THE DIGITAL MEDIA BANK

HOW VIDEO BETTER ENGAGES YOUR CUSTOMERS AND WORKERS

IT'S HOW WE CONNECT

FOREWORD

WELCOME TO TELSTRA'S LATEST REPORT: THE DIGITAL MEDIA BANK – HOW VIDEO BETTER ENGAGES YOUR CUSTOMERS AND WORKERS.

Welcome to Telstra's latest report: The Digital Media Bank – how video better engages your customers and workers. This comprehensive report on digital media and communications technologies is the fifth in my series of research papers addressing current challenges in the financial services industry.

Two key factors have driven the marked changes the banking industry has undergone in recent years. First, the GFC and its fallout has changed the financial services landscape forever and brought about increased pressure on margins, as well as creating a fierce battle for customers, deposits, lending etc. Now, more than ever, it's important for financial institutions to focus on how they can develop better relationships with their customers.

Second, we are seeing a profound shift in the role of technology within the institution. In the past technology has been seen as a key enabler to make the relationship with the customer 'cheaper'. Now we are seeing technology as a key enabler to make the relationship with the customer 'deeper'. Technology is now at the forefront of strategic development.

This year's research focuses on customers' unquenchable thirst for a digital lifestyle, all of which is being underpinned by the convergence of the communications, entertainment, devices and services markets. In this digitally connected world, we are engaging our environment in new and exciting ways giving rise to the shift from services-based competition to experience-based competition. For financial services, this means a paradigm shift from lifestage-based customer relationships to lifestyle-based relationships where 'trust' and 'symmetry' are inexricably linked into the fabric of the day-to-day lives of consumers and businesses.

The digital media bank will change the game. Success will be defined by creating technology-enabled customer lifestyle experiences that result in increased satisfaction, advocacy and consideration. The digital media bank will reach customers through their device of choice, medium of choice and, most importantly, at their moment of choice. In a world of information asymmetry, the digital media bank will deeply embed itself as the customers 'trusted advisor' delivering symmetry to how they live, work and play.

For financial institutions to become digital media enterprises, they will need strategies and capabilities to create and lifecycle-manage their digital media assets and services. As the leading Australian network and digital media services provider to the industry, we trust this report will provide key insights and guidance for that journey.

To the many industry executives who contributed to this report, thank-you for your time, insight and inspiration.

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1 EXECUTIVE SUMMARY

What are the key strategic issues?
Business leaders understand that the two strategic priorities of customer experience and improved productivity are inextricably linked. The latest Telstra Productivity Indicator 2012 (TPI) bears this out. Productivity Leaders (those who monitor, measure and target productivity) among the 700 Australian executives surveyed in the TPI were asked what activities led to the strongest productivity outcomes. The result was overwhelming, with 92% of respondents citing improved customer experience and satisfaction[1]. With six in 10 Australians using multiple banks and one in three white collar, high income earners using three to four banks, the battle for share of wallet is about to intensify – the relentless focus on rates has become a national obsession and shows no signs of dissipating. This report examines these two strategic issues and specifically researches the role that digital video media and communication technologies play in addressing those priorities for the financial services industry.

Why do people prefer to interact and learn visually?
Our perception of what makes a good experience is influenced by the context of interactions and the interplay between our senses. This is easily understood by considering the food we eat. As the famous chef Heston Blumenthal highlights in his philosophy 'Eating is a Multisensory Experience': "Ofcourse I want to create food that is delicious, but this depends on so much more than simply what's going on in the mouth – context, history, nostalgia, emotion, memory and the interplay of sight, smell, sound and taste all play an important part in our appreciation and enjoyment of food"[2]. So too do we need to consider the role our senses play in designing the customer experience.

This is particularly important as customers increasingly desire (and often do) control the time, place, channel and form in which they receive information. To date, communication technology cannot fully translate these communication types involved in face-to-face therefore a targeted approach to the use of video is critical (See Section 2).

Who are the pioneers of video-based financial services and what's been their results?
The use of video is widespread among some of the world's leading and pioneering financial institutions. Examples include Bank of America, Citigroup, Vanguard, Jyske Bank, China Merchants Bank, United Bank of Africa, Bank of Montreal, Axa, Hannoversche Lebensverischerung, E-Trade, Lloyds TSB, Mercantile Bank of Michigan, Nationwide, Postbank, ING and ABN Amro, to name but a few. Many are now publishing the benefits achieved including: increased staff engagement, reduced travel costs, increased market share, improved cross-sell, increased sales conversion rates and improved customer satisfaction and advocacy. In Australia and New Zealand, the trial and use of video communications has recently been widely reported by major institutions including ANZ, Westpac, CBA, NAB and BNZ (See Section 3).

How are Asia Pacific financial institutions using and planning for digital video services?
We interviewed CXOs from 30 financial institutions across the Asia Pacific region (See Section 3) and found that:

- Like financial institutions the world over, Asia Pacific financial institutions are already benefiting from video communications and clearly understand the business drivers for their use: internally for staff engagement, and externally for customer engagement.
- While the use of video conferencing rooms is now more widespread, capacity constraints were also widely reported, giving rise to plans for the deployment of desktop and telephony-based video.
- More branches equipped with digital media displays are now emerging. As well as broadcasting a range of content, these displays are intended to enable real-time, video-facilitated, sales and service interactions between customers and 'specialists' remotely based within the institution. Kiosks were widely reported for intended use in high traffic areas.
- Significant developments are underway for resource planning and scheduling systems to allow mobile workers (financial planners, mortgage lenders, business bankers, etc.) to use their wireless devices for video for internal and customer interactions.
- Few have put in place comprehensive strategies and capabilities to manage an ever-increasing volume of digital video.

Do Australian consumers find video-enabled banking services appealing? How likely are they to use them? What business impact would they have?
With half of online Australians already engaged with video online and a third using video calling, how can financial institutions use video to better engage customers? We presented Australian consumers with five video-enabled concepts and tested each of these for their appeal and business impact (See Table 1).

Table 1: Summary of Video-Enabled Concepts Researched and their Business Impact

	Contact/Impact Scorecard	A. Accessing Experts on Demand (%)	B. Videos on Financial Topics (%)	C. Product Videos (%)	D. Interactive Videos (%)	E. Local Branch Video-Calling (%)
	Appeal	37	40	39	31	33
	Appealing and likely to use	29	31	32	25	25
Concept appealing, likely to use AND results in...	...more satisfied with bank	24	24	23	19	20
	...more likely to recommend	21	21	21	18	19
	...more likely to open a new account	20	20	18	16	17
	...more likely to consider switching banks	15	14	12	11	12

Source: Telstra Research June 2012

Overall, the concepts scored very highly with more than three in 10 finding each of the concepts extremely/somewhat appealing and over a quarter of the general population also indicating a propensity to use the service (extremely/somewhat likely to use the service).

A fifth to a quarter (proportions range from 19% to 24%) of the general population stated that the concepts are likely to improve satisfaction levels with their bank. When it comes to advocacy, around a fifth (proportions range from 18% to 21%) would recommend a bank offering the services to family, friends or colleagues.

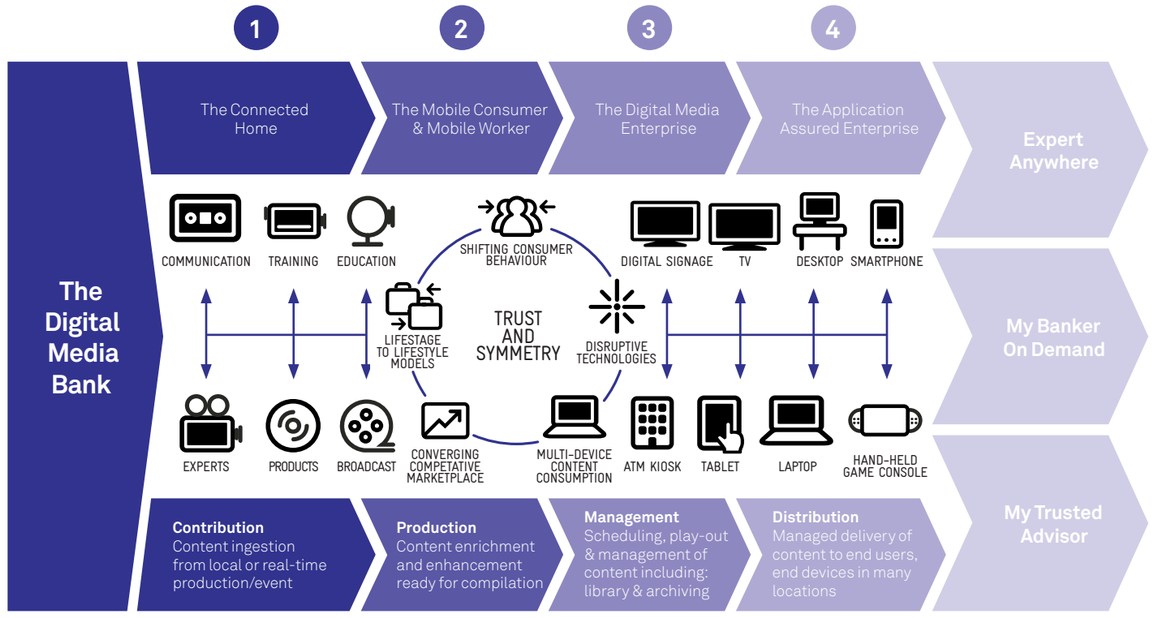
The video-banking concepts tested demonstrate that there is an opportunity for banks to build their businesses through new bank accounts or giving the people a reason to switch banks.

One in six indicated that, based on the concept services, they are at least a little likely to consider a bank for opening a new bank account (16% to 20%). Similarly, more than a tenth (11% to 15%) said that the availability of the concepts would make them at least a little more likely to consider switching banks to make use of these services.

When evaluating appeal of the concepts amongst the rural population (country towns/remote areas), the video 'calling' concepts, namely A. Accessing Experts on Demand and E. Local Branch Video-Calling received higher appeal ratings compared with the pre-recorded video concepts (40% and 36% respectively). This is likely due to limited access to local bank branches in rural areas – video-calling services provide customers with a convenient way to contact banks without having to travel.

These results confirm the point made earlier – if architected appropriately as part of an overall customer experience, video can significantly improve a customer's perceptions of banking services and subsequent satisfaction, advocacy and consideration. This is particularly true for those in rural areas, youth, high income earners and especially white collar workers who make up half of those who are already making video calls and using video-based online services (See Section 3).

Figure 1: Digital Media Bank – Anywhere, anytime, any Form, any Device



Source: Telstra Research

How can digital media and communications technology help better engage customers and workforces?
There are four key strategic developments occuring with communications and digital media technology that define how the digital media bank will operate and compete (See Figure 1 and Section 4).

1 **The Connected Home:** Australian homes are now filled with increasing numbers of connected devices. The Connected Home is an emerging concept that brings together these home devices and connectivity (including networks within the home, high speed broadband and a growing range of cloud-based services) to demonstrate how customers and remote workforces will interact with financial institutions.

Our research found that more than 80% of consumers prefer to use the five video-enabled concepts tested from the home.

2 **The Mobile Consumer and Worker:** Australia has become one of the most heavily penetrated smartphone and tablet markets in the world. With the launch of 4G, we can anticipate a rapid growth in video-calling, online-based services and mobile cloud services to support consumers and mobile workers (who will increasingly use BYOD or Bring Your Own Devices). Today, around one in two video callers do so weekly, with one in five smartphone and tablet users making video calls daily.

3 **The Digital Media Enterprise:** As pervasive new forms of digital media, fast evolving technologies and audience fragmentation continue to disrupt business and service models, new capability is required to lifecycle manage digital media assets with smart and connected systems that distribute digital video content and engage customers and workforces across multiple platforms. According to CISCO, consumer internet video traffic will grow 15-fold from 2010 to 2015, a compound annual growth rate of 72%. By 2015, internet video will account for 81% of all consumer internet traffic, up from 50% in 2010.

4 **The Application-Assured Enterprise:** Optimising the performance of IP networks in an increasingly digital media environment will become more complex. According to CISCO, business IP traffic will grow two-fold at a CAGR of 18% from 2010 to 2015. Increased adoption of advanced video communications in the enterprise segment will cause business IP traffic to grow by a factor of 2.5 between 2010 and 2015. Application-Assured Networking is a cost-effective way to optimise real-time application performance across the network where dynamic bandwidth allocation and management is required.

Those strategic developments in the field of digital video and communications technologies will help create valued experiences and improve productivity. The digital media bank will need to be able to operate in an increasingly complex Omni-channel environment characterised by continuous change and video centricity. Customer contact management will need to incorporate digital content management and distribution technologies with enterprise communications systems (particularly unified communications, unified contact management and intelligent adaptive routing systems) to better engage customers and workforces. We show how this can be achieved using three technology experience concepts:

1 **Expert Anywhere** – Enable customers in a branch, at home, or on the road to access experts, advisers or specialists located at other branches, contact centres or centres of expertise.

2 **My Banker On Demand** – Deepen the relationship between your customers and staff by enabling customers to use their device of choice, environment of choice and moment of choice to access information or make contact with known staff.

3 **My Trusted Adviser** – Become a vital part of customers' day-to-day lives, using advanced digital interactivity to create exciting new, augmented experiences that add genuine value.

2 LEARNING AND INTERACTING VISUALLY

AFTER A COMPREHENSIVE REVIEW OF THE LITERATURE ASSOCIATED WITH THE APPLICATION OF DIGITAL VIDEO MEDIA FOR FINANCIAL SERVICES, IT OCCURRED TO ME THAT A FUNDAMENTAL UNDERSTANDING OF WHY PEOPLE PREFER TO LEARN AND INTERACT VISUALLY WAS ABSENT – DESPITE THE FACT THAT THIS TOPIC HAS BEEN COMPREHENSIVELY RESEARCHED IN FIELDS SUCH AS PSYCHOLOGY AND EDUCATION.

Therefore we begin this report by providing some perspective on this question and its resulting impact to better inform customer experience design for financial services.

2.1 WHY VISUAL LEARNING?

For the better part of a century, consumer goods and services have been accompanied, and in many cases still are being accompanied, by documentation such as instruction manuals, user guides and product disclosure statements. The lack of willingness for consumers to absorb information through such documentation is legendary and has even entered the vernacular "In the event that all else fails, read the manual". Oddly, it was also an observation about the ineffectiveness of the way we are meant to learn. For whatever reason, many people have a strong aversion to reading documentation such as instruction manuals – yet it has remained the dominant paradigm. One of the reasons for the heavy reliance on text-based product information in the face of its spectacular lack of consumer engagement is an artefact of technology – we simply developed ways to reliably copy and cheaply distribute text-based information before we developed them for other media.

