3. RISK MANAGEMENT

E-Commerce is vulnerable to financial crime, due to the anonymous nature of online payments. The rapid change from bricks & mortar packaged sales to online e-commerce sales forced the gaming industry to invest heavily in risk management. Customer identification and authentication processes need to be implemented as part of enhanced due diligence, in compliance with rules and legislation as set for the payment and banking industry.

Gaming merchants are purchasing costly fraud detection software to avoid financial losses and to reputational damage. On the operational side, these changes burden their operational back-end as risk management does not only rely on innovative tools, but on processes which need to be guided, streamlined and seamlessly integrated into a company’s organization, this requires experienced staff, to analyze, prevent, investigate and report suspicious transactions.

As compliance, rules and regulations differ per country, knowledge and expertise is required.

A global Card Processor, connected to an acquiring network of PSPs and ISOs has acquired expertise in handling online payments in the e-commerce sector. We believe that by partnering with a payment solutions provider, the gaming merchant reduces the complexity which burdens his operational back-end, while sharing liability with stakeholders which, through their connection to card schemes, are regularly updated about new fraud schemes. A proven underwriting protocol enables the gaming merchant to prevent various types of fraud, such as ID theft. A global credit Card Processor has experience with traditional screening protocols, with emerging authentication and verification strategies in combination with innovative technologies, which together minimize fraud risk for those gaming merchants who are willing to expand their business cross-border by seizing the momentum which the growing popularity of online gaming has to offer.
6 PROFITABLE CROSS-BORDER E-COMMERCE

/ RETAIL / MUSIC / TRAVEL / 
/ GAMING / SOFTWARE /
AS CLOUD COMPUTING EVOLVES AND SOFTWARE PIRACY RATES DECLINE, SAAS SALES THRIVES

INTRODUCTION

DUE TO ITS DIGITAL NATURE, SOFTWARE IS EASILY SOLD THROUGH E-COMMERCE. SOFTWARE SALES STARTED OFF AS ONE-TIME PURCHASING, EITHER IN-STORE OR ONLINE. WHETHER B2C OR B2B, BUYING SOFTWARE, REQUIRED AN INSTALLATION PROCESS BASED ON A LICENSED AGREEMENT, INCLUDING MULTIPLE PATCHES AND REGULAR UPDATES. BUSINESSES AND INDIVIDUALS BOUGHT LICENSES FOR A SPECIFIC AMOUNT OF USERS. SOFTWARE VENDORS MANAGED SUBSCRIPTION-BASED ACCESS FOR ITS LICENSED CUSTOMERS AROUND THE WORLD. THIS INCLUDED SECURITY UPDATES, ENHANCEMENTS AND CUSTOMER SUPPORT ACROSS MULTIPLE CHANNELS, IN MULTIPLE LANGUAGES AND ON A VARIETY OF DEVICES. THIS TRADITIONAL WAY OF SELLING SOFTWARE WAS EXTREMELY VULNERABLE TO PIRACY.
Cloud Computing revolutionized Software sales, by selling Software as a Service. Gartner defines SaaS as software that is owned, delivered and managed remotely by one or more providers through a web browser. The software user can sign up instantly from anywhere in the world, at any time, or from any device, without having to wait for hardware delivery, time-consuming deployment, onsite-installation or long implementation cycles. This means a faster ROI at a lower cost.

Gartner expects the SaaS market to grow to reach $21.3 billion by 2015. SaaS delivery will significantly outpace traditional software product delivery, growing nearly five times faster than the software market as a whole and becoming the significant growth driver to all functional software markets. By 2015, about 24% of all new business software purchases will be of service-enabled software, and SaaS delivery will constitute about 13.1% of worldwide software spending across all primary markets and 14.4% of applications spending.

**GLOBAL SaaS REVENUES**

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTHER</td>
<td>33.3%</td>
</tr>
<tr>
<td>NORDAM</td>
<td>20.0%</td>
</tr>
<tr>
<td>LATAM</td>
<td>15.0%</td>
</tr>
<tr>
<td>EUROPE</td>
<td>10.0%</td>
</tr>
<tr>
<td>APAC</td>
<td>21.7%</td>
</tr>
</tbody>
</table>

The traditional software market suffered the consequences of the growing popularity of SaaS, losing $7 billion in 2009. The total software market continues to grow to $264 billion in 2011, a market in which cloud computing represented an 8% share. This share is expected to grow, now that Software as a Service (SaaS) is revolutionizing global software sales. Cloud computing and cloud services are growing exponentially in different countries, where they have become indispensable part of business processes. Gartner predicts that by 2016, one third of all digital data will be stored in the cloud.

The 3 fastest growing SaaS segments are Office Suites, which has a 40.7% growth, Digital Content Creation, with 32.2%, and Business Intelligence applications with 27.1%. CRM will see the largest global revenue growth in 2016, with a predicted 15.1% CAGR worldwide.

