



*cutting through complexity*

FINANCIAL SERVICES

# The Great Payments Transformation

Insight into the payments ecosystem

December 2012

[kpmg.com/payments](http://kpmg.com/payments)

KPMG INTERNATIONAL





# Foreword

While many in the financial services industry may have historically viewed payments as being somewhat boring, nothing could be further from the truth. In fact, given the rapid pace of change, innovation and growth now underway in the sector, it seems increasingly clear that payments is actually one of the most exciting – and potentially valuable – parts of our current financial system.

Emerging and influential new trends such as mobile payments, social media, the rise of new market entrants, growing regulatory influence and the introduction of immediate settlements are buffeting the sector in almost every market around the world, creating both challenges and opportunities in their wake.

But it is the undeniable shift East that will likely have the most indelible impact on the global payments sector in the long-term. As this publication makes clear, events now underway in Asia will not only have a long and lasting impact on the regional payments sector, they also will create fundamental challenges for banks and payments providers in the West as well.

It is not surprising, therefore, that the 2012 Sibos Conference – arguably the world’s premier payments event – was held in Japan, bringing more than 6,000 bankers, payments providers and technology companies into the heart of Asia to learn more about this fundamental shift. In many ways, the conference has helped foreign, regional and domestic payments players gain a greater appreciation for the changes now underway in Asia. But many questions still linger, particularly with regards to China’s impact on the shifting marketplace.

With this in mind, KPMG China brought together some of the industry’s top payments professionals and recognized banking leaders to share their insight into how China’s payments sector is transforming and influencing the future direction of payments globally and regionally. Through a series of practical and comprehensive articles, these thought leaders have picked apart some of the great complexities in the market and provided practical and actionable advice for payments players, both foreign and domestic.

As a global network of member firms, KPMG is at the forefront of this shift East. In the past year alone, we tripled the number of China practices that we operate around the world to 48, and helped advise on three of the four largest China outbound M&A transactions. Over the same period, the China tax practice grew by more than 25 percent to meet the growing tax needs of local and multinational clients.

I believe that – by combining our firm’s keen understanding of the China market with our unparalleled experience in the payments sector – we can help both domestic and foreign players make the most of this shift East and help catalyze a fundamental transformation of the payments sector in China.

I encourage you to contact your local KPMG member firm or any of the authors listed at the back of this publication to learn more about the great payments transformation that is now underway.



**David Sayer**  
Global Head of Banking  
KPMG in the UK



**Edge Zarrella**  
Partner, Clients and Innovation  
KPMG China

# Contents

**06** **A tectonic shift**  
The rise of Asia as a payments superpower



**08** **Turning innovation into revenue in China's payments market**



**10** **Overcoming legacy**  
How to leverage the Cloud in China's changing payments environment



**12** **Turning Big Data into big value**



**14** **Building future-proof operating models in wholesale transaction banking**



**16** **Acquiring a slice of China's payments ecosystem**





# 18

## The internationalization of the Renminbi



# 20

## The data blows the whistle

Using analytics to reduce fraud in China's payments ecosystem



# 22

## A taxing transaction

Tax challenges and opportunities in the payment sector



# 24

## Technology carries the weight of regulation



# 26

## Defining and executing a payments transformation strategy

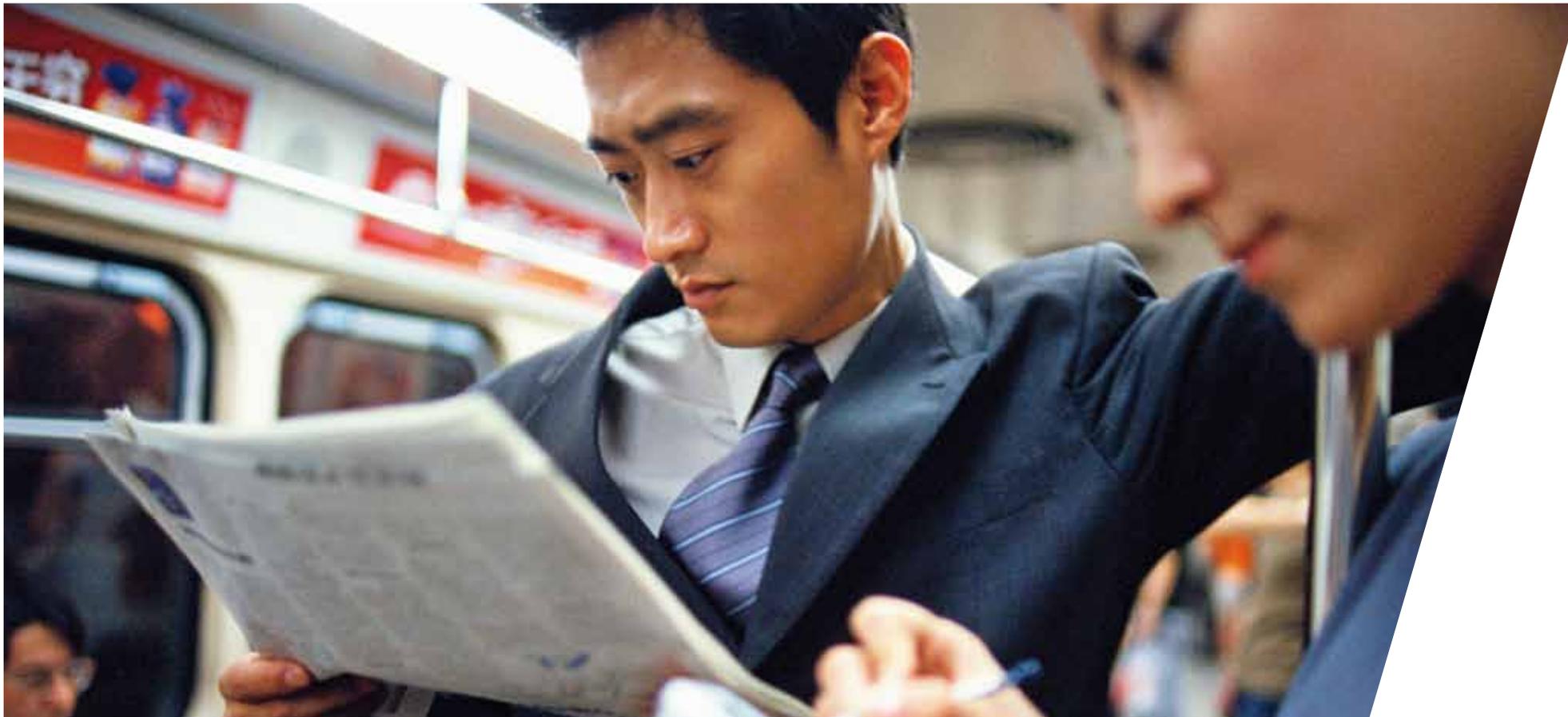


# 28

## What we took from Sibos

Five trends and considerations for the payments industry

# Executive summary



As the epicenter of the payments industry starts to shift towards the East, many participants in the global payments sector are now closely studying events in China to gain a greater understanding of how the market will evolve over the coming decade.

With activity heating up in almost all areas of China's payments market, our team of financial services professionals – both inside China and outside – developed a series of twelve articles exploring

a range of key issues and challenges emanating from the market. From the impact of tax and regulation through to the emergence of new innovations and operating models, our professionals dug deeply into the issues that matter to the payments sector, providing keen insight and valuable advice along the way.

As these articles demonstrate, there are a number of key trends now emerging from China.

## Rising payment volumes change dynamics

By 2015, Asia's purchasing volume is set to double that of the United States. With more than 1.3 billion people, China is clearly at the forefront of this volume market. As **Egidio Zarrella** points out on page 6, China is set to become a payments superpower by harnessing its payments volume to drive global competitive advantage. However, while consolidation in the market is already underway, **Jeremy Fearnley** notes in his article on page 16 that foreigners face a number of challenges in trying to acquire a slice of the country's payments ecosystem.

## Innovation catalyzes change

China's government is keen to encourage innovation and new operating models in the payments sector. According to **Mary Chong** (page 8), government measures have already changed the dynamics of the industry by introducing almost 200 new non-bank third party payment service providers who seem set to shake up the sector. Cloud computing will be central to this transformation and, as **James McKeogh** points out on page 10, will provide China's payments players with a massive opportunity to elevate their game and generate new revenues. On page 18, **Jason Bedford** also examines the government's introduction of the Offshore Renminbi and the impact that the currency will have on global markets.

## Big data creates big change

With massive volumes and new payments channels comes a torrent of new customer and product data. China stands to gain significantly from the use of Big Data in a number of ways. In a pair of complimentary articles, **Alessio Marinelli** notes that – while China's payments providers seem to currently be lagging their Western peers in leveraging Big Data to not only drive value, but also to reduce fraud in the system – there are clear indications that China is set to harness their data advantage to create real and lasting change across the system (see pages 12 and 20 for more on this).

## Rising tax and regulatory considerations

The financial service industry is no stranger to tax and regulation. In China, growing maturity in the payments sector has caused many of China's payments participants to rethink their approach to both tax and regulatory change. As **John Timpany** notes in his article on tax on page 22, players in China's market stand to gain significant benefits from examining their tax structures. And, according to **Simon Topping** on page 24, the rising tide of regulatory change will lead to both challenges and opportunities as banks re-invent their internal processes and operating models to respond to the changing regional regulatory climate.

## New operating models emerge

To respond to the transformation now underway across the region, many of China's banks are looking to adopt and implement new operating models that will not only facilitate growth but also keep pace with the rapid changes now occurring. In his article on page 14, **James O'Callaghan** notes that China's banks and payments processors will need to focus on 'future-proofing' strategies to maintain their competitive edge. At the same time on page 26, **Jeze Heath** suggests that – to develop a sustainable payments transformation strategy – banks will need to focus on understanding the pressures and influences that will act upon the market well into the future.