We can present a range of reasons why few people engage with this mode of learning in this context:

- Perhaps it's just a human thing: the effort of reading and comprehending and then of applying the newly acquired information to a practical situation requires deference and commitment – deference in admitting that knowledge has to be gained, and commitment to wading through page after page of an instruction manual or product disclosure statement. This was not how we wanted to learn, it was not how we did learn.
- Perhaps it is simply the desire to immediately begin using the nice new item we have just invested in without investing significant time and effort;
- Perhaps our busy liefstyles mean we can no longer justify the low return on invested time spent digesting product information up-front, even if we wish to do so; or
- Perhaps our brains have evolved for tens of thousands of years to absorb knowledge through storytelling – and visual representation is a richer form of telling a story.

Regardless of the underlying reasons, retailers know all too well, that the operation of a new appliance is better conveyed and more quickly grasped by a simple demonstration rather than by navigating the pages of a manual. Reading requires effort; watching and listening is simpler and more direct. There is no need to locate the on/off button: it is 'here,' shown visually. And the sequence of operating instructions is far easier to follow by demonstration than by literal description. Maybe this is a throw back to the ways and means of primitive man: this is how we hunt, clean, cook, fish; this is how we build a shelter. We are primarily visual creatures who require dynamic visual communication when interacting and learning how to operate a piece of equipment. Imagine a surgeon learning skills without practical demonstration. Imagine a pilot learning to fly an aircraft without the use of a flight simulator.

The ubiquity of high-speed broadband, internet access, personal computers and mobile devices such as smartphones and tablets does two things that disrupt the way we currently provide information about products and services to our customers:

1. It makes the copying and distribution of interactive and visual media as easy and cost-effective today as text has been for several centuries; and
2. It also opens up completely new ways of interacting and learning.

Why read a manual when you can watch a demonstration on YouTube? Why load a demonstration DVD to view on TV when you can view it on your smartphone, tablet or laptop and view it wherever and whenever you want? Why not access a fully interactive demonstration that understand and reinforce the points most relevant for you and at a time, a place and pace that suits you?

Put simply, we are increasingly used to screens and to a screen culture from an early age. We will see a steady but rapid transition of product and service information such as instruction manuals, user guides, product guides and product disclosure statements into both static and interactive video media. Consumers will vote with their feet for media which are accessible anywhere, at any time and through any connected device of their choosing. Already one in four consumers prefer it that way, and a third of these are doing it weekly. Remember the 1980s pop song: Video Killed The Radio Star? Perhaps a new verse now needs to be written: Video Killed The Written Instruction Manual[3].

2.2 INTERACTING VISUALLY – STYLES OF COMMUNICATIONS

Scientific research on non-verbal communication and behaviour began with the 1872 publication of Charles Darwin's The Expression of the Emotions in Man and Animals. Today, there is comprehensive research that demonstrates that the importance of non-verbal communication and the roles of different communication types. The advent of the digital world – the internet, social media and a panopoly of consumer communication devices used within the home and wirelessly – is fundamentally changing the way in which we communicate. As the digital world becomes increasingly intertwined in our lives, it also makes customer contact management correspondingly complex for both customers and workers.

Any decisions regarding the best choice or mix of communication styles need to be contextualised. A range of non-verbal communication types can influence a given interaction – Table 2 below lists just some of these. Each of these factors have the ability to either reinforce or detract from the messages in verbal content[4]. To date, communication technology simply cannot translate all of the communication types involved in face-to-face conversation (for example the temperature, smells and atmosphere of the physical environment). Additionally, the subject and context of the particular communication heavily influence the impact that role that the non-verbal modes of communication play.

So the choice of communication style with our customers needs to be both analytical and selective. For example, we need to understand in which circumstances and for which customers, a video-based communication will produce better outcomes than, say, a voice-based or text-based one.

Designing the message and the interaction type to suit the channel mix then becomes a critical factor in the customer experience we provide. (Customer experience is defined as the sum of all experiences a customer has with a provider of goods or services, over the duration of their relationship with that provider – from awareness to search, interest, engagement, purchase, use, service and advocacy.)

The increasingly complex relationship between video-centric communications, social platforms and the enterprise is quite evident in recent activities around Skype. Our research presented in Section 3, highlights that 84% of Australian video callers are using Skype. Globally, Skype is reported to have an estimated 663m users[5]. The announcement of Skype's partnership with Facebook in July 2011 to provide video, features the role of video in the intensifying competition between social networks such as Google+ and, more importantly, reflects the increased desire by people to interact visually with the communities in which they are embedded[6]. This integration means over 845m Facebook users now have access to video contact through Skype setting a new level of consumer expectation for the communication capabilities of social channels[7].

Table 2: Communication Types/Cues

Communication Types/Cues	Paralinguistics	Eye Gaze	Proxemics	Facial Expression	Body Language	Gestures	Appearance	Haptics
Face2Face	●	●	●	●	●	●	●	●
Video Conferencing	●	●	●	●	●	●	●	
Telephone	●							
SMS/MMS	●							
Email	●							
Social Networks	●							
Mail	●							
Fax	●							
IVR	●							
Chat	●							

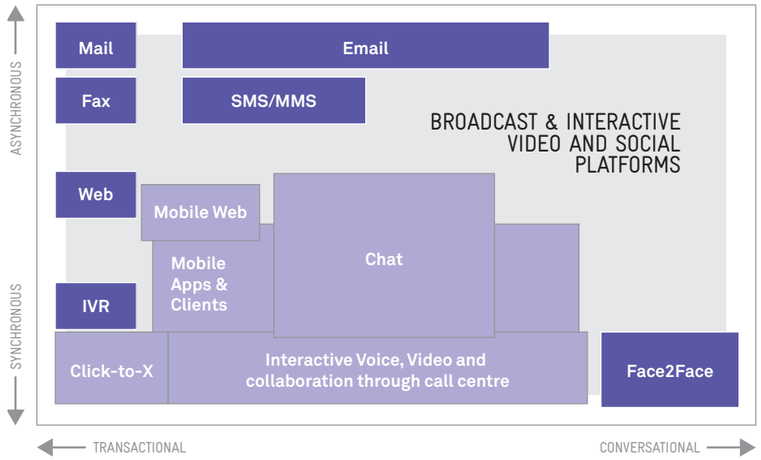
Source: Telstra Research

2 LEARNING AND INTERACTING VISUALLY (CONT.)

Figure 2 highlights the increased complexity associated with the more evolved channels. The end result is that organisations need to support a much greater range of increasingly complex and integrated channels, and to adapt to the rise of new channel properties much more quickly than ever before, particularly as video and social platforms transcend traditional forms of communication.

We finish this section with reference to a new approach emerging in the retail industry known as 'Omni-channel'. Multi-channel retail is about enabling sales and support through a variety of channels. Omni-channel extends that by providing a high quality experience and continuous engagements to the customer across the whole lifecycle traversing a range of contact channels (e.g. in-store, online and mobile). Research is emerging that indicates the Omni-channel approach is gaining traction in the financial services sector as well. According to CISCO's recent study Winning Strategies for Omni-channel Banking, June 2012, Omni-channel plays a critical role in addressing customers' desire to control the time, place, channel and information required to perform banking activities. The research further highlighted the importance of video as a key enabler of building trust in situations where humans are not physically available[8]. How and where video is incorporated within the design of customer experience in the digital Omni-channel era is a key consideration and is accordingly explored in the following sections.

Figure 2: Channel Properties



Source: Telstra Research

SUMMARY

- Visual learning is critical and studies have shown it to be more effective than written learning.
- Developments in network technology and consumer devices mean that product information in rich, non-written media such as video can be copied and distributed as easily and cheaply as traditional written media has been in the past.
- Rich visual media are not only absorbed and understood more easily, they fit our lifestyles better.
- We are now entering a new period where, perhaps, what video did to music in the 80s, will also occur to written instruction over the next decade.
- As the internet, social media and the broad spectrum of devices become increasingly intertwined in our lifestyles and indispensible to our daily activities, we need to understand their impact on communication styles with stakeholders such as customers and employees.
- Customer experience design needs to incorporate the role of non-verbal communication in reinforcing (or contradicting) the message through all experiences a customer has with a provider of goods or services, over the duration of their relationship – from awareness, search, interest, engagement, purchase, use, service and advocacy.
- The incorporation of video within social networks reflects the critical and increasing desire of people to interact visually with the communities with whom they are connected.
- Omni-channel plays a key role in addressing customers' desire to control the time, place, channel and information required to perform banking activities; the role of video in the cycle is critical to customer experience design.

3 DIGITAL VIDEO – INDUSTRY AND CONSUMER RESEARCH

HAVING NOW ESTABLISHED A BETTER UNDERSTANDING OF WHY PEOPLE PREFER TO INTERACT AND LEARN VISUALLY, AND THE IMPORTANCE OF CONSIDERING NON-VERBAL COMMUNICATION AS PART OF THE CUSTOMER EXPERIENCE DESIGN, WE NOW TURN OUR ATTENTION TO TWO AREAS:

Firstly, understanding what video-based strategies and services are being designed or implemented by financial services providers globally and in Australia, New Zealand and Asia. Secondly, we analyse new consumer research to gain an understanding of what video-based interactions and learning services consumers value and find appealing, including establishing the impact of these on customer satisfaction, advocacy, consideration, and propensity to switch.

3.1 METHODOLOGY

This section has two parts. In 3.2, we summarise the key findings of the literature review of the use of video by financial institutions around the world. The section then presents and ranks the key findings from a qualitative study conducted by Telstra during May and June 2012 from interviews with 30 CXOs from banks, credit unions, insurance providers and consumer and commercial finance providers across Australia, New Zealand and Asia. The objective of this research was to understand the video-based strategies that financial institutions have implemented or have in-plan.

In Section 3.3, we present the key findings from a quantitative study commissioned by Telstra of Australian consumers conducted during May – June 2012. The objective of this research was to test the appeal, likelihood to adopt and impact on consideration, satisfaction, loyalty and advocacy for the following video-based service concepts:

1 Accessing Experts on Demand
2 Videos on Financial Topics
3 Product Videos
4 Interactive Videos
5 Local Branch Video Calling

3.2 INDUSTRY RESEARCH – DIGITAL VIDEO KEY APPLICATIONS, STRATEGIES AND CHALLENGES

3.2.1 Global Developments – Financial Institutions Use of Video – Key Findings

A review of the published literature indicates that financial institutions have been using video communications for customer-facing interactions since at least 2006. The available literature also indicates that those institutions clearly understand the business drivers for video adoption and they are deriving quantifiable benefits from video communications (for both internal and customer-facing interactions). Video is widely used to engage staff across geographies and to improve productivity across operations, human resources, finance and administration. Externally, video is widely used to promote brands, educate customers, promote products and interact with customers in the retail banking, commercial/business banking, investment banking, and insurance spaces. Corporate video content is hosted on a wide variety of internal and external services such as brand websites, YouTube, Facebook and internal TV channels.

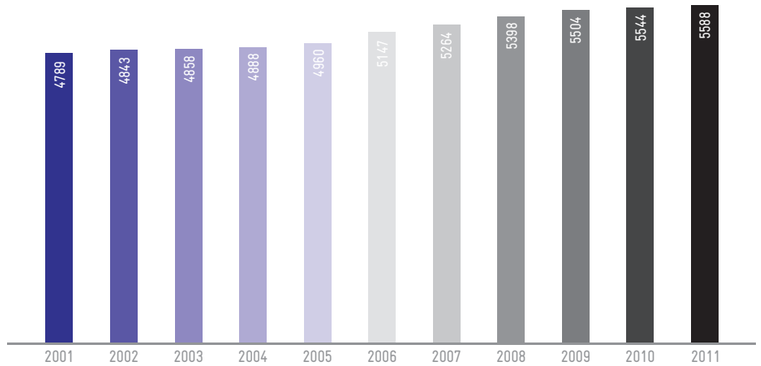
If we look at the traditional self-service banking channels such as Web, in-branch kiosks and ATM's, the drive for increased self-service has produced some very interesting applications of video. According to NCR, more than 1,300 financial institutions in more than 130 countries around the world have purchased NCR's interactive technology, which incorporates two-way video conferencing into kiosks and ATMs[9].

We are seeing video-based innovation in traditionally phone-centric channels such as the call centre. Today, many organisations record audio from customer contacts (especially through contact centres) in order to prove regulatory compliance, detect compliance breaches and improve the quality of interactions. Recorded video is increasingly being used in a similar way for sensitive interactions, particularly in trading or advice environments. This trend is likely to accelerate as video-centric contact becomes more prevalent. Where financial institutions use video for compliance, careful attention must be paid to incorporate the storage and retrieval of video sessions in a secure and compliant manner.

Video-centric innovation is also being seen in the branch. Despite the rise of the online and, more recently, mobile channels over the past 10 years, in Australia this has not been at the expense of branch numbers. In the 10 years up to June 2011, branch numbers increased by 16.7% to 5,588[10] over the period (See Chart 1). Video in the branch is essentially about repurposing those branches to offer more engaging experiences. The Commonwealth Bank emphasised this very point when CEO Ian Narev outlined in a strategic update that the bank would look to create leaner branches and back office operations to keep costs down. Mr Narev said CBA would probably keep the same number of branches, but these would be transformed, with a greater focus on technology[11].

The use of video in the online channel is widespread. A study by Forrester in 2011[12] identified the online websites of more than 90 large European and North American banks and insurance companies and found that 80% provided some form of video, either on their own site or on syndicated platforms such as YouTube. The literature is rich with some of the world's leading and pioneering financial institutions who have adopted video communications more broadly, such as Bank of America, Citigroup, Vanguard, Jyske Bank, China Merchants Bank, United Bank of Africa, Bank of Montreal, Axa, Hannoversche Lebensversicherung, E-Trade, Lloyds TSB, Mercantile Bank of Michigan, Nationwide, Postbank, ING, ABN Amro. Many are now publishing the benefits achieved, as shown in Table 3 below.