As Cloud Computing evolves and software piracy declines, online card payment solutions providers and Acquiring Banks can profit from...
changing business models, by seizing the momentum and by establishing their position in the value chain. Card Processors, Acquiring Banks and Payment Services Providers can make a difference, if they understand this market.

6.1. BUSINESS MODELS AND ONLINE PAYMENTS

As companies and individual consumers increasingly purchase and pay for software and SaaS online, software vendors have to integrate secure e-commerce payment solutions into their business model. Partnering with international Payment Service Providers and Card Processors which have acquired in-house expertise in online card payment solution and of the compliance issues and risk management protocols which are required to securely process cross-border payment transactions, will help software vendors reduce costs, while expanding their global footprint.

75% of current SaaS revenue consists of Cloud Services, a percentage which could exceed 90% by 2015. SaaS is but one variation of Cloud Computing, which can be delivered as for example Platform as a Service (PaaS), Desktop as a Service (DaaS), and Infrastructure as a Service (IaaS) and many other variants. In order to streamline and manage their business operations, CIOs need to measure the most efficient and cost-reductive way to run corporate applications, used by the various departments; Accounting, Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), Web Conferencing, Human Resource Management (HRM), Content Management (CM), to name just a few.

CRM continues to lead the SaaS market, in terms of revenue and global acceptance. SaaS represented nearly 32% of the CRM market’s total software revenue in 2011. 83% of Web Conferencing software sales is sold as SaaS and by 2013, 90% of e-commerce sites will subscribe to at least one SaaS-based service. IDC research estimates indicated that SaaS revenue will grow at a pace, six times faster than traditional software sales and IDC expects SaaS to show a compound annual growth (CAGR) of about 26% up to 2014.

Giants, like Microsoft, Sun, Dassault, Oracle, SAP, IBM, Sage, Siebel, Symantec and Adobe lead the B2B software sales market, while smaller mid-tier software companies equally benefit from the great business opportunities offered by SaaS. IDC predicted 30% growth in public IT cloud services spending in 2011. Smal and medium sized businesses (SMBs) are very interesting for cloud computing solutions, due to their flexibility and agile response to changing business processes, in response to adaption to new horizontal software strategies.

Even though the variety of payment methods is growing, Consumers and Businesses alike continue to choose credit cards payments as their number one preferred payment method to buy subscription-based SaaS. Card payments offer convenience, worldwide coverage and are perceived the most secure payment method, because of the fact that card issuers and financial institutions have acquired decades of experience in risk management and corporate security.
6.2. REGIONAL TRENDS

6.2.1. TRENDS IN THE ASIA-PACIFIC REGION

APAC REPRESENTS 12% OF THE TOTAL SOFTWARE MARKET.

Japan represents the 6th largest SaaS market in the world. Even though both Japan and South Korea are markets with a mature technological infrastructure and a high banking and internet penetration, which creates the perfect landscape for software vendors to sell their solutions online, both markets are challenging for international software publishers, due to localization issues.

For those software vendors who want to explore these promising SaaS markets, website translation into Japanese, Korean and Chinese is mission critical. Chinese total software market is the 4th largest in the world, but the country faces major challenges in dealing with software piracy. China joins Thailand, India and Indonesia as the countries with the highest Software Piracy rates in the world (+75%).

This fact alone calls for enhanced due diligence and tight collaboration between international payment services providers and global Card Processors with decennia of experience in risk management in a growing e-commerce industry which offers software vendors a secure payment gateway to seize cross-border opportunities of expanding the SaaS software sales model through the different regions.

Card payment solution providers with partners in the Asian banking industry, have the in-house expertise to deal with changing local legislation and can provide Software publishers with a secure payment gateway through which online transactions can be routed and streamlined in a global payment eco-system, which includes a network of local Payment Service Providers and Acquirers.
6.2.2. TRENDS IN EUROPE

SAAS REVENUE IN WESTERN EUROPE IS FORECAST TO REACH $3.2BN IN 2012. Native English-speaking European countries rank as top SaaS markets outside the U.S., such as the UK + Ireland, which together account for the 2nd largest SaaS market in the world.

Europe represents 36% of the global software market. Interestingly, non-English speaking countries such as the Benelux, Scandinavia, Finland are large SaaS users and Germany and France rank 3rd and 4th in the world. Italy and Spain are medium markets, ranked 12th and 13th, mainly because these countries require translating software and localization, due to the fact that a minority of the population speaks fluently English, the language which is the Lingua Franca of major Software vendors.