Our article series concludes with an insightful look at the top trends and challenges discussed at this year's **Sibos conference** held in Japan. With a number of KPMG professionals presenting and attending the conference, this article provides an 'on the ground' perspective of some of the biggest issues facing payments providers both in Asia and around the world.

When combined, this series of articles provides both foreign and domestic payments participants with a clear view of how this intractable shift East will influence the future of the global payments system. Those already active in the market will no doubt find the information and insights invaluable; those not yet looking East will also learn important lessons and – hopefully – gain a greater appreciation for how China will impact the payments market over the coming years and decades.

# A tectonic shift | The rise of Asia as a payments superpower



By  
**Egidio Zarrella**  
Clients and Innovation Partner  
KPMG China



By  
**David Sayer**  
Global Head of Banking  
KPMG International

“Payments providers around the world should be paying close attention to the Asian markets as the impacts of this tectonic shift start to transform the industry. Those with global operations or ambitions will need to quickly start considering how best to approach and participate in this vibrant yet complex market.”

**David Sayer**

By now, it should be clear that the center of the payments universe is unmistakably moving east. The facts are undeniable: in 2010 alone, Asia's share of global payment transaction volumes on general purchasing cards increased from 26 percent to 31 percent. By 2015, Asia's purchasing volume is expected to be double that of the United States.

## From emerging to leading

In part, this massive shift reflects the changes underway across Asia. Population growth, while moderated, continues to spike; more people equates to more transactions. Much of Asia (China in particular) is also experiencing increasing levels of affluence and a growing middle class, which is leading to higher levels of consumerism and greater household liquidity. Rapid urbanization is also acting as a catalyst for transaction volumes as more people move into cities and start paying for everything from rent to transportation.

But much can also be said about the impact of mobile on the payments ecosystem. Asia's consumers and businesses already



Those attending #Sibos understand that you can't claim to understand #banking unless you really understand #payments.

enjoy widespread access to the newest mobile devices and – with device prices continuing to fall – these innovations are increasingly being snatched up by even the poorest of citizens.

Mobile has also led to greater use of micropayments as new app-wielding citizens start to consume services and products in 'bite sized' pieces (one renminbi, for example, can buy a farmer access to local weather forecasts or a thermometer from online auction house Alibaba.com). This is resulting in increased upward pressure on transaction volumes.

## Policy drives change

Of course, governments have also played a key role in driving the growth of payment transactions in Asia. China's leadership, for example, has prioritized payments, outsourcing and cloud

computing in the recent 12th Five-Year Plan, thereby encouraging the development of the payments ecosystem. Interestingly (and in stark contrast to most western governments), China views the development of their mobile network as a critical infrastructure play – more important in many ways than the building of roads, rails or ports. As such, the government has invested heavily to ensure that mobile solutions will be available to their entire population of 1.4 billion.



KPMG @KPMG

3 advantages China has in the payments industry: #mobile technology, transaction volumes & #cloud infrastructure

China's leadership clearly recognizes that a functional, efficient and secure payments system is key to maintaining growth. Indeed, as the Governor of the People's Bank of China, Zhou Xiaochuan, noted, "The extensive development of China's payment system in recent years, and its safe and efficient operation, has effectively supported and promoted economic and social development for the country."

## Sprinting down the road

Given the rapid – and seemingly sustainable – pace of change in the east, it should come as no surprise that the payments sector in Asia is on the verge of leapfrogging their peers in the west. Indeed, with little to no 'legacy' infrastructure to upgrade, many of Asia's leading payments organizations have found themselves well placed to take immediate advantage of the latest systems and technologies.

Moreover, Asian payments participants have quickly turned challenge into advantage: Asia's higher transaction volumes have led to lower costs for customers, even while the region's rapid adoption of mobile has pushed payments infrastructure out to the most remote of villages.

The bottom line is that the agenda of the global payments industry is now largely being driven by the east and, if foreign players are not quick to assess the impact of this tectonic shift, they may find themselves struggling to compete in this bold new world.

## Our view following Sibos

Sibos reinforced what most participants in the sector already intrinsically knew: future success on the global stage is simply not possible without a robust and market-savvy Asia strategy.

China is clearly the most dominant and active market in the region and will almost certainly drive the growth of global transaction volume for the foreseeable future. But right across the region, Asia's economies are moving away from cash transactions and rapidly adopting new technologies (notably mobile) that are driving significant payments growth in almost every market.

For Western banks and participants at Sibos, attending the event in Japan brought opportunities to learn more about the region and – in some cases – start forming relationships with local organizations. This will be key to success; Asia is a complicated market with stark differences between countries, so Western payments organizations seeking a foothold into the region would be well advised to work with a local partner or service provider that can help navigate the 'on the ground' complexities.

# Turning innovation into revenue in China's payments market

By  
**Mary Chong**  
Partner  
KPMG China



## Yvon Audette

**KPMG in Canada**

"Global players are now under great competitive pressure to participate in the Chinese payments market. Indeed, while China's players are largely focused on driving the domestic market, they are also looking for foreign partners who can help them gain greater connectivity into the global market. Ultimately, this means there is significant room for the development of mutually beneficial partnerships. But foreign entrants will need to carefully evaluate their options before leaping into the market. The bottom line is that the Chinese market is looking for assistance in understanding the global market and how to adopt foreign principals; foreign players will need to support their local partners in order to maximize their business potential."



## Mitch Siegel

**KPMG in the US**

"The enormity of the Chinese market will lead to the continued development of numerous regional and niche solutions which, with support of the Chinese government, will create a need for inter-operation and standardization. However, innovation will eventually take over as larger companies acquire smaller ones and scale the capabilities to the broader market."

As China looks to redefine its payments industry, many organizations – both domestic and global – are keenly monitoring what is soon to be the world’s largest payments market. Indeed, the real question today is not whether China will modernize their payments environment, but rather how local and global players can take advantage of the opportunities that are now emerging.

## An ecosystem evolution

Over the past few years, it has become increasingly apparent that China is determined to transform their payments industry. The clearest indication comes from the Chinese government itself, which, in the 12th Five-Year Plan, has made the payments industry a high priority.

Much activity is already underway. For example, the Chinese government has granted almost 200 licenses to domestic non-bank third party payment service providers to effectively expand the payments ecosystem and promote the healthy development of the online payments industry. The government has also taken steps to ensure that license holders are robust enough to survive: all new license holders are required to have registered capital of at least USD25 million in order to receive a nationwide business license, and should have been making profits for two successive years. It is predicted that this approach will bring greater choice and competition to the domestic payments market and, simultaneously, protect the general public.

There has also been heavy investment by the government into developing the underlying infrastructure for the industry. More than USD154 billion is now being spent to improve processing capabilities (particularly in areas such as cloud-based data centers) and telecom companies are rapidly improving their capabilities in areas such as mobile payments.

For their part, the Chinese public has proven to be remarkably open to innovation, driven by a desire for more convenience and adoption of mobile technologies. In China, the 18-35 age group not only has the highest mobile adoption levels, but are also the greatest users of social media capabilities. This has led forward



**KPMG @KPMG**  
#Banks need #metrics for #innovation – time to market – revenue generation: Edge Zarrella, KPMG #sibos

thinking companies such as TenPay and China Rewards to explore opportunities to monetize this market through the integration of online shopping channels and loyalty programs. Early evidence shows that this combination of technology, value proposition and market is a recipe for success.

## Turning innovation into value

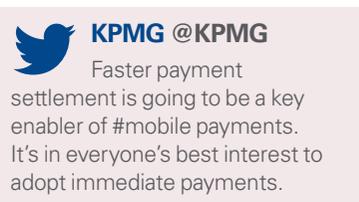
However, the market is still largely dominated by four key players (AliPay, TenPay, Union Pay and 99bill) who, collectively, hold an estimated 80 percent of the domestic payments market. But while these big players effectively control the ‘volume market’ by offering convenient and innovative consumer-focused solutions, there is still tremendous opportunity for new market entrants.

Many have been focused on establishing unique market niches in which they can develop an end-to-end value proposition. SmartPay, for example, is focused on city-wide bill payments and lottery; QQ is rapidly establishing itself in the gaming sector; and AliPay and China PayPal are fighting it out in the consumer online auction and virtual market segments.

But other small third party players seem to be struggling to articulate their business value proposition. In many cases, these parties not only hold licenses in the Chinese market, but also valuable technology innovations and applications. However, many of the smaller players are somewhat less focused on dominating the market as – with an estimated 431 million mobile users – they recognize that even small levels of market share can bring significant revenue. For these players, great opportunities still exist by delivering leading edge solutions to demanding consumers. Handpay, for example, is partnering with banks to provide their mobile commerce platforms by delivering enhanced payment security through smartcard overlays.

## Opportunity for foreign investment

While licenses are currently restricted to domestic service providers only, there is still significant opportunity for foreign



**KPMG @KPMG**  
Faster payment settlement is going to be a key enabler of #mobile payments. It's in everyone's best interest to adopt immediate payments.

organizations. By partnering with either existing or new domestic players, foreign companies can bring their ideas and best practices into the China market and assist in stimulating continued innovation.

And while the Asian payments market will likely transform with or without the participation of foreign players, it does provide an environment where the best operators in the world can deliver leading edge services to the largest market, while simultaneously helping the rest of the industry outside China to develop their own business propositions.

## Our view following Sibos

There is no doubt that a wave of innovation is breaking over the industry with breathtaking pressure. Most notable at Sibos, of course, was Asia’s mastery of the mobile space, predominantly on the retail side, but with emerging corporate solutions as well.