Chart 1: Australian Bank Branch Numbers



Source: Australian Bankers Association

Table 3: Example Financial Institutions Pioneering with Video

Paralinguistics	Eye Gaze	Results Reported
HSBC[13]	Reduce Travel Costs	• $44m in FY08
NECU[14]	Increase Market Share	• 10% of loan volume produced via video meetings
Banco Commercial Portugues[15]	Increase Market Presence	• 78% of opportunities now result in customer action • Cross-sell ratios increased from 3.5 products per person to 3.8 between 2001 and 2004
Citibank[16]	Improve Cross-Sell; Increase Customer Acquisition	• 80% increase
BNP Paribas Fortis[17]	Reduce Travel Costs; Accelerate Business Processes; Improve Productivity	• ROI achieved within one year across several business units
Coastal Federal Credit Union [18]	Extend Trading Hours	• 40% reduction in teller costs while increasing service hours by 87%
Bankinter[19]	Improve Customer Satisfaction; Cross Sell; Improve Sales Conversion Rates	• 10% increase in satisfaction on video channel compared to banks average • Sales conversion rates reached 25% in first six months • 2% of online customers actively using video call service • Reduced CO2 emissions from video call service in 2009 and 2010 by 65 tons and 42 tons respectively • Reduced attrition by 5.6%
DnB NOR[20]	Improve Productivity	• Improved productivity by one customer meeting per day in remote locations to five

In Australia and New Zealand, the trial and use of video communications has also been widely reported recently, as shown in Table 4 overleaf.

Table 4: Example Australian and New Zealand Financial Institutions Trialling/Using Video

Year	Organisation	Application	Business Driver
2005	New England Credit Union[21]	Wealth management services across its branch network; Provide expert advice; Provide expert training across the network	• Improve productivity of employees and managers • Increase sale per branch • Deliver high quality customer service
2010	National Australia Bank[22]	Wholesale business clients connecting with experts in branches; Internal meetings; Global meetings	• Reduce travel costs • Reduce carbon • Flexible working
2010	Bank of New Zealand [23]	Video in branches to connect small businesses with specialists; Digital signage	• Unspecified
2011	Westpac Group[24]	Trial of video for financial advice	• Customer experience • Convenience • Cross-sell
2012	Australia and New Zealand Banking Group[25]	ANZ Private Wealth and ANZ Trustees connecting with specialists on complex transactions such as portfolio planning, investment opportunities, complex banking, capital markets, personal insurance, estate planning and wealth management	• Strengthen client relationships • Greater access to Experts on Demand • Aligns with corporate green agenda
2012	Commonwealth Bank of Australia[26]	In branches including rural areas; Internal across its operation; Integrated into operating environment; Financial planning	• Convenience • Improve customer experience • Staff engagement • Extended trading hours

3.2.2 Asia Pacific Qualitative Study Internal Use of Video – Key Findings

Interviews with CXOs from 30 financial institutions across the Asia Pacific region suggest that, like financial institutions the world over, Asia Pacific financial institutions are benefiting from video communications and clearly understand how video aligns with both internal business drivers of better staff engagement and productivity and the drive for growth by providing better and more complete customer experience. Most respondents already use video internally to varying degrees. The use of video is widespread in conferencing, collaboration and broadcasting – particularly for those organisations with workforces distributed either nationally or internationally.

These results are consistent with CISCO's predictions that business video conferencing traffic in Australia is growing significantly faster than overall business IP traffic, at a CAGR of 28% from 2010 – 2015[27]. Key findings are as follows.

1. Video Content Type, Applications and Lifecycle Management

In recent years there has been wide cultural acceptance and business adoption of real-time conferencing and collaboration to improve engagement between management and staff, and between workgroups. Most respondents have also been using video to broadcast company information, product information or to deliver training more consistently to a distributed workforce.

The lifecycle management of video content (origination, production, distribution, storage, archiving, and retrieval) was usually performed internally by marketing communications personnel where internal-only applications were involved, but the same tasks were more likely to be outsourced to agencies where market or customer-facing video content was being produced (see Table 5).

Table 5: Video Content Type, Applications and Lifecycle Management

Ranking	Video Content Type	Applications	Content Management Systems
1	Real-Time Interactions	Conferencing and Collaboration	In-sourced
2	Staff Training	Distributed learning both in broadcast and interactive real-time	In-sourced/ Outsourced
3	Company Information	Management broadcasts or interactive real-time multipoint video	In-sourced/ Outsourced
4	Product Information	Product launches, campaigns	In-sourced/ Outsourced

Table 6: Video Delivery Channels and Access Locations

Ranking	Video Delivery/ Access Channel	Video Content Types	Access Location
1	PC – Intranet/Internet	Real-Time Interactions, Training, Company Information, Product Information	Work, Offsite
2	VC Rooms	Real-Time Interactions	Work
3	TV Channel	Company Information, Product Information	Work
4	Smartphone	Real-Time Interactions, Company Information	Offsite
5	Tablets	Real-Time Interactions, Training, Company Information, Product Information	Offsite
6	Desk Phone	Real-Time Interactions	Work

Table 7: Business Drivers and Implementation Issues

Ranking	Business Driver	Video Delivery/Access Channels	Main Implementation Issue
1	Better Access to Information	VC Rooms, Intranet, Internet, Smartphone, Tablet, Desk phone	Network Capacity
2	Better Access to Training	VC Rooms, Intranet, Internet, Smartphone, Tablet, Desk phone, TV Channel	Staff Skills
3	Workforce Productivity	VC Rooms, Intranet, Internet, Desk phone, TV Channel	Channel Integration
4	Reduce Travel Costs	VC Rooms, Internet, Desk phone	Network Capacity
5	Reducing Carbon Footprint	VC Rooms, Internet, Desk phone	Network Capacity

2. Video Delivery Channels and Access Locations

The rapid rise of remote and wireless working has been a key driver for laptop computing, and explains why these devices – and desktop PCs – ranked first for video-based interactions or consuming broadcast-based video. Dedicated video conferencing rooms are now more widely available within offices, it was reported that the significant rise in demand for their use was creating capacity issues.

Smartphones and tablets were increasingly also being used for accessing video (particularly by executives and mobile workers) and widespread planning is also underway for video-based desk phone capability (see Table 6).

3. Business Drivers and Implementation Factors.

The most common business case drivers for video-centric solutions were: improving staff engagement through better access to information and training, productivity and reducing travel costs. Reducing organisational carbon footprint was a minor driver. Network capacity in terms of bandwidth was reported as the main implementation issue followed by staff training in scheduling and using systems and applications (see Table 7).

3.2.3 Asia Pacific Qualitative Study Existing or Planned External Use of Video in Customer Facing Channels – Key Findings
Most respondents reported that they have completed pilots or business cases or had developed strategies to deploy video over customer-facing channels during the coming 18 months, or are already producing broadcast video material. Key findings are as follows.

1. Video Content Type, Applications and Lifecycle Management
The application of real-time conferencing and collaboration for sales and service related interactions was the most important development priority reported by respondents. External marketing or media agencies were usually responsible for the lifecycle management of video content (origination, production, distribution, storage, archiving, and retrieval) for external use. A clear strategic gap exists around lifecycle management of video content, with most respondents indicating they do not have comprehensive strategies and capabilities in place to manage an ever-increasing volume of digital video (see Table 8).

2. Video Delivery Channels and Access Locations
The widespread use of laptops by mobile workers – including financial planners, mortgage lenders, brokers, business bankers and relationship managers – explains the broadly stated intention to use video for sales and service related interactions and product related information accessed from either a work or offsite location. It is forecasted that these same workers will, over time, progressively adopt other devices such as tablets, smartphones and desk phones to conduct real-time sales and service interactions with customers. Extensive planning is now underway that will see branch or head office locations equipped with digital media displays and kiosks that will broadcast a variety of content and enable real-time, video-facilitated sales and service interactions between customers and company 'specialists' based elsewhere (see Table 9).

3 Business Drivers and Implementation Issues
Unlike the key drivers for the internal use of video (staff engagement, improving productivity, reducing travel costs), the key drivers for the external use of video are growth orientated (acquiring customers, cross-selling, increasing market share). The main implementation issue reported was resource scheduling i.e. the ability to find those with the requisite, highly specialised skills for implementation. Network capacity was the next most important issue, along with locations (see Table 10).

Table 8: Video Content Type, Applications and Lifecycle Management

Ranking	Video Content Type	Applications	Content Distribution & Management Systems
1	Sales and Service	Conferencing and Collaboration	In-sourced
2	Commercials	Brand or Product	Outsourced
5	Product Information	Products, Campaigns, Educational	Outsourced
4	Company Information	Management or Corporate broadcasts	Outsourced

Table 9: Video Delivery Channels and Access Locations

Ranking	Video Delivery/Access Channel	Video Content Types	Access Location
1	PC – Web (including YouTube & Facebook)	Sales and Service, Product Information	Work, Offsite
2	VC Rooms	Sales and Service	Branch
3	Digital Media Display	Company Information, Commercials, Product Information	Branch
4	Smartphone	Sales and Service, Company Information, Commercials, Product Information	Offsite
5	Tablets	Sales and Service, Company Information, Commercials, Product Information	Offsite
6	Desk Phone	Sales and Service	Work
7	Kiosks	Sales and Service	Offsite
8	ATM	Sales and Service	Offsite

Table 10: Business Drivers and Implementation Issues

Ranking	Business Driver	Video Delivery/Access Channels	Main Implementation Issue
1	Improving Cross-Sell	PC, VC Rooms, Digital Media Display, Tablet, Smartphone, Desk phone	Resource Scheduling
2	Increase Market Share	VC Rooms, Digital Media Display, Tablet, Smartphone, Desk phone	Network Capacity
3	Increase Market Presence	PC, VC Rooms, Tablet, Smartphone, Kiosks, ATM	Locations
4	Improving Customer Satisfaction	PC, VC Rooms, Tablet, Desk phone,	Network Capability
5	Speed of Access	PC, VC Rooms, Tablet, Desk phone, Smartphone	Channel Integration

3.3 CONSUMER RESEARCH – VIDEO BASED BANKING SERVICES

3.3.1 Concepts Tested

The research assessed whether 5 proposed concepts appealed to Australians, likelihood to adopt and whether they had the potential to increase customers' satisfaction, advocacy and loyalty with banks (see Table 11).

The study involved a representative sample of the adult (online) Australian population that have at least some involvement in their household's finances/banking and hold at least one of the following bank accounts for personal use: general transaction/ savings account, home loan, credit card, high interest saving account, term deposit, personal loan or an investment account (e.g. unit trusts). The data is weighted to the ABS Census data for state, gender and age.

This section presents a summary of the key research findings.

3.3.2 Best Performing Concepts

The scorecard in the Executive Summary shows the overall key performance indicators for each concept amongst the general population. Overall, the pre-recorded video concepts (B. Videos on Financial Topics and C. Product Videos) have the greatest appeal (40% and 39% respectively) and usage intent (31% and 32% respectively), followed closely by A. Accessing Experts on Demand (37% extremely/somewhat appealing and 29% usage intent).

When evaluating the appeal of the concepts amongst the rural population (country towns/remote areas), the video 'calling' concepts, namely A. Accessing Experts on Demand and E. Local Branch Video-Calling received higher appeal ratings compared with the pre-recorded video concepts. This is likely to be due to those living in country areas having limited access to local bank branches – video-calling services provide a convenient way for them to contact a bank without having to travel.

3.3.3 Who Found the Concepts Appealing?

It is positive to note that those who found the concepts appealing were the younger, likely early adopter generation that will grow in financial worth over time. Across most concepts, those who found the services extremely/somewhat appealing have very similar demographic profiles. As mentioned, they tended to be the younger 18-34 year old age group (depending on concept, 35% to 40% of those who found each concept appealing fell into this age group) and more than half (between 52% and 57%) were employed in white-collar professions. Except for concept E. Local Branch Video-Calling, almost a third (27% to 29%) of those who found the concepts appealing were high net worth mass affluent people[28].

Those who found the concepts appealing were also more likely to already be engaging in online video based activities such as watching videos or movies online and video calling.

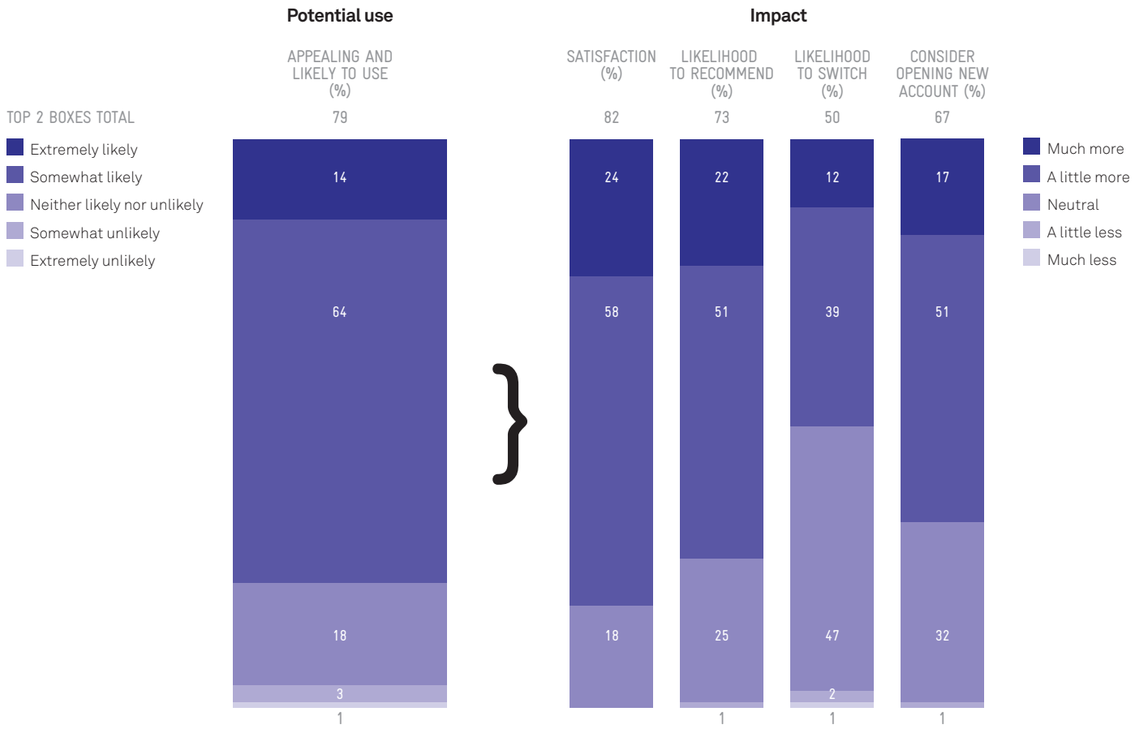
E. Local Branch Video-Calling appealed to a slightly different market in that almost four in 10 (38%) of those who found it appealing are adults with children. This indicates that for families, the service may provide a more convenient and 'hassle-free' way to get banking done without having to bring children into the branch or juggle schedules to visit the branch.

The next section provides detailed information on the performance of each concept, mainly amongst those who are potential users (i.e. find the concept extremely/somewhat appealing and are extremely/somewhat likely to use the service).