WESTERN EUROPE, SAAS MARKET SHARE IN 2011
(IN US $ MILLIONS)

<table>
<thead>
<tr>
<th>Country</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK + IRL</td>
<td>179</td>
</tr>
<tr>
<td>Germany</td>
<td>136</td>
</tr>
<tr>
<td>France</td>
<td>147</td>
</tr>
<tr>
<td>Benelux</td>
<td>281</td>
</tr>
<tr>
<td>Scan + Finl</td>
<td>297</td>
</tr>
<tr>
<td>Italy</td>
<td>540</td>
</tr>
<tr>
<td>Spain</td>
<td>405</td>
</tr>
<tr>
<td>Rest</td>
<td>716</td>
</tr>
</tbody>
</table>

Source: Gartner

6.2.3. TRENDS IN LATIN AMERICA

Brazil leads, as the 5th most populous country in the world. As one of the BRIC countries, Brazil is becoming a regional power and therefore it isn’t surprising that Brazil is the 10th largest SaaS market in the world. Protectionism, local legislation, bureaucracy and software localization are the main challenges in a rapidly growing Latin American market, where translation into Spanish and Portuguese is crucial to the wider adoption of online software sales and SaaS.
6.2.4. TRENDS IN NORTH AMERICA & CANADA

The 10 largest SaaS markets account for 90% of the global SaaS market and of this 90%, the US represents over 60%. North America is the most mature software market, with SaaS software revenue forecast to total $9.1 billion in 2012. Outside the US, the UK and Ireland are the largest SaaS markets, followed by Germany, France, Canada and Japan.

America consumes over 60% of the total global CRM market. The United States leads the world in CRM software investment, deployment and payback. Market leader Salesforce continues to outpace its competitors, offering SaaS CRM applications and even though several of the top open source CRM systems are developed in North America, Open Source CRM solutions have not been as successful in the US as in other regions.

The AMI 2010 Worldwide SMB Cloud Service study predicted a 25% CAGR for hosted business application services spending in the U.S. through 2014—about five times the rate of on-premises software sales growth, exceed $95 billion, or about 11% of total worldwide SMB ICT spending. AMI indicated. AMI found that remote managed IT services, SaaS and Web and Video Conferencing are the highest growth components within the Cloud.
The IDC research found that most SaaS is being delivered to US companies, which currently have 71% of the cloud computing market, but by 2014, SaaS adoption will become more global. Even though Canada lags well behind its Northern American neighbor, Canada still represents the 5th SaaS market in the world.
6.3. RISK MANAGEMENT

SOFTWARE DEVELOPERS BELIEVE THAT SOFTWARE PIRACY WILL DECLINE AS CLOUD COMPUTING WILL MATURE AND BECOME MAINSTREAM.

However, Business Software Alliance (BSA) surveyed 15,000 PC users—respondents in 33 countries, of which 42% admitted to have been sharing their login credentials to paid cloud computing services with other people within their organizations. An intelligent licensing model, which links users to specific devices, can tackle this form of SaaS piracy. Leading software developer Adobe Systems believes that with real-time analytics offered by cloud computing solutions, it is possible for the software vendors to gain basic control over their applications, especially because SaaS users are always online.

INDIVIDUALS USERS AND SMALL, MID-TIER AND LARGE BUSINESS ORGANIZATIONS WHO REALIZE THE HUGE POTENTIAL AND THE COST SAVINGS BENEFITS OF CLOUD COMPUTING SOLUTIONS, ARE EQUALLY CONCERNED ABOUT SECURITY AND AVAILABILITY OF CLOUDS.

The data owner remains at all times responsible to maintain high business standards through best practices, by complying with PCI-DSS security standards and industry regulated requirements regarding privacy rules, integrity, non-repudiation and security control over sensitive to critical data. IP protection is crucial, as the source code is the salient "hard" asset. Software source code, from SaaS products accessed over the internet via a web browser, is easier to protect than software installed at client sites. Finally, it is also easier to ensure SaaS usage is authorized.

Software Piracy rates in leading markets such as the US (20%), the UK (27%) and Japan (21%) will decline as cloud computing technology evolves and fraud prevention, risk management, rules and regulations adapt and internationalize under a global e-commerce economy.

International payment solution providers, experienced in global card processing, enable software providers to transact payments over a secure gateway, connecting software vendors to a network of Acquiring Banks which have acquired decennia of experience in compliance and underwriting protocols to prevent fraud and to mitigate risk. SaaS developers know how to monitor subscription licensing to prevent license abuse of users who share their login credentials. By sharing knowledge and expertise, stakeholders involved in SaaS sales and online payments can mitigate risk and reduce piracy rates.
7 CONCLUSION

E-COMMERCE INDUSTRIES PROFIT FROM A WORLD IN WHICH CONSUMERS SPEND AN INCREASING AMOUNT OF TIME ONLINE, IN A GLOBALIZING WORLD, INTERCONNECTED THROUGH INTERNET. NATIONAL BARRIERS DISSOLVE, ON BLOG SITES AND SOCIAL MEDIA PLATFORMS WHERE TRAVELERS WORLDWIDE, SHARE THEIR EXPERIENCES, THROUGH IMAGES AND VIDEOS. PRODUCTS ARE BECOMING SERVICED EXPERIENCES.