We believe that innovation is always a benefit to the industry and consumers. Besides, spreading the innovation burden out into the emerging markets will likely catalyze more creativity and deliver new opportunities to the global market. As one attendee quipped, “that’s fine with me if Asia wants to fund the next generation of innovation in the industry, we’ll license it once it becomes mainstream but – until then – we’ve got other things to focus our investments on.”

Those paying close attention at Sibos may have noted that technology is not the only area that Asia is innovating. Many banks and payments participants are also developing non-traditional market strategies and operating models that may, eventually, spark a global transformation in the sector in the same way that LEAN flowed out of Japan and revolutionized the manufacturing industry.

While only a handful of truly innovative solutions and technologies were showcased at this year’s Sibos conference, we anticipate that the next year will bring remarkable change to the industry.

# Overcoming legacy | How to leverage the Cloud in China's changing payments environment



By  
**James McKeogh**  
KPMG China



## **Martin Vipond**

**KPMG in South Africa**

"Transforming the IT environment is a massive and complex task for banks around the world. More than simply plugging in a new platform and starting operations, IT transformation – done right – requires significant effort to be put into developing the right governance frameworks, controls, processes and policies to meet the needs of the future-state business. This cannot be done in a vacuum: it will require all business units and functions to work together to create a common vision of how the bank will operate in the future."



## **Mark Hale**

**KPMG in the UK**

"China's payments sector will find that transformation success will ultimately depend on motivating merchant adoption and building customer trust. However, this has to be underpinned by resilient infrastructure to support predictable, safe and efficient clearing and settlement. To really outperform northern hemisphere market solutions, success would also be characterized by delivering value through innovation as well as satisfaction through more value adding, relevant and customer led service propositions. Together these are the key ingredients to creating solutions that will drive revenue growth, grow market share and drive brand value."



## **Daniel Houseman**

**KPMG in Australia**

"Banks may also want to consider whether they can potentially purchase processing services from Cloud service providers in order to eliminate the need to develop new payments platforms. Data privacy will be a hurdle to adopting this approach, but – if it can be surmounted – may provide banks with long-term and sustainable savings in the future."

The pace of change within China's payments market has been, quite frankly, astonishing. Purchase volumes have been rising meteorically and hundreds of new players have entered the market (thanks largely to the introduction of third party licenses), even while new technologies are disrupting the status quo for traditional payments providers. Simply put, today's payments environment in China is altogether different to what it was just five years ago.

## Held back by legacy?

Against this backdrop, China's payments providers have come to the rather abrupt realization that their legacy systems have become a real and tangible risk to growth. Some of the more internationally-minded

providers even suggest that the coming transformation will be an opportunity to truly leapfrog global and western competitors

by developing new systems that harness the transaction volume and embrace technological change to create a future 'model' for payments.

Certainly, Cloud computing will act as a catalyst in this legacy transformation. Cloud is itself an enabling technology. By harnessing Cloud, payments providers are seeking to take advantage of its key characteristics such as on-demand self-service, pooled resources, elastic capacity and pay-per-use fee structure to develop scalable, resilient and dynamic infrastructure and systems.

## A killer Cloud

Cloud also represents a massive opportunity for payments providers to elevate their game and generate new revenue. For example, take the mountain of data collected on payments every day in China: by leveraging Cloud, payments providers can harness that data to generate real-time analytics that can subsequently be sold back to retailers who – also using Cloud technologies – can translate that data into demand forecasting and loyalty programs.

While China's government has made the development of Cloud a key priority in the 12th Five-Year Plan, uptake has been somewhat slow to date. However, there are clear indications that China's Cloud is about to rise. While China currently accounts for only around three percent



**KPMG @KPMG**  
China accounts for only 3% of the #Cloud market. most pundits agree that this is likely to rise to 19%

of the Cloud market, most pundits agree that this is likely to rise to 19 percent. As Cloud adoption and utilization rises in China, so too will its attraction as a payments platform.

## Bridging the gap

For now, many of China's banks have been focusing on implementing new systems that will ultimately serve as a stepping stone to the new Cloud-enabled world. However, there is a clear tendency within China's payments ecosystem towards implementing 'best of breed' and 'off the shelf' solutions which, while certainly simpler to procure, often results in lengthy implementation periods and significant configuration requirements.

As a result, a number of China's banks and payments participants have found that swapping their legacy systems is often much more complex than originally anticipated. Learning from these lessons, many of China's banks are now evolving their systems implementation plans to partner with both vendors and management consultants who can apply global best practices within the context of the local setting to create a truly 'fit-for-purpose' solution.

In truth, the transformation of China's core banking systems will prove to be a significant challenge for most banks. It will require them to first develop a larger holistic plan complete with target operating models and clear KPIs before setting out on the procurement journey. Processes, controls and governance will need to follow.

## The merchant and the consumer

One must remember, however, that core banking systems – while certainly the most complex legacy system to overhaul – are not the only piece of aging infrastructure experiencing massive change right now in China. So too are the consumer payment and merchant technologies.

To date, this is where much of the activity in China has focused. Mobile payment technology is rapidly being put into place and adoption is ascending. Internet payments, already a popular channel in China, are also expanding their market share at an impressive speed.

There have also been a number of new solutions offered on the merchant side, but adoption has been slow. This is partially due to the fact that China is still predominantly a cash culture. In addition, China's merchant acquirers have yet to demonstrate the full value of new technology.

This creates another significant opportunity for banks. By developing and introducing a range of new services for merchants – from



**KPMG @KPMG**  
Today's system replacements are tomorrow's legacy systems. #Banks must find smarter, more agile ways to implement IT.

programs to manage liquidity and provide real-time views into cash positions to the types of products being purchased and customer purchasing trends – banks and their third party suppliers may quickly be able to grow their market share and gain a bigger slice of China's payments environment by transcending their legacy platforms.

## Our view following Sibos

In one way or another, the need to move away from legacy IT systems was a key topic in almost every session. Whether driven by regulatory change and compliance requirements, shifting customer preferences or a desire for greater efficiency, everyone agreed that a new approach was needed to ensure that systems could become more flexible and responsive to meet the rapidly evolving market.

Sibos also highlighted a growing trend amongst payment participants to take a more agile approach to development. Whereas organizations had traditionally opted to implement multi-million dollar systems over two to three years, now the preference is to push out new products or applications quickly and then conduct regular releases or updates to integrate improvements over time.

And while there was also much discussion on the benefits of new Cloud-enabled solutions for the payments industry, no clear trend seemed to be emerging from either the sessions or the attendees. Some felt strongly that Cloud would irk the regulators and create data and privacy risks; others, however, told inspiring stories of the Cloud already successfully at work within the sector.

We believe that Cloud will prove to be a key component for banks seeking to create more agile systems and, as such, anticipate that Cloud adoption will steadily increase over the coming years.

# Turning Big Data into big value

By  
**Alessio Marinelli**  
KPMG China



**Akhilesh Tuteja**  
KPMG in India

“With the proliferation of internet banking, the growing use of mPayments and customers willingness to air their complaints across Facebook and Twitter, so much data exists which can generate significant new insights into customer behavior, if it is successfully mined. In the digital and information age we are now in, this is akin to ‘digital gold’. But unless Big Data is harnessed quickly and effectively, the big banks will struggle to compete with the more customer centric and digitally literate new entrants to the market.”



**Nikil Mathur**  
KPMG in the UK

“The application of Big Data is causing a challenge for organizations around the world who are struggling with the practical implications of implementing the breadth, depth and linkage that comes with this data. Big data needs a fantastic data warehouse capability which enables the organization to collect a series of structured and unstructured data in order to create a single customer view. In my experience, most companies are still trying to get up to speed with the basic concept of a single customer view and understand its benefits in the multi-channel world.”



**Marcus Vass**  
Partner, Bird & Bird

“Big Data is a potential treasure trove that businesses can capitalize on for useful information. However, businesses should be aware of the legal boundaries and risks associated with data harvesting. Hence it is important to develop a corporate policy that fosters privacy and information security.”

Is your organization drowning in data? Chances are this may only get worse. Given the dramatic growth forecasted for transaction volumes in Asia (which, according to The Nilson Report in 2010, are expected to top USD10 trillion by 2015), it seems clear that Asia's payments processors face both a significant risk and a massive opportunity when it comes to dealing with Big Data.

## Managing risks and taking advantage of opportunity

The risk posed is that Asia's payments organizations may quickly become overwhelmed by the huge amounts of data in their systems and fail to translate their Big Data into big value. Indeed, to date, many of Asia's largest payments organizations have generally lagged behind their global peers in their collection and use of data. Essentially, this means that significant value – and possibly competitive advantage – is being lost.

Big Data creates a massive opportunity for Asia's payments participants. The simple fact is that payments processors have access to an enviable amount of customer data which, when properly analyzed and packaged, can generate new revenue streams for banks and valuable insight for their clients, particularly in the retail, hospitality and leisure industries. Spending patterns can be analyzed, products can be better promoted, and data can be aggregated and resold to interested parties. Moreover, once armed with this level of customer insight from payments processors, companies can subsequently start to evolve their liquidity management and ensure that investments are being channeled to the right projects at the right time.

However, many of Asia's payments processors face significant challenges in reaching this goal. For one, payments leaders will need to evolve their business intelligence (BI) from simply collecting and collating information to also focusing on analytics and aggregation. Consequently, Asia's payments industry will need to assert the value of their data and accompanying analytics to those clients that would benefit most from this information.



**KPMG @KPMG**

#BigData: no matter how big it is, it's just data. The real problem is turning it into insights rather than just facts.