Table 11: Concepts Tested

A. Accessing Experts on Demand	**Accessing experts on demand for banking or insurance services.** This service would allow you access to a specialist – e.g. a financial planner, mortgage lender, branch manager or relationship manager – using video. The video would be accessed either in a branch, via your computer, your tablet, your smartphone, ATM or your TV.
B. Videos on Financial Topics	**Educational videos on financial topics.** This service would allow you to learn about ways to improve savings, credit card spending and obtain financial advice from watching online videos.
C. Product Videos	**Product videos explaining how to use banking or insurance products or services.** This service would allow you to learn about products (e.g. mobile banking) by watching online videos rather than reading product disclosure statements.
D. Interactive Videos	**Interactive video – with a presenter from a bank or financial institution.** This service would allow you to learn or be educated about products by watching online videos and having the ability to chat to the presenter via text/instant messenger to have questions answered.
E. Local Branch Video-Calling	**Video calling to people in your local branch that you know (rather than someone in a central location/ call centre you have not dealt with before) to talk about a banking service.** This service would allow you to contact your bank via video calling and interact with them visually, rather than a using a phone call or attending the branch personally.

Chart 2: Concept A. Accessing Experts on Demand Results



Data Source: Telstra Research, June 2012

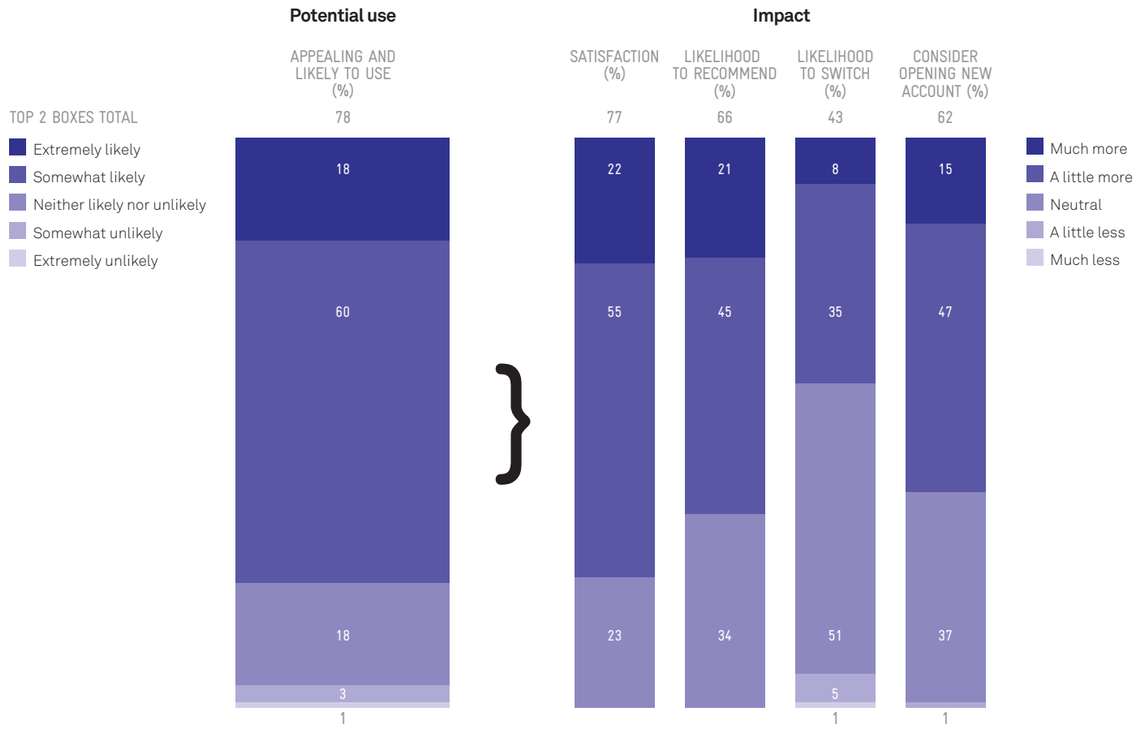
3.3.4 Concept A. Accessing Experts on Demand
Of the non-pre-recorded concepts, Accessing Experts on Demand had the greatest overall appeal, with 37% finding it extremely/somewhat appealing. Similarly, amongst the rural population (those living in country towns/remote areas), this concept had the highest appeal. This is most likely due to the perceived benefit and convenience of not having to travel to a bank branch to discuss/obtain information, when technology now allows for other options.

Almost eight in 10 (79%) of those who found this concept appealing said they were extremely/somewhat likely to use it.

The concept has the potential to have a positive impact on financial institutions, with more than eight in 10 (82%) of potential users saying it would improve their satisfaction with their bank. Advocacy is also likely to benefit with nearly three quarters (73%) of potential concept users being likely to recommend it to family, friends or colleagues. Two thirds (67%) of potential users also indicated that they would consider opening a new bank account if the service was offered.

Amongst potential users of Accessing Experts on Demand, one in two (50%) say they are a little/much more likely to switch to another bank to make use of the service. This concept, together with E. Local Branch Video-Calling, is the most influential of the five concepts in making potential users switch banks in order to make use of the service. This could be driven through the unique offering of a video service where the same delivery cannot be obtained elsewhere (as opposed to pre-recorded videos where information could easily be sourced elsewhere and warrants less of a need to change banks) (see Chart 2).

Chart 3: Concept B. Videos on Financial Topics Results



Data Source: Telstra Research, June 2012

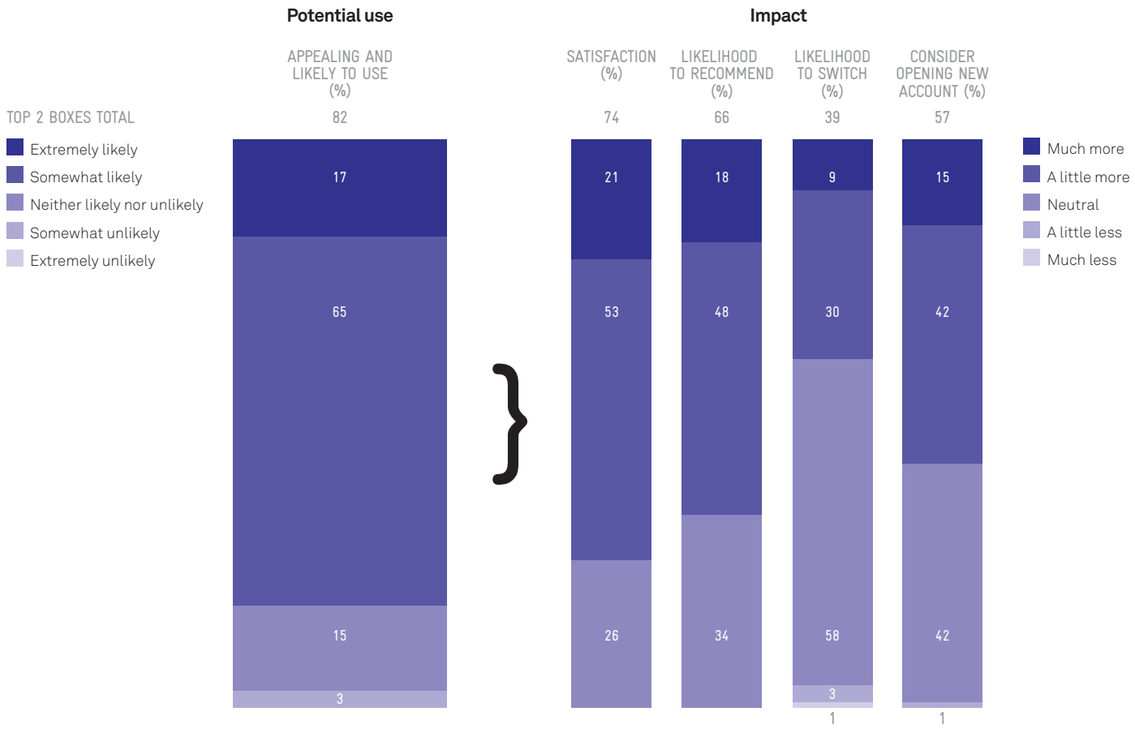
3.3.5 Concept B. Videos on Financial Topics
Videos on Financial Topics has the greatest overall appeal with four in 10 (40%) finding it extremely/somewhat appealing. Amongst those who found it appealing, more than three quarters (78%) indicated they were extremely/somewhat likely to use the service. Introduction of this concept is likely to have a positive impact on satisfaction with more than three quarters (77%) of potential users indicating that they would be a little/much more satisfied with their current bank if this service were to be implemented.

Advocacy is likely to benefit with two thirds (66%) at least a little more likely to recommend their bank to friends, family or colleagues. The concept also lends itself to changing banking behaviour at a product level with around six in 10 (62%) potential users at least a little more likely to consider opening a bank account.

B. Videos on Financial Topics has the potential to drive acquisition by banks with 43% of potential users indicating that they would be at least a little more likely to consider switching banks to make use of this service. (see Chart 3).

3 DIGITAL VIDEO – INDUSTRY AND CONSUMER RESEARCH (CONT.)

Chart 4: Concept C. Product Videos Results



Data Source: Telstra Research, June 2012

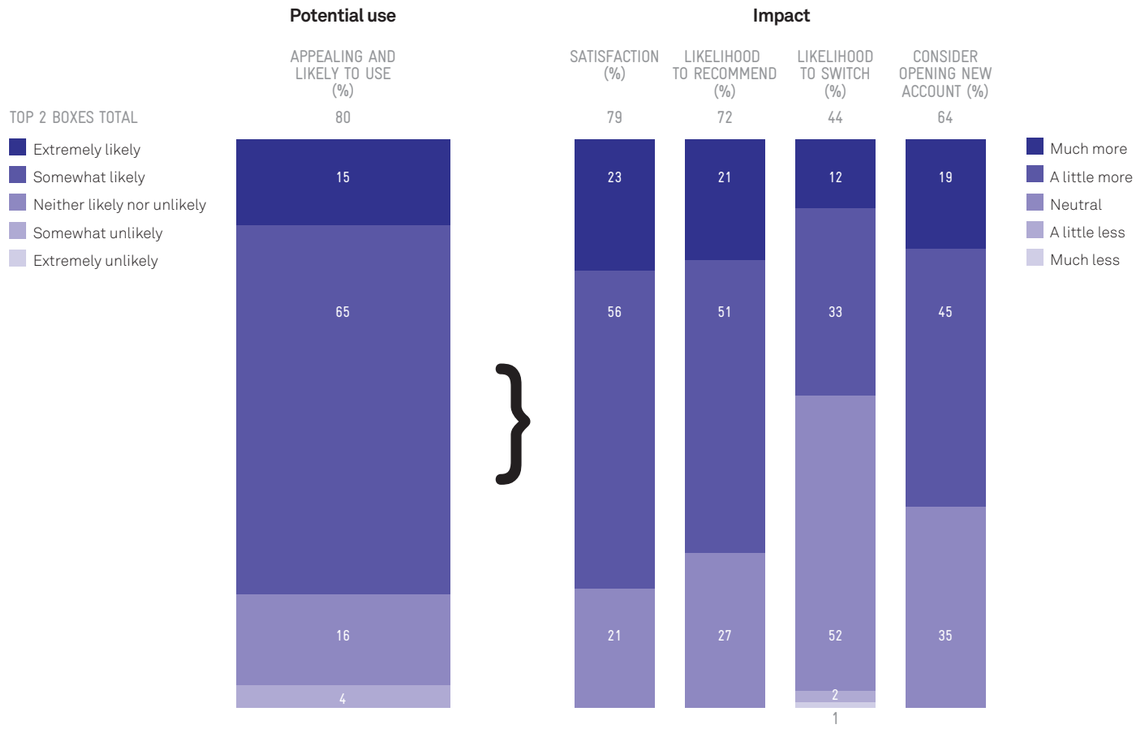
3.3.6 Concept C. Product Videos
The evaluation of the Product Videos concept was very similar to that of B. Videos on Financial Topics.

Product Videos were seen to be extremely/somewhat appealing by four in 10 (39%) in the general population. Amongst those who found it appealing, more than eight in 10 (82%) indicated intent to use the service (extremely/somewhat likely to use).

As with Videos on Financial Topics, this concept is likely to have an impact on satisfaction with almost three quarters (74%) of potential users saying that Product Videos would make them a little/much more satisfied with their current bank. Advocacy is also likely to benefit with two thirds (66%) at least a little more likely to recommend their bank to friends, family or colleagues. The concept may also drive product with around six in 10 (57%) being at least a little more likely to consider opening a bank account with a bank that offered the service.

There is also some potential to drive acquisition with 39% of potential users indicating that they would be at least a little more likely to switch accounts to a bank that offered this service (see Chart 4).

Chart 5: Concept D. Interactive Videos Results



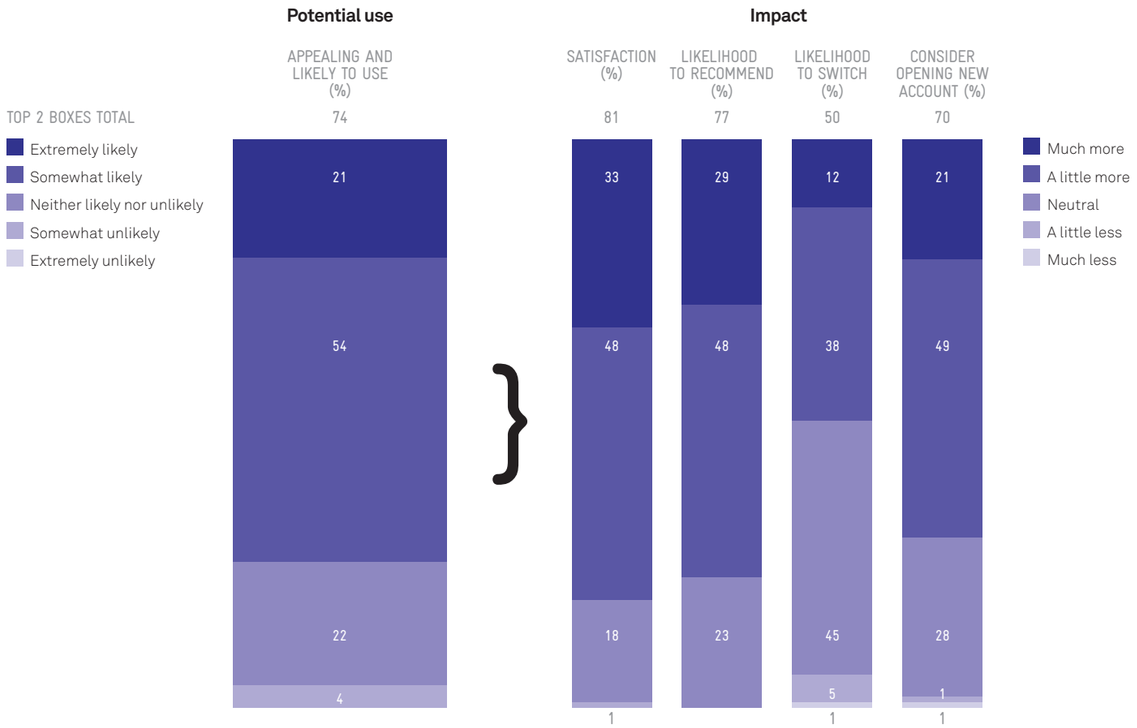
Data Source: Telstra Research, June 2012

3.3.7 Concept D. Interactive Videos
Although D. Interactive Videos had the lowest appeal ratings of the five concepts tested, it was still seen to be extremely/somewhat appealing by a third (31%) of the general population. Of this third that do find the concept appealing, 80% would also make use of the service if it was made available to them.