CHILDREN AND ADULTS PLAY SUBSCRIPTION-BASED F2P GAMES ON THEIR PCS, TABLETS AND SMARTPHONES, WHICH ALLOW THEM TO INTERACT AND ENGAGE WITH PLAYERS AROUND THE GLOBE. COMPANIES REVERT TO COST-SAVING MODELS AND BUY SOFTWARE AS A SERVICE (SAAS), APPLICATIONS WHICH INTEGRATE WITH THEIR EXISTING PROCESSES AND WHICH
DO NOT REQUIRE TIME-CONSUMING INSTALLATION PROCESSES, REGULAR UPDATES AND PATCHES, OR REMOTE CUSTOMER SUPPORT. EXPERIENCED ONLINE CONSUMERS BECOME EXPERTS IN E-SHOPPING, A PROCESS IN WHICH THEY EXCHANGE AND SHARE THEIR EXPERIENCE WITH SPECIFIC BRANDS, COMPARE REVIEWS, WEB SHOPS AND PRICING, INFLUENCING EACH OTHER’S DECISION-MAKING PROCESS. THESE CHANGES REQUIRE NEW MARKETING STRATEGIES AND INTELLIGENT BUSINESS MODELS.

MOBILE E-COMMERCE is growing at a faster pace than ecommerce itself. Mobile shopping offers consumers in developed and maturing regions the freedom, comfort and convenience to purchase goods and services at the best price, from anyplace, at anytime, anywhere, from any device. In those regions, where banking and internet penetration are developing, high mobile penetration presents consumers with the possibility to transfer payments and benefit from mobile e-commerce. E-commerce is transforming Retail in a virtual market space, enriched by a multi-channel approach which offers consumers the freedom to select, choose and purchase goods both off- and online.

Alternative payment methods offer customers an array of payment options, but surveys indicate that over half of the online payments are made with credit cards. Whether from a PC, a Tablet or a Mobile, consumers tend to trust a payment solution which has survived the test of time. Credit card payments are being accepted worldwide, issued and acquired by financial institutions which have gained expertise in risk management, adapting to a changing legal landscape of compliance rules and of enhanced due diligence.

E-commerce has been immune to the global economic crisis and independent of the geographical region, online payments are on the rise. This offers stakeholders in the global payment industry tremendous business opportunities, once they understand take advantage of their position in the value chain. By partnering with an innovative global card processor, which connects iPSPs, ISOs and their Merchants to an Acquiring Network of Domestic Banks within the different regions, risk liability is defined and managed intelligently and payment transactions are routed globally. When stakeholders work together in one full-service collaboration-model within the eco-payment landscape, challenges become opportunities and complex cross-national e-trade is transformed into profitable cross-border e-commerce.
ABOUT THE PUBLISHER
8 ABOUT THE PUBLISHER

8.1. ABOUT PAYVISION

Founded in 2002 by Rudolf Booker, Payvision is a fast growing, independent Payment Solution Provider specialized in Global Card Payments for the e-Commerce market. Payvision offers Acquiring Banks, Agents, Payment Service Providers, ISO, MSPs and their Merchants a secure PCI-DSS Compliant, PSD Licensed International Payment Processing Network enhanced with innovative technology.

Over the past decade, Payvision has consistently expanded its geographical footprint across the continents, resulting in vast knowledge and insight in the complexity of Card Payments and e-commerce, in a global market subject to great challenges such as unprecedented technological innovation, changing business needs and an increasingly demanding regulatory landscape.

Payvision’s experience in the different international regions has resulted in a global network of global acquiring banks, connecting over 300 trusted business partners with more than 5000 web merchants worldwide, for which we process over 100 million transactions a year.
PAYVISION, an independent global card processor, offers international payment service providers and ISOs unprecedented business opportunities by connecting them to acquiring banks in our global card payment network. Payvision has the in-house expertise to offer global domestic acquiring for cross-border e-commerce. Payvision provides its customers with:

**ONE PAYMENT PLATFORM FOR GLOBAL CARD PROCESSING**

- Global domestic acquiring with the same quality in each region
- 150+ transaction currencies and regional card settlement currencies
- Risk and fraud management solutions

**ONE** single high-end reporting interface for worldwide transactions

**ONE** internationally approved risk and underwriting protocol

Cost reduction and optimization for profitable cross-border e-commerce

24/7 support

For more information visit [www.payvision.com](http://www.payvision.com)