## Much to lose, but more to gain

Based on the experience of peers in other regions, Asia's banks also stand to gain significant internal advantages from maturing their BI and data analytics capabilities. One major area of opportunity is in the back office. By delivering more insightful and timely analysis, a bank or card company may, for example, gain a clearer understanding of the impact of foreign exchange adjustments on their payments. This will effectively lead to improved currency hedging within the treasury department and result in better cash management and forecasting.

Another area of high value for payments providers comes from using data analytics to draw a clear picture of the lifecycle profitability of each available channel. This delivers greater insight into how transactions move and how that links to the propensity to buy or customer preferences for each of those specific channels.

## The path to data enlightenment

So what can Asia's payments participants do to reap the full value that Big Data offers? Firstly, organizations must understand what they hope to achieve from their BI and Big Data strategies. This will require them to truly understand their business strategy and then work from the top down to identify the individual key performance indicators that support the achievement of the organization's goals. In other words, rather than simply responding to the immediate demands of the organization, BI leaders would be wise to focus on ensuring that their long-term strategy clearly aligns to the strategic goals of the organization.

Organizations will also need to develop the capability to discern what data (and from what source) delivers the most valuable insight against that strategy and what data only adds complexity and uncertainty to the process.



**KPMG @KPMG**

Data taxonomy is a big topic at #Sibos. Many want to know how to pull it together and link it in a meaningful way.

## Making analytics a business priority

One would be hard pressed to overestimate the value that BI and analytics can offer Asian payments participants. With massive growth forecasted in Asia's payments volume, the region is uniquely positioned to drive the understanding and use of Big Data in the payments industry on a global scale.

Immediate action must be taken to achieve this goal. Across Asia, banks and payments providers will now need to start developing an actionable and achievable plan for turning their Big Data into big value through an effective BI strategy. This, in turn, creates a number of tactical projects that break the Big Data problem into bite size chunks. And while the journey to a BI 'end state' may involve a number of tactical solutions, the alternative is to risk drowning in the data deluge that is surely coming.

## Our view following Sibos

There was big talk about Big Data; at Sibos, much like every other industry event over the past few years, the term 'Big Data' was everywhere. Interestingly, it was data 'taxonomy' that seemed to attract the most attention this year, which seems to signify that the industry has awoken from its data paralysis and is now getting on with the hard task of sorting through the mounds of data at its disposal.

That is not to say that banks have cracked the data puzzle. In fact, the bank executives we spoke with seemed – on the whole – to still be struggling with transforming their insights into value for the customer and, as a result, are slowly but surely losing market share to some of their more innovative and non-traditional competitors.

China, in particular, may see some of the greatest advancements in leveraging payments data. With 200 new market entrants all seeking some form of competitive advantage, China's banks and payment organizations will need to innovate quickly if they hope to maintain their dominant positions.

# Building future-proof operating models in wholesale transaction banking



By  
**James O'Callaghan**  
KPMG China



**Fred Schneider**

**KPMG in Germany**

"Our experience working with leading payments participants around the world shows that developing a successful future-proof operating model demands the buy-in of senior leadership across operations and the various lines of business. As with any transformation project, the direction and strategy will need to be led and communicated by the business itself, so tight collaboration between the functions will be critical, especially with the technology partners."



**Kim O'Donoghue**

**KPMG in the UK**

"In the West, transaction banking operating models have developed based on opportunities to standardize, automate and centralize. All three of these help lower the bank's overall risk, reduce costs and – ultimately – deliver a better customer service. Standardization, automation and centralization also tend to lead to a simpler operating model which, as James rightly notes, delivers more flexibility and adaptability to respond to changes in the ecosystem."

Given the recent transformation of China's markets and the payments market in particular, many banks and payments processors are now seeking to build a level of 'future-proofing' into their transaction banking operating models. This is a welcome trend.

The timing of this is very appropriate given that many Western banks are also looking at their strategy to decide what to do with their legacy core banking platforms, many of which were implemented during the 1980's or inherited through acquisitions. These systems are now struggling to support organizations as they transition through the evolution of mobile payments and technology and respond to the demands and volumes of clients and transactions.

## Advantage China

China has a clear opportunity to harness its considerable advantages (such as the evolution of mobile technology, increased transaction volumes, rapidly developing Cloud infrastructure and a comparatively stable economy) to develop flexible, scalable and adaptable operating models capable of lasting a generation or more.

However, building future-proof operating models requires China's banks to have a high level of awareness, both of their own structural advantages and limitations, as well as the direction of the changes going on around them. China can also learn from lessons learned by Western organizations regarding the challenges faced when undertaking such large transformational initiatives.

## Look inside and out

To start, banks will need to gain a clear understanding of their long-term strategies and objectives. Is the over-riding goal of the organization to increase transaction volumes or expand into new markets? Is international expansion on the horizon or are all eyes focused on domestic growth? Does the bank have a clear vision of what their clients need now and in the future and how they want to be serviced?



**KPMG @KPMG**

Key to a successful future-proof operating model will be securing the buy-in of senior leadership #banks #Sibos

This will allow banks to start to envision their future operating model and develop a framework against which they can properly align their decision making process and design principles. In turn, this will lead to the creation of a target operating model that will act as a roadmap for all future decisions and investments.

## Taking a holistic view

Banks will, however, need to be aware of the impact these changes will have on the broader organization. Indeed, given the interconnectedness of today's banks, true future-proofing cannot successfully occur in individual silos; it requires banks to take a holistic view of the organization to understand the dependencies of the change and its impact on suppliers, customers, stakeholders and employees.

Of course, a range of other considerations must also be overlaid. For example, take regulation: banks that either have, or plan to have overseas operations, will need to carefully consider how regulation in foreign jurisdictions may influence their operating models. Many markets now require sensitive payment systems and processes to be conducted within the jurisdiction itself, which will impact the ability to centralize operations. In much the same vein, data and security are also key concerns for regulators, possibly requiring the establishment of local data warehouses and new controls and governance systems.

## Assessing the dependencies

All of this will naturally impact the sourcing decisions that must be made. Some systems and processes will need to be maintained on-shore, while others may be centralized and put into a shared service model that serves as a regional – or even global – hub. The introduction of Cloud computing into the payments ecosystem (a topic which was discussed earlier in this article series) will also add a new dimension to the sourcing decision process.



**KPMG @KPMG**

#Banks had better be either big and efficient or small and innovative. Anything in the middle is going to be an uphill struggle.

Key to developing a successful future-proof operating model will be securing the buy-in of senior leadership and the various lines of business. As with any transformation project, the direction and strategy will need to be led and communicated by the business itself, and so tight collaboration between the functions will be critical, especially with the technology partners. Architects of future-proof operating models will also need to dedicate resources towards helping the business to understand the implications of the change, developing future-proof processes and communicating the change throughout the organization.

Regardless of the shape of the operating model, the bottom line is that – to last into the future – operating models will need to be flexible and agile to ensure that any environmental changes can quickly be absorbed into the daily operations. Ultimately, the ability to adapt will be the only true test of how 'future-proof' the eventual operating model will be.

## Our view following Sibos

A fortune teller would have been a popular attraction at Sibos. With almost everyone in attendance looking for some sign of where the market and the regulators are going, the idea of future-proofing operating models was top of mind.

But hope did seem to be within reach. There was a general consensus that – while the exact shape and letter of upcoming regulation was not clear – the general direction being taken by regulators was sufficient for banks to start creating future operating models. The same sentiment was echoed for technology and consumer preferences.

The use of payment hubs and the impact of Cloud computing were frequently discussed as opportunities to bring a level of future-proofing to operating models, as was the need for greater flexibility and agility in planning and implementation.

It does not take a fortune teller, however, to know that the evolution of the payments industry has only just started and that – inevitably – no operating model can be 'future-proofed' enough to fully withstand the changes that are coming.

# Acquiring a slice of China's payments ecosystem



By  
**Jeremy Fearnley**  
KPMG China



## Stuart Robertson

**Head of T&R Banking  
KPMG in Switzerland**

"Globally, we have seen a brisk pace of M&A activity within the payments space – particularly in areas related to mobile payments, Cloud computing and payments analytics – as organizations seek to gain scale or capabilities in these emerging areas. However, much of this activity has tended to stay within individual regions as organizations look towards 'safer' and more familiar markets close to home. So while we are seeing some activity within the Asian region itself, there are few examples of European or North American banks swooping into Asia to grab a piece of the market through traditional M&A."



## Edge Zarrella

**KPMG China**

"Even if Western banks were able to acquire a bank or payments provider in China, the real question is whether they are in the right shape to properly digest and integrate operations in a complex market such as China. The truth is that most Western banks are still struggling to sort out the complex web of systems and processes that they have cobbled together from past acquisitions and – until they get that right – there seems to be little appetite for more transactions of this type."

From a Western perspective, it may appear that China's payments sector is ripe for a roaring round of M&A activity. Growth is booming, volume is king, banks seem flush, and now a veritable feast of potential targets beckons. In fact, in 2010, China's total non-cash payment business, including banknote clearing and bank card settlements, was worth RMB905 trillion (USD140 trillion). So it may come as a surprise that there has actually been little recent M&A activity in China's payments space.

## The domestic view

It seems that many third party license holders are keen to crack this space alone. In some cases, they have enjoyed support from venture capitalists and private investors who see promise and potentially large returns from technologies and innovations already emerging from these new entrants. However, as these venture capitalists and investors divest their holdings, we expect to see an increase in M&A activity.