Introduction of the concept is likely to have a positive impact on satisfaction with more than three quarters (79%) of potential users indicating that they would be a little/much more satisfied with their current bank if this service were to be implemented. Advocacy is likely to benefit with 72% at least a little more likely to recommend their bank to friends, family or colleagues. The concept also lends itself to changing products behaviour with around six in 10 (64%) at least a little more likely to consider opening a bank account.

D. Interactive Videos has the potential to drive customer acquisition with 44% of potential users indicating that they would be at least a little more likely to consider switching banks to make use of this service (see Chart 5).

Chart 6: Concept E. Local Branch Video-Calling Results



Data Source: Telstra Research, June 2012

3.3.8 Concept E. Local Branch Video-Calling

Amongst the general population, out of the five concepts tested, Local Branch Video-Calling had the fourth highest extremely/somewhat appealing rating (33%). However, amongst the rural population (those living in country towns/remote areas), Local Branch Video-Calling had the second highest appeal rating. As with Accessing Experts on Demand, this is more likely to be driven through the convenience of being able to contact staff you know without having to travel.

Three quarters (74%) of those who found this concept appealing indicated that they were extremely/somewhat likely to use it.

Eight in 10 (81%) of potential users indicated that the Local Branch Video-Calling would improve their satisfaction with their bank. This concept had the greatest impact on advocacy amongst its potential users compared to potential users of other concepts.

One in two (50%) potential users said they are a little/much more likely to switch to another bank to make use of the service. As mentioned earlier, together with A. Accessing Experts on Demand, Local Branch Video-Calling is the most influential of the five concepts in driving switching behaviour. The concept also lends itself to changing banking behaviour at a product level, with 70% at least a little more likely to consider opening a bank account if this concept were available (see Chart 6).

3.3.9 Maximising Concept Appeal

Analysis was conducted to identify the optimal number (and combination) of the five concepts to reach the greatest number of people who found at least one of the concepts appealing.

The proportion of the general population that find at least one concept appealing increases from 40% for one concept to 57% for three concepts. This indicates that some of these concepts appeal only to specific population targets. Reach was shown to plateau when more than three concepts are combined.

Amongst those who already watch online videos/movies, up to 65% find at least one of three concepts appealing, while amongst those who already engage in video calling, this figure increases to 72%.

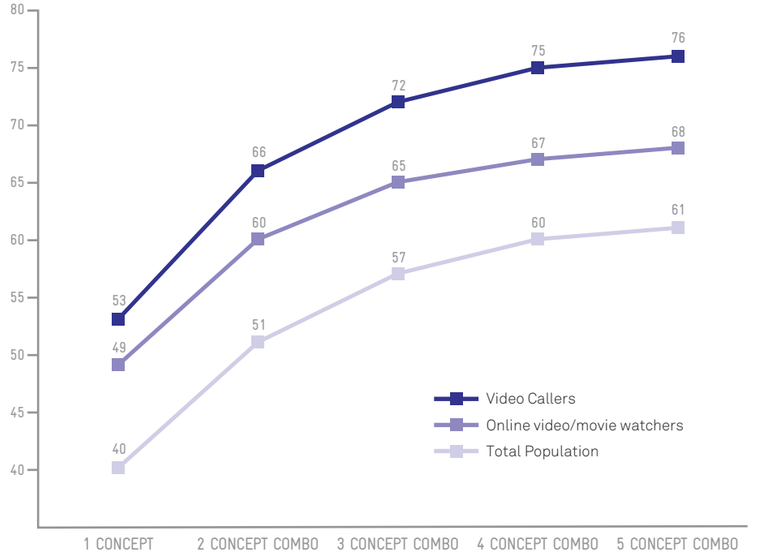
Videos on Financial Topics had the strongest stand-alone appeal and forms part of the strongest combinations of two and three topics.

The analysis highlights that some of the products, specifically Local Branch Video-Calling have niche appeal (i.e. are found appealing by different targets of the population).

The optimal combination of two services is Videos on Financial Topics and either Accessing Experts on Demand or Local Branch Video-Calling (51% find at least one of these combinations appealing).

The optimal three-concept combination involves the inclusion of Product Videos in one of the two-product combination bundles (see Chart 7).

Chart 7: Find At Least one Concept Appealing (%)
(Note: Based on specific concept combinations)



Data Source: Telstra Research, June 2012

SUMMARY

- A study of large European and North American banks and insurance companies found that 80% provided some form of video, either on their own site or on syndicated platforms such as YouTube. They are already benefiting from video communications and have a clear understanding of the business drivers.
- Some of the world's leading and pioneering financial institutions have adopted video communications – internally, to engage staff and improve productivity and externally, to promote their brand, educate customers, promote products and interact with customers for retail banking, and/or commercial/business banking.
- Interviews with CXOs from 30 financial institutions across the Asia Pacific region suggest that, like financial institutions the world over, Asia Pacific banking and finance institutions are benefiting from video communications and clearly understand the business drivers – internally, to enhance staff engagement; externally, to drive growth.
- Whilst video conferencing facilities are more widely available within organisations today, the significant rise in demand for their use is stretching their capacity.
- Extensive planning is now underway that will see the branch and commercial locations equipped with digital media displays and kiosks that will broadcast a variety of content and enable real-time video facilitated sales and service interactions between customers and 'specialists' from the organisation who are based elsewhere.
- The lifecycle management of video content was generally outsourced – mainly due to respondents not having the resources, or the comprehensive strategies and capabilities in place to manage an ever-increasing volume of digital video.
- Overall, the concept scores are very high, with more than three in 10 respondents finding each of the concepts extremely/somewhat appealing and over a quarter of the general population also indicating a propensity to use the service (extremely/somewhat likely to use the service).
- A fifth to a quarter (proportions range from 19% to 24%) of the general population stated that the concepts are likely to improve satisfaction levels with their bank. When it comes to advocacy, around a fifth (proportions range from 18% to 21%) would recommend a bank offering these services to family, friends or colleagues.
- The video banking concepts tested provide an opportunity for banks to build their businesses through new bank accounts or giving the people a reason to switch banks. One in six indicated that, based on the concept services, they are at least a little likely to consider a bank for opening a new bank account (16% to 20%). Similarly, more than a 10th (11% to 15%) said that the availability of the concepts would make them at least a little more likely to consider switching banks to make use of these services.
- When evaluating the appeal of the concepts amongst the rural population (country towns/remote areas), the video 'calling' concepts, namely A. Accessing Experts on Demand and E. Local Branch Video-Calling received higher appeal ratings compared with the pre-recorded video concepts (40% and 36% respectively). This is likely due to those in rural regions having limited access to local bank branches – the use of video calling services provides them with a convenient way of contacting banks without having to travel.
- The optimal combination for maximising appeal of two services is Videos on Financial Topics and either Accessing Experts on Demand or Local Branch Video-Calling (51% find at least one of these combinations appealing). The optimal three-concept combination involves the inclusion of Product Videos with one of the two-product combination bundles.

4 DIGITAL MEDIA AND COMMUNICATIONS TECHNOLOGIES

THE DIGITAL MEDIA AND COMMUNICATION TECHNOLOGY ENVIRONMENT IS UNDERGOING RAPID, STEP CHANGE DEVELOPMENT. AT THE FOREFRONT OF THIS CHANGE IS THE MEDIA INDUSTRY. THE KEY INSIGHTS FROM THAT INDUSTRY ARE IDENTIFIED AND APPLIED TO THE FINANCIAL SERVICES INDUSTRY THROUGHOUT THIS SECTION.

4.1. KEY DEVELOPMENTS IN THE COMMUNICATIONS TECHNOLOGY ENVIRONMENT

4.1.1. The Connected Home

Australian homes are filled with an ever increasing range of connected devices, including PCs, laptops, smartphones, tablets, gaming consoles, smart TVs, wireless LAN, printers and storage devices (see Table 12)[29].

The Connected Home is an emerging concept that describes the way that these devices combine with the network within the home, high speed broadband and a growing range of cloud-based services to provide a truly connected environment. Customers in the Connected Home will access photos, music, videos, movies, gaming, personal or business data and software applications. Traditional services such as telephony will be transformed by the Connected Home to include video calling and high-definition voice and a raft of new services are emerging, such as home automation, energy management and home monitoring.

A range of emerging technologies will enable video calling within the Connected Home. Consumer smartphones, tablets and PCs are becoming ever more capable, with increased processing speed, higher screen resolutions, HD quality cameras and in-built video encoding. Higher speed broadband, with increased uplink and downlink speed, will support HD quality video while service provider IP telephony is emerging as the platform that will allow next generation video calling to inter-operate across video phones, tablets, PCs and TVs. Fully capable video connectivity from mobile broadband-equipped devices will complete the end-to-end video services picture and will be enabled by the LTE services currently being deployed by network operators. Video-calling within web applications will also become more common with the widespread adoption of HTML 5 native browser support for voice and video encoding.

Table 12: Technology in Australian Homes

Device	Desktop	Laptop	Wireless LAN	Tablet	Games console	Smart TV
2011 Penetration in Australian Homes (%)	76	75	61	18	49	20*
Used to Access Internet (%)	54	40	N/A	20	18	11

Sources: Nielsen: The Australian Online Consumer Landscape March 2012;
*Estimated Penetration Source: Digital Marketing Lab, December 4, 2011

Two key application areas will emerge for businesses – firstly, customer contact using rich video-enabled customer interaction and; secondly, teleworking, where staff working from home will have access to a full range of video-enabled corporate communication and collaboration tools.

For customer contact, video will emerge for both self-service and agent assisted interactions, combining the amenity of visual user interfaces with the immediacy of real-time contact. As an extension to this, higher value professional consultancies can be provided efficiently and economically via video as an alternative to in-person consultations. Meanwhile, with teleworking applications, a remote worker in the Connected Home will able to participate in interactions on an equal basis with office-based participants. Cases outlining these scenarios are listed below (and shown in Figure 3 overleaf).

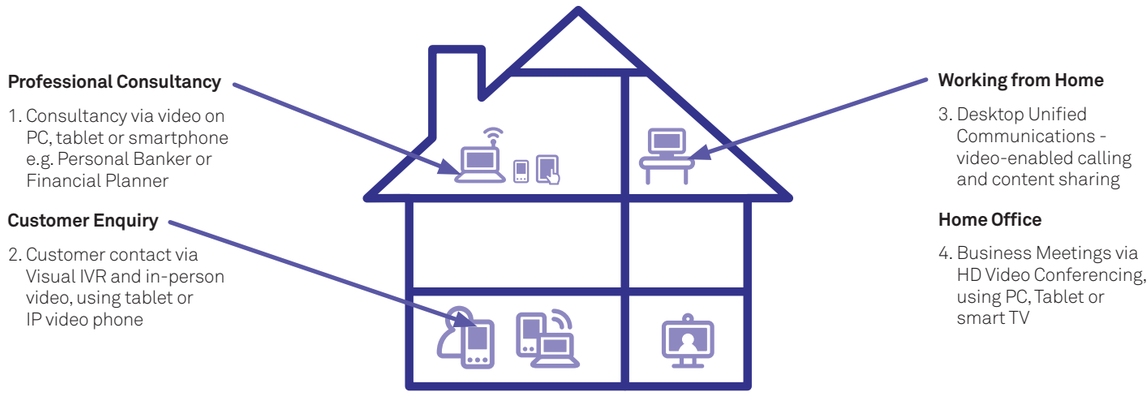
1. **Professional Consultancy** – Meet with a Private Banker, Financial Planner, Business Banker, Broker or Mortgage Lender: Video and multi-media in the home provide a platform for direct consultancy services that may otherwise be restricted to an in person or in office consultancy – for example, for personal banking, superannuation or financial advice. Benefits to the customer can include greater convenience, timeliness and access to a broader array of specialised services.

   For banks, benefits include greater productivity, greater flexibility, less travel and access to the customer closer to the times they make critical decisions. In this scenario, an appointment time could be made with the agent and confirmed by calendar or email invitation. The customer could enter the video consultation simply by clicking an email link or via the meeting schedule listed on service provider's online portal. The preferred customer device is likely to be a PC, laptop or tablet set aside in an appropriate private or semi-private location.

   Within the consultation, the voice and video can be augmented with the ability to share and display and relevant personal, product, market or other information. A key component is an online video meeting and content sharing solution, with integration to telephony for customers who don't have an audio equipped device.

2. **Customer Enquiry** – Visual Call Centre: Next Generation video and web-enabled home telephony devices will provide an opportunity for a richer service interaction between financial service providers and customers. The larger screen and video enhanced experience will enable blending of self-service and agent contact in ways not available with today's speech and IVR solutions. As a first point of contact, a customer may use the financial service provider's device app or web presence as a means to initiate contact.

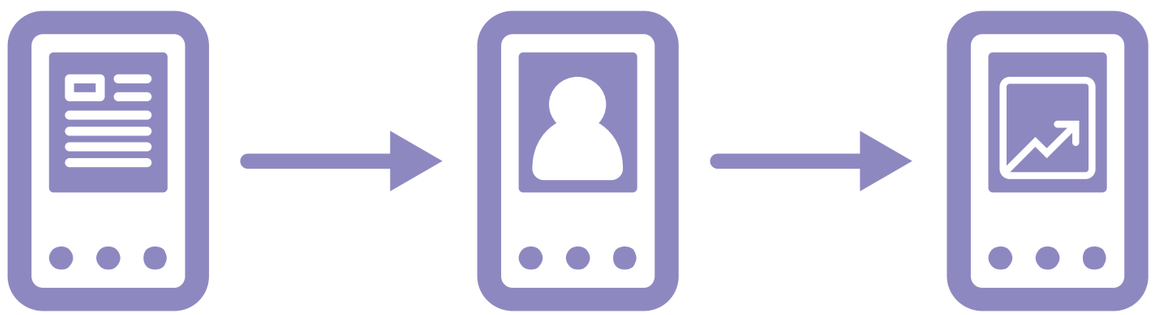
Figure 3: The Connected Home – Video Usage Scenarios



The customer could identify him or herself, seek initial information or request a service agent using visual (and/or audio-) enabled menus on the visual User Interface (UI). For example, a customer could select a home loan enquiry option, enter their email address and then connect to a Mortgage Lender.