China's big banks and payment majors are also taking a measured approach before placing any bets on potential acquisition targets. This is understandable; given their size and dominance, most of these players can afford to wait it out until it becomes clear which technologies and start-ups will deliver value and which will ultimately fail. That being said, they are excited about online payments, and many commercial banks are now actively promoting online payments by way of discounts and other promotions. Many in China are probably already well aware that Ping An Bank, Bank of Communications, and China Merchants Bank have recently launched online payment promotions with partner payment gateways.

## The challenge for foreigners

For foreign acquirers, the M&A environment is more complex. The biggest challenge relates to ownership and regulation. For example, new third party licenses contain stipulations that they

must remain fully owned by Chinese interests. As a result, most foreign organizations looking to participate in China's payments ecosystem will have to settle for structured options such as Variable Interest Entities (VIE) or make strategic alliances with Chinese third party processors looking for overseas collaboration to secure a position onshore.

Most foreign investors may also be somewhat intimidated by the four big payments players in China - AliPay, TenPay, Union Pay and 99bill; collectively, they account for an estimated 80 percent of the domestic payments market. Those inexperienced in China's marketplace may also be concerned about the potential risks when undertaking a venture in such a massive and (for those in the West) foreign market.

## Opportunity on the horizon?

While currently, many of the largest players in the volume payment sector maintain in-house platforms, this trend will not last forever. This is particularly true for some of the financial services sector and those major retailers who have experienced massive growth in their payments business as a result of the explosion of online shopping volumes which, in 2011, exceeded RMB750 billion.

Indeed, it seems increasingly clear that the next tier below these major players also require specialist third party payment service providers. For these license holders, the long-term alternatives seem fairly clear: acquire, partner or be acquired.

With almost 200 players, it is inevitable that the market will go through significant consolidation over the short to medium-term as smaller companies merge. As such, we expect that the larger in-house groups may be key players in this consolidation as they reach critical mass, are spun-out by their parent groups, and seek to acquire the independents in a bid to access niche market segments or technologies. In one such move, Alipay acquired OnCard Payments, a private equity-backed payment gateway that specialized in handling transactions for the travel sector.

Certain regulatory actions may accelerate this process. But while the People's Bank of China has committed to opening the market to foreign companies, foreigners are effectively shut out – for now.

Opening the payment processing and settlement market to foreign players would spur a significant increase in M&A activity as third party settlement providers seek to access and process transactions for domestic banks as well as bring innovation and best practice to the market.

While the current market may seem subdued, the bottom line is there are strong undercurrents taking hold that seem likely to surge into a wave of activity in the not too distant future.



## Our view following Sibos

While there was a general acknowledgement that China's current rules either disqualify or strongly discourage foreign payments organizations from taking control of a part of China's payments ecosystem, many Western organizations had none the less made strong headway in the market.

A number of global and regional banks have already formed partnerships with some of China's larger players. Non-traditional competitors – such as PayPal China – had forged new approaches to capturing part of China's payments promise.

And while no major transactions were announced or mooted, there was a general feeling that Western banks were starting to seek out new partners that could – eventually – become acquisition targets if the market conditions became more encouraging.

Interestingly, some of the chatter on the conference floor seemed to indicate that a reversal of the anticipated trend may be in the offing. Recently, one of China's state-owned banks has been given the green-light to acquire foreign financial services organizations. East may move West before the West is able to move East.

# The internationalization of the Renminbi

By  
**Jason Bedford**  
KPMG China



**Daniel Houseman**  
KPMG in Australia

“There is a growing recognition in Australia and other markets that banks need to work out a way to partner with their counterparts in China to facilitate cross-border transactions. The expectation is that the adoption of CNH will take a step out of the process which – hopefully – will make it more accessible for people to trade directly without having to use an intermediate currency.”



**David Sayer**  
KPMG in the UK

“This is truly a remarkable time in global currency markets. Everyone is interested in understanding how the new currency is going to work, what products are being developed to support it, and how trades will be managed. Yes, there is probably a lot of hype about the CNH but – underneath it all – there is a genuine feeling that this is a significant change in the money markets.”

Over the past few years, China's Renminbi has quietly, yet aggressively, been moving onto the world stage. Indeed, with strong support from the Chinese government, we have seen the increasing adoption of the Renminbi as a settlement currency. This is not only within the domestic market, but also across Asia and – slowly, but surely – in other foreign markets such as the US and the UK.

However, given that the domestic Renminbi is not a convertible currency, this has led to the rise of what is commonly known as 'Offshore Renminbi' (CNH). Interestingly, the value of the domestic Renminbi (CNY) can often differ from that of the CNH, which initially took on a higher value than its domestic counterpart (although the variance is gradually diminishing).

While some lending of the CNH has certainly occurred along with the roll out of CNH denominated wealth management products (primarily within regional markets such as Malaysia and Indonesia), the larger focus on the CNH has been as a settlement currency. Essentially, it is now possible for companies purchasing within, or selling to, China to pay entirely in Renminbi and, as a result, reduce transaction and FX costs for their purchases. By the same token, Chinese companies and tourists purchasing outside of the country also benefit from using Renminbi as a settlement currency.

## Hurdles impact adoption

However, there are still a number of challenges holding back the wider adoption of the CNH. For one, many offshore holders of CNH have traditionally found it difficult to leverage their holdings into returns in any markets outside of China. This, however, is starting to change. China's government has recently been experimenting with a number of pilot projects aimed at creating investment opportunities for the CNH. For example, an initiative known as RQFII provides a framework by which domestic fund managers can set up a presence in offshore markets in order to manage funds being invested into China. London has also been aggressively working to create CNH-denominated investment opportunities (though adoption has been rather slow).

 **KPMG @KPMG**  
For foreign payments processors and #banks, the rise of the Renminbi creates a number of opportunities

International investors are also somewhat concerned that the new currency may be prone to volatility. In large part, this is because government 'ownership' of CNH is unclear and – without the implicit promises that stem from Central Bank backing – this has led investors to question how the currency would be stabilized in the event of significant market turbulence.

 **KPMG @KPMG**  
#China's National Advanced Payment System II will help streamline cross-settlement processes around the #Renminbi

Other problems are rapidly being solved. For example, the lack of SWIFT codes for the CNH has, to date, made cross-border settlement rather difficult. While there are no plans to develop a SWIFT code for CNH, China's soon-to-be introduced National Advanced Payment System (CNAPS)II system will help to streamline cross-settlement processes around the Renminbi.

## Converting CNH into opportunity

For foreign payments processors and banks, the rise of the Renminbi as a settlement currency creates a number of opportunities. For example, many multinational organizations based in Asia and trading in China will likely be keen to settle transactions in Renminbi which will provide a distinct competitive advantage to those banks that are able to offer this service. Others will be seeking to take advantage of offshore Renminbi treasury and wealth management services.

Banks also see increasing opportunities to put their CNH reserves to work within the China marketplace. For example, those interested in creating a JV with one of China's third party payments license holders, may find value in funding their investment by using their CNH rather than US dollars. There are also increasing opportunities to channel offshore Renminbi into the Chinese market through the origination of loans.

However, the biggest opportunity most likely is for China's domestic banks that are well placed to serve those global multinationals and regional trading partners with investment interests in China. As a result, the adoption of CNH has actually been a strong catalyst for domestic banks to explore opportunities to expand overseas in order to be closer to potential customers and domestic enterprises expanding offshore.

## A new global currency?

The wide-spread use of Renminbi as a settlement currency will also ultimately drive further growth in China's transaction volumes. This will enhance the profitability of domestic payments processors and broaden the payments market outside of the domestic sphere.

Over the coming years, we expect to see many of the existing challenges facing the adoption of CNH start to be solved and anticipate that – while the currency will likely not usurp the US dollar as the global settlement currency any time soon – it may well become a strong alternative for those conducting business or settling transactions in Asia.

## Our view following Sibos

It's not very often that a new major global currency hits the market. So it's not surprising that Offshore Renminbi (CNH) was a topic of significant interest at this year's Sibos conference. And while the optimism is palpable in China, much of the interest in CNH at Sibos came from banks in China's biggest trading partners who see an opportunity to capture part of the cross-border payments volume by offering settlements in Renminbi.

The benefits are fairly clear; by trading in CNH, companies can reduce the cost of each transaction simply by cutting out the mid-step of converting to USD that – today – happens between almost all cross-border transactions.

But while most industry observers assumed that the CNH would predominantly be a trade currency between Japan and China, the reality is that banks and payments processors from around the world were keen to hear how the new currency would operate in the market. Australian and Western banks were just as interested in learning about the CNH as their Japanese hosts.

The jury was out, however, on whether the CNH could eventually take over the USD to become the dominant global settlement currency.

# The data blows the whistle | Using analytics to reduce fraud in China's payments ecosystem



By  
**Alessio Marinelli**  
KPMG China



By  
**James McKeogh**  
KPMG China



**Chris Hadorn**  
KPMG in the US

"Fraud and information protection really goes hand in hand with regulation and customer expectations. We've seen significant progress being made, in the US in particular, where banks are ramping up their analytics as a core competency and using predictive modeling to identify issues such as fraud or insider trading."



**Liz Oakes**  
KPMG in the UK

"Regulators have long focused on using payments data to identify fraud. Today, regulators are even more aware of the benefits of using data to identify fraudulent activity. Take the Dodd Frank rule 1073 which will, by extrapolation, require payment service providers to give detailed data to a US originating bank on timing, charges and local taxes applied to a transaction in advance, so that full and final information can be provided to a customer at the initiation point for remittance transactions originating from the US."

Standing on the cusp of a payments revolution, China's banks and regulatory authorities are keenly focused on enhancing their ability to identify and react to financial crime.

For regulators, the need to eliminate fraud has never been more acute. In part, this is because the internationalization of the Renminbi (discussed in the previous article in this series) is forcing China's government to renew their efforts to remove counterfeit notes and tackle fraud in order to enhance the currency's reputation on the world stage. Greater understanding of fraudulent activity within the payments sector will also help the government in its fight against corruption and organized crime – two top priorities for the country's leadership.

For China's banks and payments processors, the ability to monitor, identify and respond to fraud will make or break their international expansion plans. Indeed, with banking regulators around the world now paying close attention to payments transaction activity in order to spot rogue trading, money laundering and fraud, China's banks will need to meet, and where possible, exceed the compliance requirements of foreign regulators. Penalties can range from steep fines through to blocked acquisitions and reputational damage.

## Stepping up the scope

Ask most banking executives and they will likely tell you that they already use analytics to spot fraud and other illicit activities. While this may be true, most only do so in a reactive way by reviewing suspicious activity or identifying anomalies in patterns – arguably once the fraudulent activity has already occurred.

 **KPMG @KPMG**  
Expect to see growing consolidation in the #China marketplace as new license holders are snapped up by bigger players.

real and material risk of fraud or rogue activity in their trading

Moreover, the use of analytics to detect fraud has, to date, largely been focused on the retail market where the risks are relatively well-known. Today, however, China's banks are starting to recognize the

and investment management spaces as well. This is much more difficult to identify; insiders generally have a clear understanding of the systems and controls in place to identify fraud and are therefore uniquely positioned to circumvent them. As a result, anti-fraud measures in this space must be flexible, adaptable and conducted in real-time in order to identify and interrupt fraudsters' new permutations and tricks.

This is where data analytics really proves its worth in eliminating fraud. Modern data analytics is not only capable of simultaneously conducting monitoring and alert processes in real-time across a massive volume of transactions, it can also adapt to changes in patterns and incorporate important external data. For example, today's systems are able to monitor a trader's communication across email, telephone, text, social media and messenger services to spot suspicious activity, and then correlate that against the trader's transactional activity. It can also reach across publicly-available data from other payments parties to flag potential occurrences of inter-institutional or international fraud.

 **KPMG @KPMG**  
Financial crime #analytics is the ability to embed the system into risk & management processes.

## Turning data into action

It will, however, take much more than simply implementing the latest data analytics solutions to reduce or eliminate fraud; it will also require banks to develop appropriate processes and responses to allow them to proactively manage the resulting prompts. The activities of Nick Leeson in the 1990s and Jerome Kerviel in the early 2000s all went unnoticed, causing significant exposure. More recent incidents have been identified earlier, but the reaction time taken to prevent rogue trading is still poor and timely responses do not occur. It is one thing to identify fraud; it is altogether another to be able to turn those prompts into immediate and effective action.

Moreover, these controls must be efficient enough to operate in real-time, particularly given the rise of SEPA in Europe

and Singapore's G3 payments mechanism, both of which have effectively eliminated the 24-hour turn-around time on transactions that had traditionally acted as a buffer for financial crime analysts and investigators.

The point here is that financial crime analytics is not just about data and information. It is also about speed, efficiency, effectiveness, and the ability to embed the system into operational risk and management processes. Consequently, given all the changes that are now underway in China's payments ecosystem, this seems like the perfect opportunity for the country's banks to build these robust, real-time financial crime responses into their new operating models.

## Our view following Sibos

The identification and elimination of fraud was – as it should be – a key theme at this year's Sibos. The simple truth is that as transaction volumes increase and new technologies come on stream (both in the consumer and the banking environments), the potential for fraud, money laundering and rogue trading increase exponentially.

The use of data for identifying, predicting and eliminating fraud was raised in a number of separate forums, with particular focus placed on solving the challenge of meeting regulatory reporting requirements by leveraging data from KYC and other customer-facing processes.

However, with most banks still struggling to convert their data into actionable insights and real-time prevention processes, there was a general feeling that creating proactive, analytics-driven anti-fraud measures was still an elusive goal for most in attendance at Sibos.

We believe that once payments organizations solidify their grip on their data, the ensuing information and processes will quickly start to be applied to anti-fraud systems to help banks meet compliance obligations, reduce their risk of exposure to loss and root out rogue activities.

# A taxing transaction | Tax challenges and opportunities in the payment sector

By  
**John Kondos**  
KPMG China



**Thomas DeLuca**

**Managing Director  
Advanced Merchant Payments Ltd.**

"In reality, almost any company with a significant portion of cashflow from electronic payment can benefit from a thorough review of payment channels for potential tax savings and efficiencies, whether based in China selling outbound, vice versa, or somewhere in between. Unfortunately, most only awaken to the potential efficiencies when the cost/benefit of proper structuring becomes not only more significant, but also more administratively and strategically burdensome. The message is clear – strategic structuring should be a top priority from the get-go."

As China's payments market matures and larger players start casting their eyes overseas, a growing number of them are becoming increasingly aware of the potential impact that transfer pricing may have on their organizations.

And rightfully so; transfer pricing – when not carefully managed – can create significant risks and costs for payments organizations now and in the future. At the same time, however, many of the more savvy players are also starting to recognize the potential opportunities that can be gained through smart and deliberate transfer pricing strategies and are therefore now placing serious focus on tax planning capabilities.

## Increased scrutiny on transfer pricing

While many of China's payments organizations seem to be fairly immature when it comes to developing tax strategies, the reality is that few nascent organizations or industry sectors tend to place a very high focus on tax planning within the first few years of their growth. In many cases it is not until a serious tax challenge or a dispute with a tax authority arises that minds are finally crystalized towards the real risks and reputational damage that can stem from this area of the business.



**KPMG @KPMG**  
Few #payments providers have adopted forward-looking #tax strategies to mitigate tax exposure & reduce risk.

All evidence suggests that these types of disputes are becoming more common. In part, this is because China's tax authorities have become increasingly focused on transfer pricing. In fact, having carefully studied transfer pricing approaches in other parts of the world, China has developed what is now considered one of the most comprehensive regimes in the region.

China's transfer pricing compliance obligations are also rather strict. For example, almost all cross-border enterprises are required to submit formal transfer pricing documentation on an annual basis (whereas in many other jurisdictions this step is only required when a formal audit is launched). However, in reality, few cross-border payments organizations possess either the resources

or the experience to fully document their transfer payments for related party dealings and, therefore, leave themselves open to significant risk of non-compliance and penalties.

## Creating advantage and reducing risk

While few payments organizations seem to have developed truly mature transfer pricing strategies, fewer still have put into place forward-looking tax strategies to mitigate their tax exposure, reduce risk and create competitive advantage. This is a shame. Significant benefits can be achieved when internationally active payments organizations implement smart transfer pricing strategies, particularly with regards to their technology and IP assets or their treasury and foreign exchange income.

Take the development and operating costs of a payment platform for example. One approach is to create a type of cost-share contribution arrangement where every operating company contributes to the implementation. But while this approach may seem straightforward to structure and maintain, it also brings certain complexities. For one, how is true market value determined in situations where new operating companies join or depart from the arrangement? How are these cost contributions centrally recorded? And what are the risk-sharing implications of the arrangement?

Another option is to form an IP holding company in a low-tax jurisdiction such as Hong Kong or Singapore and charge licensing or royalty fees to users. However, moving intangible assets into a new holding company can also trigger tax implications and, particularly in China, may attract challenges from tax authorities keen to retain the IP and royalty payments within their jurisdictional reach.

## Planning an effective tax strategy

Unfortunately, there is no 'silver bullet' for transfer tax planning in the payments sector and each organization will need to develop their own strategy to meet their unique situations and circumstances.

What is certain, however, is that payments organizations must start thinking about and planning their tax strategy right away,

while those organizations with an existing tax strategy may want to consider conducting a transfer pricing 'health check' on their organizational arrangements.



**KPMG @KPMG**  
#Transferpricing when not carefully managed, can create significant risks & costs for #payments organizations.

The bottom line is that careful and thorough tax planning is key to not only ensuring that transfer pricing arrangements can stand up to the increasingly complex web of regulations now emerging around the world, but also to creating competitive advantage through greater tax efficiency.

## Our view following Sibos

One could be excused for thinking that tax has little bearing on the flow of payments through the system. Few talk about the impact of tax on the payments industry; fewer still have considered how their operating models and organizational structure impact their tax obligations.

But while tax was not high on the agenda at Sibos, there is ample evidence to suggest that it should have been. With all the talk of new solutions coming to market and the increasing inventory of Intellectual Property being amassed within banks, the need to develop an effective and tax-efficient approach should be clear.

We believe that smart tax structuring not only delivers bottom line benefits, it also reduces the risk of non-compliance and helps create a future-proofed structure that supports the growth of the organization. At the same time, tax authorities are becoming increasingly focused on stamping out tax avoidance schemes, so payments participants will want to develop their strategy within the context of potential future regulatory change.

Tax strategies may well be the most under-appreciated growth strategy in the payments sector. Only time will tell if it will find its way into the spotlight in the future.

# Technology carries the weight of regulation



By  
**Simon Topping**  
KPMG China



By  
**James McKeogh**  
KPMG China



## Giles Williams

**KPMG in the UK**

“Developing a universal standard for data taxonomy within the banking sector will almost certainly improve transparency within the system and reduce the burden on the banks who – currently – are caught like a deer in headlights every time a regulator asks for another cut of data to assess a bank’s exposure to certain markets or suites of products.”



## Akhilesh Tuteja

**KPMG in India**

“The reality is that regulation now consumes more investment and resources compared to most other parts of a bank’s operating environment. Banks cannot afford to keep rolling out Band-Aid solutions to what is essentially a long-term challenge. Moving ahead efficiently and effectively requires a holistic and long-term plan that can be tweaked to respond to the specifics of the regulatory regime in each market in which they operate.”