As the call progresses, loan options, comparisons or repayment schedules could be shared with the customer. When a higher degree of intimacy is required, a one- or two-way video interaction can be provided. And if a Mortgage Lender is not immediately available, a video call back could be offered, or video product content presented in conjunction with an estimated wait time. Use of a tablet-based home phone with a separate handset or speakerphone and larger screen will make for a more practical and compelling experience in comparison with a smartphone (see Figure 4).

Figure 4: Customer Enquiry - Visual Call Centre



1. Visual IVR
2. Video Service Agent
3. Compare Product Choices

Source: Telstra Research

3. Working from Home – Desktop Unified Communications: Many large businesses (including financial institutions) have deployed business unified communications solutions to integrate voice, video-calling, instant messaging, presence and content sharing. These foster more intimate contact, real-time collaboration and improved productivity. With the trends towards worker mobility, "office anywhere" and increased workforce flexibility the Connected Home will play an important role in hosting business unified communications. Staff using these applications will expect to communicate using a mix of business and consumer devices – tablets connected using Wi-Fi, smartphones, office notebooks and consumer video phones will become a fully capable extension of their in-office facilities. To maintain "connectedness" with office-based teams, home users will expect to see co-worker availability, connect with video calls and to collaborate on work documents on a mix of these devices. Extending these concepts, video hangout services could be used by workers at home, with real-time video or video avatars of work colleagues presented to the desktop. Key elements needed include multi-device unified communications solutions, secure access to corporate networks and access to cloud-based business services.

4. Home Office – Meetings via HD Video Conferencing: With the increased proliferation of HD video-enabled devices, multi-point video conferencing is expected to grow rapidly in the coming years. Underpinning this growth is the evolution of network-based services to seamlessly bridge the video capabilities of PC, tablet, IP video telephony and over the top applications (e.g. Skype) in addition to higher end telepresence or room-based systems. Businesses will better leverage their investments in video, while realising travel, lifestyle and productivity benefits for employees at home, as well as for those in the office.

The anticipated experience includes the ability to join meetings simply via one-click from the meeting invitation and to share desktop or presentation content with all parties connected to the meeting. Business users at home might connect using mobile work equipment (such as laptops or smartphones) or potentially personal devices (such as video telephones, tablets and smart TVs), depending on their preferences and the requirements of their employer.

4.1.2 The Mobile Consumer & Worker
The Australian market has become one of the world's highest penetrations of mobile devices and smartphones. In Australia, smartphones and tablets are rapidly replacing feature phones and are predicted to continue this swift rise in popularity (see Charts 7 and 8).

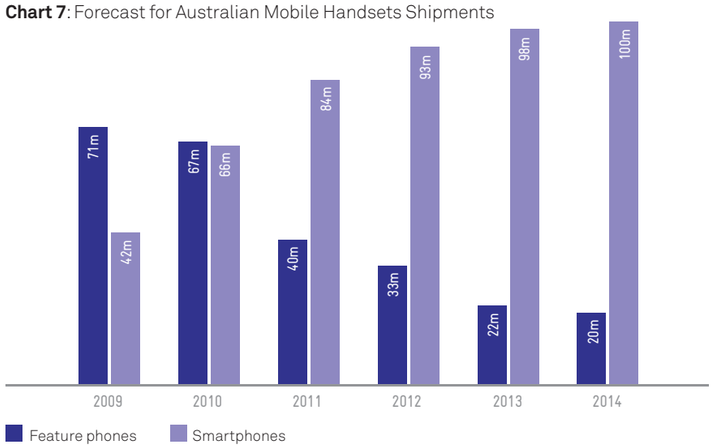
According to Telsyte, the number of connected 4G mobile devices in Australia is set to grow to seven million units by 2016, reaching 19% penetration of total mobile connections[31]. A key driver of LTE adoption is mobile broadband and the consumption of mobile data traffic. CISCO predict that, in Australia, mobile data traffic will grow 14-fold from 2011 to 2016, a compounded annual growth rate of 68% – the equivalent to 13 times the volume of the entire Australian internet in 2005[32].

Australian's enthusiasm for mobile technology has translated directly into widespread adoption of mobile banking applications and the increasingly criticality of mobile devices and mobile connectivity to information workers. Specialist research firm RFi, found that in February 2012, 37% of Australians with a smartphone conduct at least one banking task on their mobile and approximately 47% with a tablet[33]. Financial institutions also have vast mobile workforces (including mortgage lenders, financial planners, business bankers, relationship managers, brokers, etc.) and wireless technology is critical to improving productivity and delivering better levels of service in the field.

2012 ushered in a new era in mobile technology with the launch of LTE (Long Term Evolution) in the Australian market. Commonly referred to as 4G, Telstra launched Australia's first 4G and 3G HSPA dual channel capable smartphone – the HTC Velocity[30].

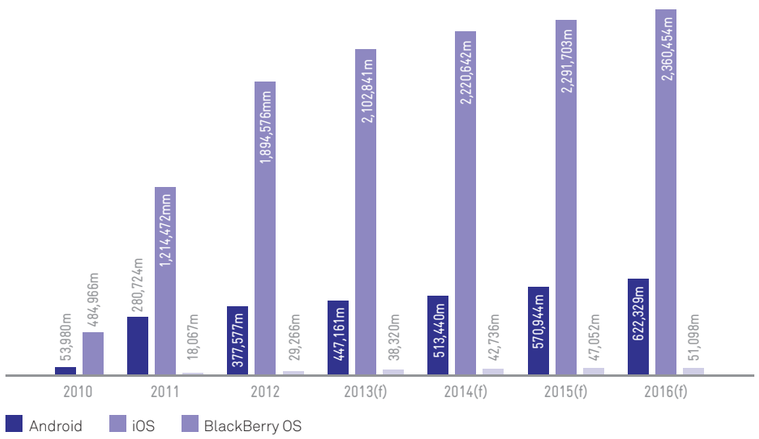
In a 2010 productivity study on business bankers by Telstra with a major Australian bank, it found that productivity could be improved by 5% per employee through the utilisation of smartphones[34].

Chart 7: Forecast for Australian Mobile Handsets Shipments



Source Data: "Australian Quarterly Mobile Device 2010-2014 Forecast and Analysis (3Q10)", IDC, December 2010

Chart 8: Shipments of Tablets in Australia



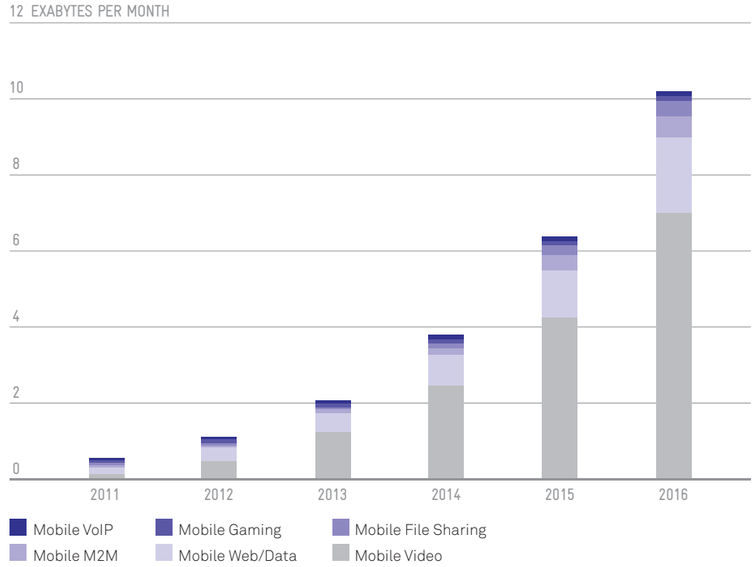
Source Data: "Australian Quarterly Media Tablet & eReader 2011Q4 Forecast and Analysis (3Q10)", IDC, 2012

Of course, video is a major application space for mobile devices. A May 2012 Study by IPSOS Media CT for Google showed 65% of Australian smartphone users watch video on their device[35]. Mobile video today generates more global traffic and as mobile video content has much higher bit rates than other mobile content types, it is predicted to generate most of the mobile traffic growth through to 2016, growing at a CAGR of 90% between 2011 to 2016 – more than any other mobile application category[36] (see Chart 9).

Mobile wireless internet continues to be the fastest growing technology for accessing the internet in terms of actual subscribers. According to the Bureau of Statistics, as at December 2011, approximately 47% of internet subscribers use mobile wireless technologies to access the internet[37] (see Chart 10).

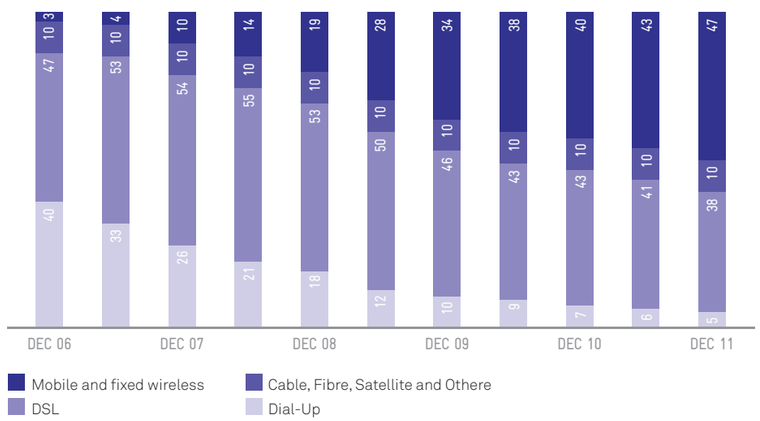
Smartphones and tablets have enabled the creation of much more efficient content and service delivery models in consumer markets – delivery models that enterprises can now leverage. Cloud-based mobile applications and services have largely overcome the memory and speed constraints that ordinarily would prevent them from acting as media devices. According to CISCO, globally cloud applications will account for 71% of total mobile data traffic in 2016, compared with 45% at the end of 2011[38]. For many enterprises with complex systems such as wealth management, cloud will be an attractive technological alternative. A recent article titled, Planners call for app platform[39], discusses this issue and cites research indicating that despite one in three financial planners wanting to access to their investment platforms and financial planning software on their smartphones and tablets, wealth management businesses are yet to deliver fully functional applications wirelessly.

Chart 9: Forecast for Australian Mobile Handsets in Operation



Source: CISCO VNI Mobile, 2012

Chart 10: Proportion of Australian Internet Subscribers by Access Type



Source: Australian Bureau of Statistics, internet Activity, Australia, December 2012

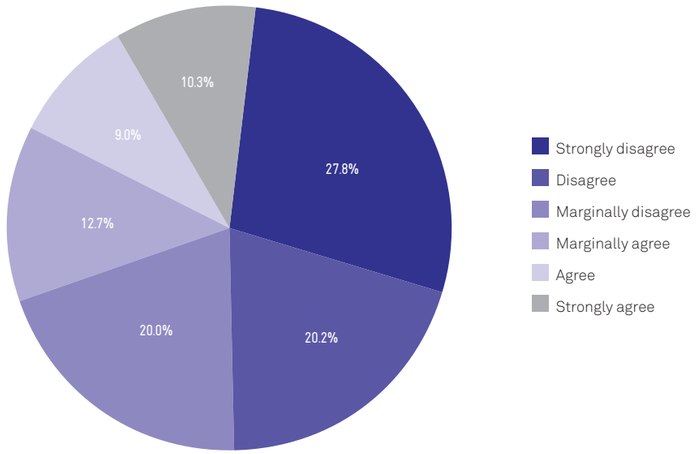
4 DIGITAL MEDIA AND COMMUNICATIONS TECHNOLOGIES (CONT.)

A key consideration for cloud-based delivery to wireless devices is the emerging Bring Your Own (BYOD) device development. In our 2009 report on Generation Y[40], we outlined how BYOD would become an integral part of the working environment for a generation that has grown up making a learning investment in their personal technologies. Momentum on this issue has now reached the point where BYOD has become a mainstream issue for enterprise IT strategies in Australia. In a 2012 study by IDC of Australian enterprise employees, 32% of respondents agreed with the statement 'I want to use my own device for work and personal use' (see Chart 11). That same study further reported that 13% of Australian enterprises already offer BYOD and that a further 37% intend to enact or pilot a BYOD policy in the next 18 months[41] (see Chart 12).

Major financial services institutions such as Suncorp and CBA have reported significant BYOD implementations and strategies for personal smartphones, laptops and tablets[42].