If there is one constant that has emerged from the Global Financial Crisis, it is the drumbeat of regulation. Globally, regulators are rapidly devising and announcing new regulatory requirements aimed at reducing the potential for – and severity of – a future financial markets meltdown. Financial institutions, clearly, are the main target.

The impact on banks and other financial institutions has been significant. Some have failed, others have merged, and a few have even gained market share and new business as a result. Amidst all this change, many banking leaders are now starting to question how technology can be harnessed to respond to the growing demands of regulatory compliance.

## Technology under stress

The pace and demands of regulatory change have put alarming strain on banks' technology functions. For example, take the Basel III standards on capital adequacy, stress testing and market liquidity. Only a few years ago, most banks struggled just to add up point-in-time numbers to meet their compliance obligations; today, they are frequently asked to also run their data through a variety of stress scenarios. To meet the liquidity requirements, they have to add up the numbers and then model behavioral characteristics of their liabilities. Clearly, the complexity of compliance has grown exponentially, and with it, the need for more robust and sophisticated technology to meet these obligations.

Other regulatory changes are currently afoot that will be immensely disruptive to banks' technology functions. Primarily in the US

 **KPMG @KPMG**  
Significant banking revenues are at risk due to planned #regulation. #Banks must understand their exposure to regulatory change.

and the European Union, but increasingly in other markets as well, regulators are starting to focus on how banks can be effectively 'ring-fenced' in order to quickly quarantine any future banking failures without disrupting the entire financial system.

To achieve this, UK regulators, for example, require banks to separate their individual business units' technology systems and processes so each can stand alone in a crisis. This leaves banks with two viable options: invest in separate systems

(along with all the maintenance, management and infrastructure that goes with it) or outsource the technology function to a third party supplier that could serve the separated banks, yet be independent enough to survive a financial crisis.

## The perils of short-termism

Unsurprisingly, many bank executives and technology leaders are somewhat overwhelmed by the changes required to respond to this influx of regulatory requirements.

In many cases, this seems to have resulted in banks taking a rather short-term view of regulatory-related technology: identify the immediate requirement, build a quick fix, meet the compliance obligation, and move on.

This strategy can only ever be a Band-Aid solution to a much more systemic problem. The reality is that regulatory change is not stagnant and technology will surely bear the brunt of the change requirements. Without a long-term view and strategy, banks are likely to waste budget, add unnecessary complexity, and deflect attention away from growing the core business.

## Turning regulatory change into competitive advantage

What is needed, therefore, is a long-term and holistic view of not only the direction of existing and future regulation, but also an ability to overlay potential growth strategies to ensure that technology systems can both meet compliance requirements and enable the business going forward. For instance, Cloud Computing holds significant promise for enhancing efficiency, reducing costs and driving product innovation within banks. However, the use of Cloud services within banking is already coming under scrutiny by regulators who – as noted earlier – are keen to retain core system processes within their jurisdictions. Tough choices and complex decisions will be needed.

The reality is that banks, with the right insight and careful planning, can quite confidently surmise the future direction of regulatory change. The overall objectives of today's regulatory



**KPMG @KPMG**

Most #banks don't seem to have recognized the requirements of #Dodd Frank rule 1073. Time is running out and major changes must be made.

change are quite clear. So too is the preferred approach of individual regulatory bodies. All that remains is to translate directional assumptions into actionable strategies that can be integrated into the organization's growth strategy.

To be sure, this will be no small task. But those banks that are able to achieve this will almost certainly gain significant competitive advantage through reduced system maintenance and upgrade costs, better use of internal resources, lower compliance burdens, reduced organizational complexity and 'future-proof' growth strategies. Simply put, it is the difference between reacting to regulatory change and taking advantage of it.

## Our view following Sibos

If unanimous consensus could be found on anything at Sibos, it was that the current quantum and pace of regulatory change is creating serious challenges to payments operations and, as a result, placing significant pressure on the continued profitability of the sector. In fact, according to many attendees, responding to regulatory change was now diverting a significant level of budget and executive attention from managing the core business.

Likely one of the best-attended and most discussed sessions focused on how technology could be leveraged to respond to the ever-increasing regulatory burden. Attendees of the session, moderated by KPMG's Simon Topping, Leader of KPMG's FS Regulatory Center of Excellence in Asia Pacific, seemed particularly keen to understand how new data systems and approaches might be harnessed to bring greater efficiency and transparency to the reporting process.

In his comments to the session, David Saul, Chief Scientist at State Street, introduced the audience to the idea of using semantic database technologies (similar to those used in modern internet searches) to automate data aggregation and unite the data needed for regulatory compliance in the most efficient way possible. We believe that activity in this area will soon take off as standards are set and processes defined for exchanging information between companies and regulators.

# Defining and executing a payments transformation strategy



By  
**Jez Heath**  
KPMG China



By  
**Harry Hughes**  
KPMG China



**Fred Schneiderei**

**KPMG in Germany**

"The same pressures forcing China's payment sector to transform are – in some way or other – evident in payments markets around the world. Most banks and payment providers today have read the writing on the wall and are closely evaluating their current and intended future position/leverage in the payment ecosystem as well as their partnering strategy and are now diligently striving to reinvent their operating models and structures to respond to the inevitable change. Those that are succeeding are the ones that are willing to radically rethink their operations and – if necessary – sacrifice long-held assumptions to create a future-focused strategy."



**Ajmal Samuel**

**President and CEO, ASAP Transaction Processing**

"The payments industry needs to undertake a solid re-think of the payment processing market as there is now strong demand from all stakeholders – consumers, merchants and banks – to provide services which go beyond payment processing. At the core of this change lies the concept of 'convergence' which will define the next 'new way' of doing things. Simply processing a payment transaction will no longer be enough; in this brave new world, Asia is clearly leading the way with China at the head of the pack."

As this *Great Payments Transformation* series has articulated, payments infrastructure is rapidly developing in China and the wider region. Adoption rates for electronic payments are growing exponentially in developing markets, regulations are continuing to mature, and platforms are evolving. At the same time, new market entrants are driving competition alongside the consumer who is increasingly setting expectations for innovation in product development.

## A shifting marketplace

The challenges for payment providers in the market are broad. In part, the payments environment is being impacted by key regulatory projects across the region such as G3 (Singapore), Immediate Payments (Australia), e-billing (Hong Kong) and CNAPS2 (China), which are rapidly evolving the agenda.

But it is also the payments market itself that is boosting transformation throughout the payments ecosystem. Just look at the innovation currently springing up right across China's payments ecosystem as a result of 200 newly licensed Third Party Payment Providers entering the market which immediately increased competition and eroded margins. In response, many market participants are now streamlining their systems and processes to deliver Straight Through Processing (STP) capability, which in turn, will lead to reduced transaction execution times and costs.

 **KPMG @KPMG**  
Non-legacy players have an advantage by not being tied to a clunky and hard to adapt platform. That's helping them steal market share.

Interestingly, it is the drive for customer-centricity that is catalyzing these improvements as payments organizations start to keenly focus on providing services and performance demanded by customers. Take, for example, the growing trend for China's banks to leverage social media in order to capture the 'voice of the customer', identify and resolve issues more effectively, as well as develop and deliver increasingly customer-centric product offerings. When one considers the traditional product development approach for banks (which focused on matching existing market offerings), this new approach (delivering more innovative solutions) stands in stark contrast.

Despite these drivers for change, payment providers are still largely constrained by the economic realities of the current environment. Few payment providers are willing to undertake new initiatives without first understanding and verifying the potential return on investment that each new product may offer. With management challenging the prioritization of key initiatives and driving regional standardization where possible, any new operating model or strategy will absolutely need to show how the investment will be monetized in the short and medium-term. Clearly, this is where the importance of robust business planning lies.

 **KPMG @KPMG**  
Can #banks benefit from a trademarked style of product and service development? Building new inflexible #legacy systems can't continue.

## A transformation imperative

Once the need to transform has been recognized, payments market participants will then need to identify the most effective ways to facilitate such change within the payments ecosystem. Key consideration areas include: organic versus inorganic growth, who to partner with and how, what markets or product lines should be entered (or exited), and how best to structure operating models and entities for tax and transfer pricing impacts.

That being said, creating a successful strategy requires a clear understanding and analysis of today's payments market. Indeed, participants will need to understand and develop a single, forward-looking view of how market changes will impact current business models and revenue streams. Admittedly, this will be a complex undertaking as many of the transformation opportunities will naturally include strategies based on a long play with multi-year investments.

Key stakeholders – including customers, shareholders and regulators – will also need to be engaged. While support from shareholders and approval from regulators will give customers the confidence to adopt new payment approaches, only those who move first are likely to reap the rewards from the market.

## Formalizing the strategy

Payments market participants should not underestimate the importance of a well-defined, future-proofed transformation strategy that directly aligns to their growth goals. Without one, banks and payments providers risk operating reactively in the face of market change which, in turn, will lead to costly mistakes such as rolling out products or continuing operations in markets that are misaligned to their strategic goals.

Those that are able to take a long-term, holistic view of business planning and transformation will find themselves better prepared to take advantage of the current market changes and, in doing so, can outline a road-map for the future growth and stability of their business.

## Our view following Sibos

Nobody at Sibos argued the need for transformation within the industry. No matter what part of the value chain or what region of the world you represented, there was an overwhelming understanding that change was being thrust upon the industry and that participants had little choice but to either evolve or die.

Truth be told, the entire Sibos conference was essentially a step towards transformation. Those in attendance used the event to gain a clearer understanding of the changes now underway within the market, while solutions providers harvested feedback and demands from their existing and potential clients to design and deliver new solutions to facilitate the inevitable transformation that must occur.

There was also a hum of discussion around the best way to develop realistic business plans and secure resources to undertake what could be the most significant transformation in the history of the industry. And while there were no 'one-size-fits-all' solutions proffered, there was a wide-spread belief that – as executives and their Boards start to recognize the imperative for change – momentum and funding will surely increase.

# What we took from Sibos | Five trends and considerations for the payments industry

As 6,000 of the world's payments and transaction participants gathered in Osaka, Japan for this year's Sibos conference, KPMG was there to share best practices, debate emerging issues and – ultimately – to help participants make the most of the changes underway in the market.

It is easy to underestimate how important payments are to financial institutions, however it represents some 25 percent of bank revenues and 35 percent of the cost base of banks. "Transaction banking drives many of the key value drivers of a bank in terms of liquidity, customer service and compliance. Every economic transaction involves a payment, it's synonymous with banking," says Mark Hale, Head of Payments, KPMG in the UK.

The whole payments sector is now in the midst of a transformation, the likes of which will change the fundamental rules of the game. Through the course of our presentations, discussions and participation, we identified five key themes that – whether they were on the Sibos agenda or not – dominated the discussion at this year's conference.

On their own, each of these issues creates new and challenging complexities for payments participants; taken together, they signal an undeniable transformation agenda that cannot be ignored.

## **1** Coping with unrelenting regulatory change

Regulation was – once again – the linchpin that connected almost every conversation at this year's Sibos conference. Few (if any) participants were bold enough to suggest that they were coping with the pace of regulatory change; most admitted they were struggling – or worse, failing – to keep up.

That being said, there were very positive signals that many of the participating organizations were now starting to recognize the need to develop a more strategic approach to managing regulatory change, particularly its impact on technology systems and infrastructure.

"People are deeply interested in understanding how they can apply a portfolio approach to their regulation-driven technology challenges," noted Simon Topping, Leader of KPMG's FS Regulatory Center of Excellence in Asia Pacific, who moderated the regulatory sessions at Sibos. "They want to understand the future direction of regulatory changes so that they can get out ahead of it and build systems and processes that will help them ensure compliance around the world and across their lines of business."

“Many of the attendees were uncertain about the impact of existing regulation on their international business,” noted Liz Oakes, KPMG in the UK. “For example, few were aware of the potential impact of US Dodd Frank rule 1073, which will by extrapolation require payment service providers to give detailed data to a US-originating bank on timing, charges and local taxes applied to a transaction in advance, so that full and final information can be provided to a customer at the initiation point for remittance transactions originating from the US; the rule comes into force in February 2013, so there is no time to waste.”

## **2** Move towards faster payments picks up pace

“One of the hottest topics at Sibos and around the industry globally is the move towards executing immediate payments,” said David Sayer, KPMG’s Global Head of Banking. “Following in the footsteps of the UK, we will soon see Singapore and Australia move forward quickly on this and – before long – I suspect that all major markets will be implementing rules to bring about instant payment services driven by a move to mobile. The expertise which KPMG acquired through leading this change in the UK is now very relevant to other jurisdictions.”

For most banks, this move towards instant payments will require a significant transformation in their technology systems and processes. “Banks will need to do a lot of preparation work to be able to make and accept real-time payments and this will demand significant investment from the banks,” noted Daniel Houseman, KPMG in Australia. “The challenge is how to develop a business case for investment that quantifies and articulates the benefits to the bank and its customers.”

“A faster payment capability is an absolute pre-requisite to creating a successful mobile payments platform; people won’t wait for days to receive their payments in the mobile world,” noted Edge Zarrella, KPMG China. “We are also seeing greater adoption of international standards such as ISO20022, which will be critical to supporting the settlement of instant payments in cross-border transactions.”

## **3** The rise of Asia

If there was an unofficial theme at Sibos, it was the shift towards the East. Indeed, Asia’s growing dominance underlined almost every session and permeated into everything from plenary sessions though to networking events.

For Asian banks, the focus was on identifying new strategies to grow their business and leverage lessons from the West. Those from outside of Asia, however, took the opportunity to learn more

about the region and will undoubtedly be going home to assess their capabilities and presence in the market.

“Everyone knows that Asia is where the real growth is occurring in today’s market,” noted Chris Hadorn, KPMG in the US. “But while the broader industry seems to recognize the trends, many organizations are still trying to work out what the impact will be on their business and, once they figure that out, what they should do about it.”

“The Asian market is going to be bigger than the European and US markets combined and banks – particularly the big global guys – simply can’t ignore that this is where the volume is going,” added Edge Zarrella. “Those banks that don’t already have a plan for how they are going to address this shift towards Asia will almost certainly find themselves cut out of the opportunity before too long.”

## **4** Competitive threats change the rules of the game

Right across Asia and around the world, banks are increasingly recognizing that their payments revenue is slowly being eroded by new and nontraditional competitors in the marketplace. From massively successful payments organizations such as China’s AliPay or TenPay through to telecom and mobile service providers, banks are starting to feel pressure on their transactions margins.

“In some cases, the regulatory landscape is leading to a competitive imbalance between the banking industry – which is heavily regulated – and the new market entrants which are generally less regulated when it comes to payments,” noted Chris Hadorn. “But banks must also recognize that these non-legacy players tend to be much more agile, more innovative and are often quicker in the marketplace, meaning that banks will need to work hard to protect and defend their existing markets.”

“Those that attended the KPMG dinner at Sibos heard from Matthias Kroener at Fidor Bank, one of the first truly social networking banks,” added Mark Hale. “Whether Fidor Bank is ultimately successful or not, it has already turned the rules of banking on their head and forced the payments industry to think differently about innovation in this sector.”

## **5** Transformation takes center stage

Given the prevailing currents within the payments sector, many attendees and speakers at this year’s Sibos conference were focused on developing transformation strategies to help banks and payment providers adapt to the realities of the new market environment.

“There was a general agreement that agility and flexibility would need to be core characteristics for the industry going forward,” added Daniel Houseman. “The old days of implementing massive legacy systems across the organization in three or four year cycles are clearly gone; to survive in today’s environment, banks must be able to make changes and adjustments on an ‘as needed’ basis.”

“Particularly for those banks that have grown through acquisition, a major challenge will be in unpicking the mess of overlapping and inter-related IT systems to create a more flexible and adaptive system,” added Chris Hadorn. “Organizations are now focused on creating services and applications that cross the organization horizontally rather than creating several vertical solutions that support a limited number of business needs.”

## All about the customer

At the heart of the majority of the changes that are now buffeting the market is the customer. Regulation is meant to provide security and transparency to customers and stakeholders; immediate payments is focused on delivering real-time value for customers (particularly those moving towards mobile solutions); competition is being driven by new customer preferences and a desire for value.

“All of this is really tied around one over-arching question: how are you supporting the consumer who actually buys your services?” added Edge Zarrella. “Ultimately, this will require banks and payment participants to look at the market from a variety of different viewpoints including the regulators’, the customers’ and then the banks’.”

## Final word on Sibos

Those who attended Sibos this year will no doubt have left the conference with a pervasive feeling that the payments industry is in the midst of a dramatic and evolutionary change. Some found solace in the fact that they were not alone in their struggle. Others developed relationships with key suppliers and service providers that could bring new solutions and innovative thinking to bear on their complex challenges.

And, while it remains to be seen how the payments sector will evolve by the next Sibos conference in 2013, one thing is sure: banks and payments providers simply cannot afford to wait to respond to the deep need for transformation in the industry.

# Contact us

For further information about this publication and our firms' services, please contact:

## David Sayer

**Global Head of Banking**

**KPMG in the UK**

**T:** +44 20 7311 5404

**E:** david.sayer@kpmg.co.uk

## Edge Zarrella

**Partner, Clients and Innovation**

**KPMG China**

**T:** +852 2847 5197

**E:** egidio.zarrella@kpmg.com

## KPMG's Global Payments working group

### Mark Hale

**Head of Payments, KPMG in the UK**

**T:** +1 404 979 2317

**E:** mark.hale@kpmg.co.uk

### James McKeogh

**Director, KPMG China**

**T:** +852 2847 5018

**E:** james.g.mckeogh@kpmg.com

### Harry Hughes

**Senior Manager, KPMG China**

**T:** +852 2847 5018

**E:** harry.hughes@kpmg.com

### Michael Axarlis

**Partner, KPMG in Australia**

**T:** +61 3 9288 6523

**E:** maxarlis@kpmg.com.au

### Daniel Houseman

**Director, KPMG in Australia**

**T:** +61 3 9288 6820

**E:** dhouseman@kpmg.com.au

### Chris Hadorn

**Principal, KPMG in the US**

**T:** +1 404 979 2317

**E:** chrishadorn@kpmg.com

### Fred Schneidereit

**Partner, KPMG in Germany**

**T:** +49 30 2068 2813

**E:** fschneidereit@kpmg.com

**We gratefully acknowledge the contribution of the following individuals who authored the articles in this report:**

### Jason Bedford

**KPMG China**

### Mary Chong

**KPMG China**

### Jeremy Fearnley

**KPMG China**

### Jez Heath

**KPMG China**

### John Kondos

**KPMG China**

### Alessio Marinelli

**KPMG China**

### James O'Callaghan

**KPMG China**

### Simon Topping

**KPMG China**

[kpmg.com/socialmedia](http://kpmg.com/socialmedia)



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm vis-à-vis third parties, nor does KPMG International have any such authority to obligate or bind any member firm. All rights reserved.

The KPMG name, logo and "cutting through complexity" are registered trademarks or trademarks of KPMG International.

Designed by Evalueserve.

Publication name: The Great Payments Transformation: Insight into the payments ecosystem

Publication number: 121172

Publication date: December 2012