Chart 11: Enterprise Employee Support for BYOD

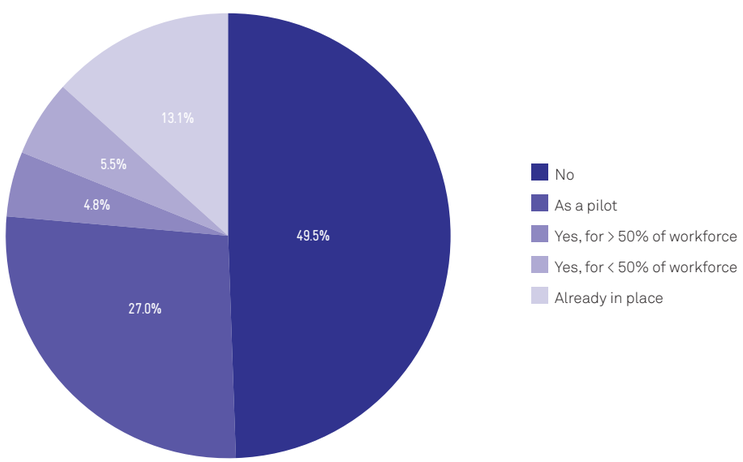
Q. Please indicate your level of agreement to the the statement: "I want to use my own device for work and for personal use"



Source: IDC, 'Enterprise Mobility: Moving Beyond Bring Your Own Device', January 2012

Chart 12: BYOD Intentions in the next 18 months

Q. Are you likely to enact a "bring your own device" policy in the next 18 months?



Source: IDC, 'Enterprise Mobility: Moving Beyond Bring Your Own Device', January 2012

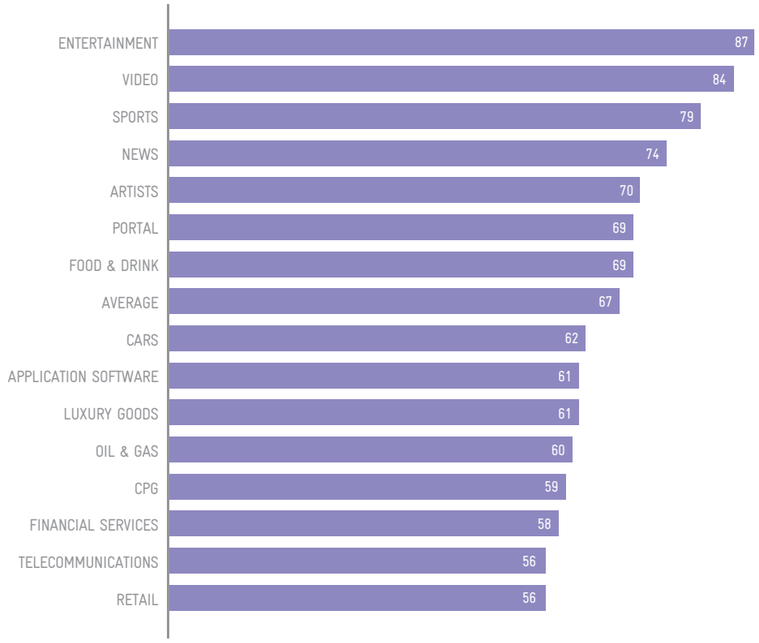
4.1.3. The Digital Media Enterprise

Video is now well integrated into many consumer and business websites across a wide range of industries, and is predicted to increase considerably in popularity. According to CISCO, consumer Internet video traffic in Australia will grow 15-fold from 2010 to 2015, a compound annual growth rate of 72%. By 2015, Internet video will account for 81% of all consumer internet traffic, up from 50% in 2010[43]. Forrester Research has been monitoring these developments and has developed four categories that define the consumer video online experience. These are discovery, consumption, content and context. Forrester further developed a scorecard and identified best practice from an extensive study of more than 100 consumer-facing websites that use video across different industries and scored video content from more than 100 leading websites across 15 industry verticals (see Chart 13).

Their results indicate that leaders have emerged in the entertainment, video specialist and sports related industries, possibly reflecting their more advanced lifecycle experience and operational management models for video-based content. Their research further highlights that industries such as financial services, telecommunications and retailers are yet to realise the potential that video has for engaging their customers online[44].

The next major development from broadcast video will be the incorporation of video interactions into the online and other channels. Gartner predict that by Year End 2015, 10% of customer interactions will have a video component, including self-service[45]. As we have demonstrated in previous sections, we need to integrate digital media much more comprehensively than ever before. Critically, financial institutions will need to prepare all-inclusive strategies for the lifecycle management of digital video media to meet the demand highlighted in Section 3. So what can be learnt from industries that are so much more advanced on this frontier?

Chart 13: Average Online Video Scores by Industry



Source: Forrester Online Video Product Scorecard Benchmarking 07/10

As pervasive new forms of digital media, fast-evolving technologies and audience fragmentation continue to disrupt traditional business and service models across many industry sectors, many enterprises are grappling with multiple challenges. They face a future where more and more customers and workers consume media on demand, on the go and in interactive formats.

Keeping up with these changes requires fresh thinking, adaptive new operational models and, fundamentally, smart and connected systems that distribute digital video content and engage consumers and workers across multiple platforms.

Management of digital media content lifecycles is critical for financial institutions, although many currently lack this capability, as highlighted in Section 3 of this report.

Addressing this will require strategies to acquire, distribute and manage media assets in a reliable, cost efficient manner, and the integration of these capabilities with enterprise systems in both front and back of house. Financial institutions can also capitalise on the substantial investments already made by others, as shown in Figure 5, which depicts the breadth of digital media capabilities now available to financial institutions.

In an Australian first, the integration of content distribution and management platforms into Telstra's core network provides financial institutions with a single point of service, monitoring across content acquisition, management, storage, distribution and devices. Services feature:

- Content Delivery Services – optimising the delivery of financial institutions' live and on-demand high-definition video content to any internet connected device.
- Business TV – providing video services for financial institutions' communications to internal workforces and external customers, including corporate messaging, video education and training, and video content on public websites.
- Digital Media Display – providing a video management and publishing environment for delivering video on demand and linear programming.

4.1.4 The Application Assured Enterprise

Whilst most financial institutions have made investments in IP Networks, the task of optimising performance of the network in an increasingly digital media environment becomes much more complex. At the same time, as the previous sections show, delivering good high quality media-centric customer and enterprise experiences is becoming an increasingly critical requirement. Section 3 highlighted that network capacity was already a major challenge for many financial institutions at the moment.

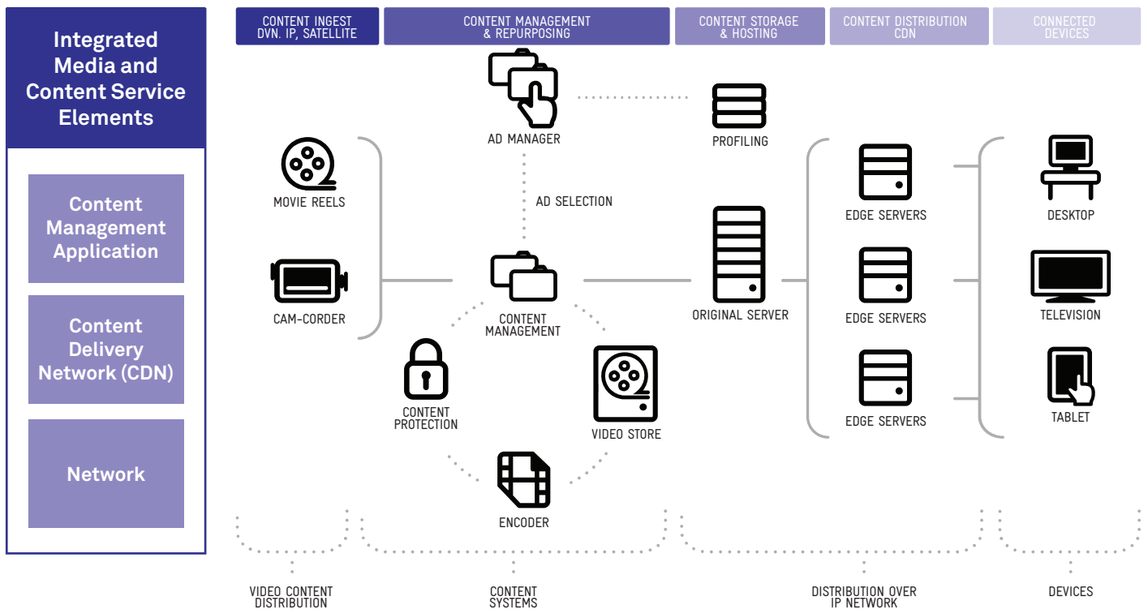
This pressure is only likely to intensify as – according to CISCO – increased adoption of advanced video communications in the enterprise segment will cause business IP traffic to grow by a factor of 2.5 between 2010 and 2015[46].

Application Assured Networking (AAN) is a simple and cost-effective way to optimise real-time application performance across your network. Typically, AAN is more suited for real-time applications where dynamic bandwidth allocation and management is required.

These types of applications are desktop/transaction-based, real-time applications such as video conferencing, IP Telephony and multicast applications (such as media streaming). AAN can also be used for internet protocol-based applications that require higher bandwidth for specific time periods, such as database back-up between a head office data centre and content distribution (see Figure 6).

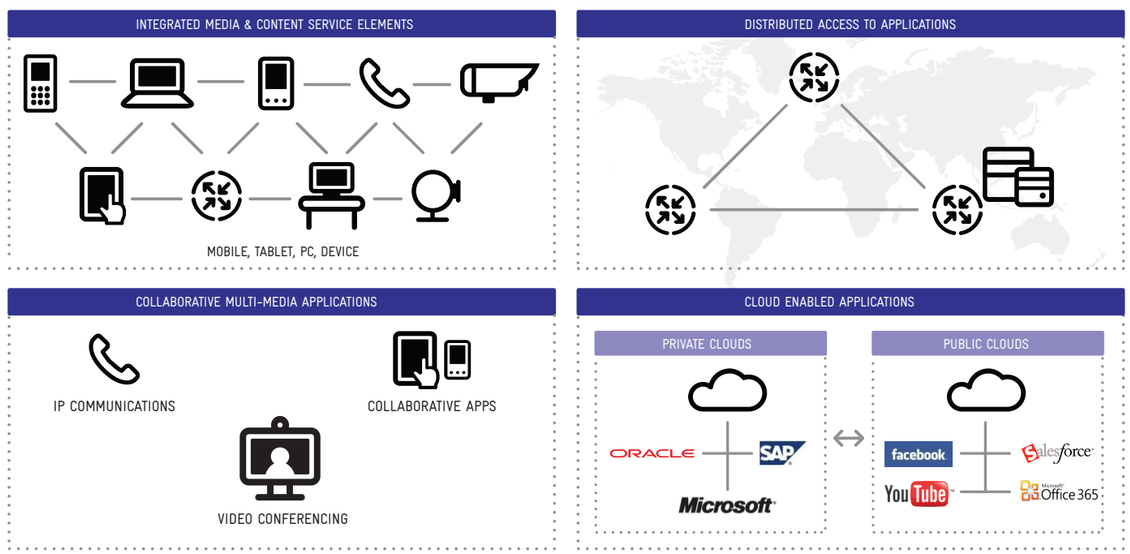
In what was reported to be a world first, Telstra this year announced the launch of AAN on its Next IP™ network. This service offers enterprises the ability to monitor traffic, and identify and report on how different applications are using their network assets. The data is viewable via an online portal, with Telstra providing a consultancy helpdesk to help enterprises interpret the information. The next phase of development, expected in 2012, aims to deliver actual policy control – allowing enterprises to set certain parameters within their network to optimise the delivery of specific applications, such as video conferencing or mission critical cloud services[47].

Figure 5: Integrated Digital Media and Content Service Delivery Model



Source: Telstra Research

Figure 6: Key Enterprise Drivers – Application Assurance



Source: Telstra Research

4.2 CUSTOMER EXPERIENCE THEMES

This section presents three examples of what financial institutions could achieve by incorporating digital video with enterprise communications systems.

In Section 2, we looked at why people prefer to interact and learn visually. We identified that a selective approach is crucial to customer experience design and that the mix of cues must be optimised if the message or interaction is to have its desired effect. This is particularly true for video messages or interactions, which are often inappropriately referred to as a substitute for face-to-face interactions. It's essential to match the design of the message or interaction to the choice of channels in today's increasingly complex, increasingly Onmi-channel environment.

Section 3 showed how much consumers value access to experts, contact with people they already know and trust – and how financial institutions can benefit from this. Video can help educate consumers, increase levels of engagement with products, and enhance levels of satisfaction, advocacy and consideration.

Based on this, we now present three concepts that use digital video media to transform customer interactions and engagement: Expert Anywhere – Customers in a branch, at home, or on the road can access experts, advisers or specialists anywhere within the organisation.

- My Banker On Demand – Customers can contact a known staff member using their device of choice, in the environment of their choice (from home, work, or on the road), at their moment of choice.
- My Trusted Adviser – Customers can explore what a financial institution can offer in highly creative and exciting ways – advanced digital interactivity adds value and augments the experience, whether comparing products or simply browsing for information.

Each of these concepts is enabled by an ecosystem of customer contact technologies and digital content management and distribution technologies. The remainder of this section describes and explores each of these customer experience concepts.

4.2.1. Expert Anywhere

As we've seen from Section 3, many organisations either have or are in the process of implementing mechanisms to let customers in a branch, at home or on the road access experts, advisers or specialists located at other branches, or to contact a help centre or centre of expertise.

The Expert Anywhere concept is based on the following premises:

- Financial services providers seek to improve the productivity of their workers and to expand the breadth and quality of advice/expertise they can offer customers as an important sustainable differentiator. Ideally they'd like their experts to be available from anywhere – from a branch, a centre of expertise, back-of-house or on the road.
- When financial institutions provide advice remotely, they want to offer a more engaging experience to help build the relationship between the customer and the institution.
- Their consumers are increasingly mobile and digital video media centric, so financial institutions want to provide expertise to their customers wherever they are.
- Customers and experts not just to converse, but to collaborate effectively to get the job done and the problem solved.
- They seek to provide customers with highly engaging learning content whether the customer chooses to visit them physically in a branch or office, or through self-service channels, such as online, through the device of their choice.

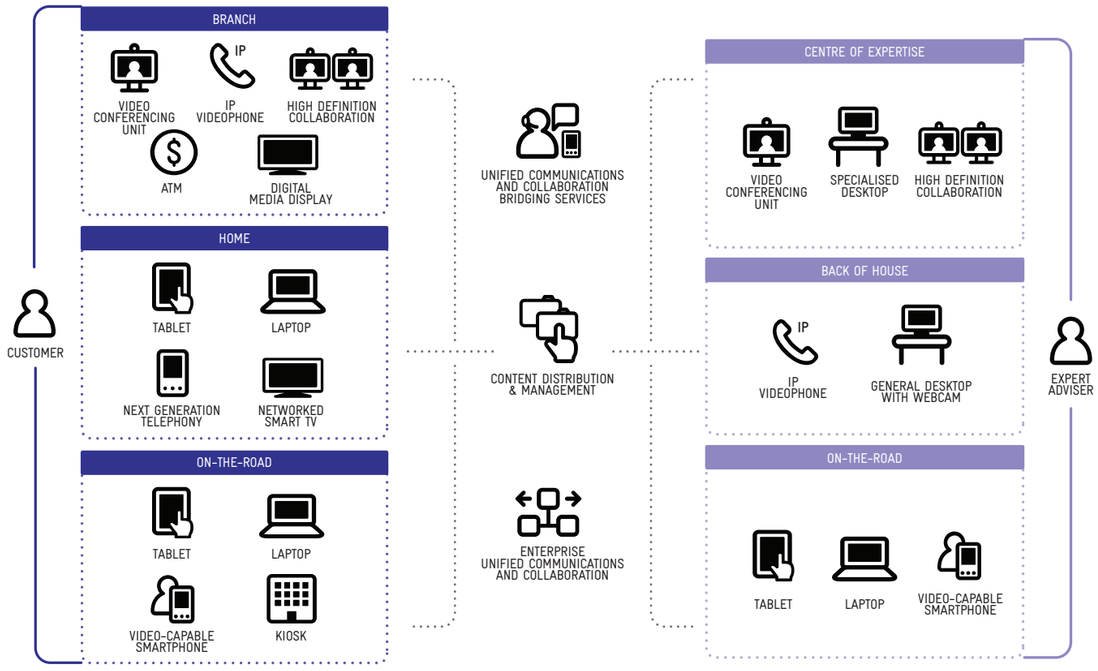
Figure 7 depicts the Expert Anywhere vision, allowing experts anywhere in the organisation to connect directly to customers whether they are visiting a branch, at home, in their regular workplace or even on the road. Rather than simply holding a video conversation, the customer and expert can collaborate far more effectively – sharing data and applications, as well as jointly working on documents.

Basing Expert Anywhere on an open, increasingly sophisticated Unified Communications & Collaboration (UC&C) platform means that it can be fully integrated with other customer contact platforms, for example: Contact routing systems and workflow systems allow greater flexibility in the scheduling of advice sessions.

- Contact quality management systems enable us to measure and manage the quality of experience the customer receives.
- Decision support tools (such as "next best action" recommendations) to provide support to experts.
- Contact analytics systems mine advice sessions for potential future up-sell or cross-sell opportunities.

Content Distribution and Management will capture, store and transform digital video content so it can be delivered to any internet connected device – TVs, PCs, smart-phones, tablets, ATMs, Kiosks, Branches (via internal TV or digital signage) to ensure that all viewers (whether customers or workers) have a great experience each time they interact with that content.

Figure 7: The Experts Anywhere Vision



Source: Telstra Research

To get a picture of the customer experience that Expert Anywhere might deliver, consider the following example:

EXPERT ANYWHERE IN ACTION

Julie, a small business owner and mobile worker, drops into her local branch to deposit the takings for the day. The digital signage catches her attention with equipment financing specials that she happens to be considering. All the branch experts are currently out seeing clients onsite. The customer service consultant in the branch knows Julie is a valuable client and uses presence via the banks Unified Communications Platform to identify and locate an available remotely located expert and facilitates a video-banking communication in a private room within the bank.

The expert uses video and collaboration tools on a PC in the video conference facility to present Julie with the necessary information about her financing request. The expert is able to pre-populate and complete the documentation and print it out locally so that Julie can execute the documentation at the local branch.

With pre-approvals now in place, Julie leaves the branch to begin discussions with her equipment supplier.

A substantial part of the Expert Anywhere vision can be delivered today. Many large Australian financial organisations have already invested in the core technologies needed to start bringing Expert Anywhere to life:

- Integrated, high-speed corporate wide area networks such as Telstra's Next IP™ and Next G™ connected with edge devices capable of managing and prioritising multi-media traffic.
- An IP-based enterprise UC&C platform.
- Secure remote network access for specialist or expert on the road.

By utilising these existing key components, it is possible for experts at any fixed or mobile location to be connected with customers seeking advice in any branch, from the home or on the road.

Evolution towards the full Expert Anywhere vision will require maturation of a number of technology capabilities, in particular:

- Integrating staff on smart phones into Expert Anywhere requires bridging between enterprise UC&C and video calling on 3G or 4G telephony networks. This capability is just beginning to emerge with a small number of early adopters already trialling or implementing this capability.
- Mobile workers on the road using laptops equipped with high-speed wireless broadband (such as Telstra's Next G™ service) can already be integrated with Expert Anywhere and the advent of 4G will further improve end-to-end quality.
- Extending Expert Anywhere out to customers will depend on the equipment they use. The functionality required to integrate with customers on the road is similar to that needed to integrate mobile workers. Accessing Expert Anywhere from "connected home" devices such as networked televisions, game consoles and media tablets without unmanageable complexity will become feasible with the coming generation of home network gateways. These will provide a consistent service integration layer across the massively diverse range of digital home devices.

4.2.2 My Banker on Demand

Previously, in Section 3, the research suggested that establishing a person-to-person relationship could significantly increase customer satisfaction, loyalty and advocacy. Customers are good at self-selecting and expect organisations to understand in which situations they prefer a transactional approach and in which they want relationship.

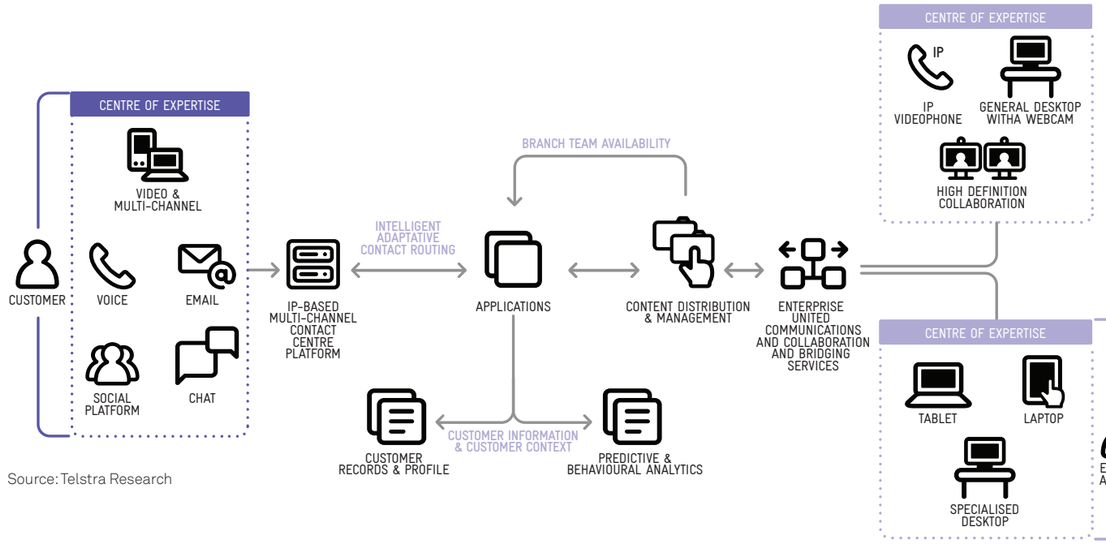
"My Banker on Demand" is based on a few key premises:

- The growing importance of relationship and conversation in customer engagements means that, rather than focusing exclusively on assigning contact classes to resource queues, we need to be able to connect individual customers with the best person or people in the organisation to handle the contact.
- Increasing channel complexity makes managing channels in silos increasingly less feasible. Customers expect immediacy, consistency and a seamless experience.
- Customers will expect a richer communication experience, based on a broader array of devices and channels, when they contact an organisation.
- For many customers, particularly small businesses, the local branch and its staff are at the heart of the relationship with the financial institution.
- Branch centric customers would like to be able to contact branch staff from more places, and in different ways.

The combination of enterprise UC&C, advanced analytics on customer and behavioural data, and an IP-based multi-channel customer contact platform provides us with the capability to:

- Relatively easily build a capability to accept contacts on any given channel.
- Exploit extensive customer data and sophisticated analytics to make evidence-based decisions about where to best route that contact.
- Ensure that the best individual person in the organisation to talk to that individual customer or prospect can take the contact regardless of whether they are in a contact centre, back of house or even in the field.

Figure 8: My Banker On Demand Vision



Source: Telstra Research

To understand what My Banker on Demand could deliver, consider the following example of apotential customer experience:

MY BANKER ON DEMAND IN ACTION

David, a self-employed investor, has been dealing with Rebecca at the Armadale Branch to begin organising investment loans on two properties that he'll renovate and resell. He has just viewed an educational video on his bank's internet banking site that demonstrates how he can structure his loans to optimise his tax benefits. From his Connected Home, David calls the bank's 1-300 visual call centre number and is immediately identified.

My Banker On Demand knows David is a high value, affluent customer who regularly deals with either Rebecca or Sam at the Armadale Branch – it also knows that David is calling from his video-capable mobile and that he has recently viewed the educational video. Using presence information from the enterprise UC system, My Banker On Demand knows that Rebecca is in a meeting, but Sam is free and at his desk.

David hears a message "Hi David, Rebecca, whom you've been dealing with, is not available at the moment. If you'd like, I can connect you to Sam at the Armadale Branch immediately or connect you to one of our other investment loan advisers." David says he'll speak to Sam. A pop-up on Sam's PC screen shows him that David is calling and gives him a hot-link to all of David's information.

"Hi David, it's Sam. How are you doing today…I notice you recently viewed our educational video on loan structuring – did you find that informative?"

"Absolutely replied David, but I need some tax and property heritage advice now before I meet with the builder at 11.00am." Sam is able to connect into the conversation with James the tax adviser and Sarah the heritage property expert who works for a small consultancy advising financiers regarding heritage properties. James is in a coffee shop in Armadale between inspections, but he can instantly give David the advice he needs and even share the required registration forms and processes from Heritage Victoria from his laptop together with video links for David to download specific examples of comparable heritage properties.

Sam has resolved David's questions effectively, efficiently and on the spot through the devices of David's choosing, the medium of his choosing and in the moment of his choosing.

Like the Expert Anywhere concept, a key component of My Banker On Demand is an open enterprise UC&C platform that allows communication on any channel or combination of channels consistent with the capabilities of the devices of the customer and relevant contact within the organisation. Many financial institutions are implementing UC&C today. Other key capabilities required to deliver the My Banker On Demand vision include advanced customer profiling, customer relationship management and predictive analytics. These are all areas where the financial services industry is well advanced. The final component is an IP-based multi-channel customer contact platform that can support complex and sophisticated approaches to routing and queuing contacts, down to the individual level.

4.2.3 My Trusted Adviser

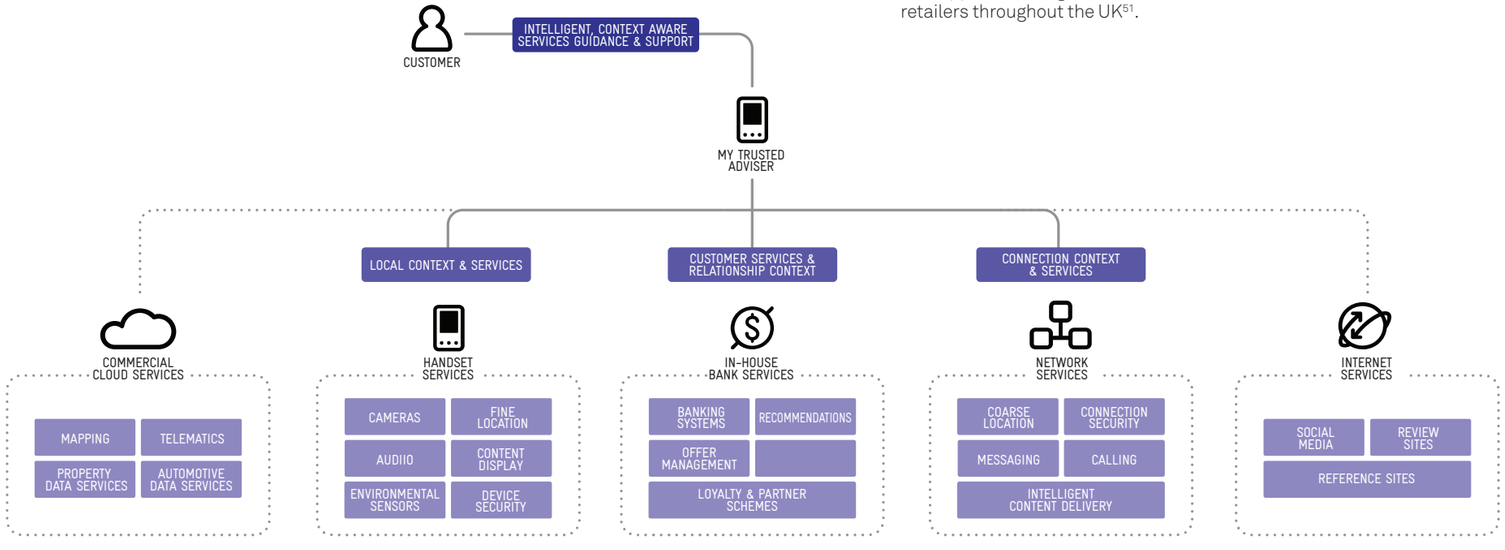
The last customer experience theme we present is based on a key emerging development associated with context aware video applications (that is, video converged with location and data capabilities, as discussed earlier in this section). Augmented Reality (AR) – often creatively depicted as a futuristic way to deliver instructions through cool glasses to a Mission Impossible operative on a cliff top from a helicopter – has come of age as mobile devices have developed. With AR, information is overlaid on a user's field of vision so that they experience a fusion of real and virtual information. This field is rapidly developing and many innovative new financial services applications are emerging – typically consisting of a video feed (reality) from a mobile device that is augmented with location and context based information (big data). It's a disruptive technology in so far as it completely changes the way in which customers can interact with their environment and with asymmetric information.

My Trusted Adviser is based on a few key premises:

- Trust is central to the relationship between a customer and their financial institution. As such customers are less hesitant to provide personal information to financial institutions in return for value adding services.
- Customers are willing to increase the frequency and breadth of interactions with their financial institution, particularly through an increasing array of wireless devices.
- Customers will expect a richer communication experience and the ability to use a broader array of devices and channels when they contact organisations.
- Customers are willing to deepen their relationship (as distinct from multi-banking) as a result of the increased trust, immediacy and the value provided.

As financial services in all their forms – payments, credit, investment and insurance – are so inextricably woven into the fabric of our daily lives, the combination of financial services and AR is well suited to be a significant 'game changing convergence'. The willingness of consumers to provide personal information to financial institutions creates the opportunity for those institutions to participate in, and add genuine value to, the day-to-day lives of their customers.

Figure 9: My Trusted Adviser



Source: Telstra Research

According to an Earnest & Young 2012 study across 35 countries including Australia, 72 % of Australian (and 70 % of global) consumers would be willing to provide their bank with personal information if it resulted in tangible improvements to the suitability of products and services[48] they were offered.

Whilst business models are now emerging for paid content and advertising, geo-targeted mobile marketing and mCommerce will open up more new commercial models and encourage new relationships between players within the ecosystem. Financial institutions will have scope to form deeper relationships with industries including retail, travel, hospitality, and information providers. Early examples of AR apps in the financial services industry are emerging such as the PNC Bank (USA) app for locating ATMs or branches[49], the CBA (Australia) app for home buyers[50] (see case study), and the Barclays (UK) app for locating ATMs and countless retailers throughout the UK[51].

In addition to the existing and evolving capabilities offered by mobile devices, browsers, image recognition and the LTE networks, the accelerated delivery of AR will require geospatial visualisation and big data capabilities.

As we have discussed extensively in this report, our natural preference is to interact and learn visually. Analytic visualisation bridges the perceptual and cognitive strengths with statistical computing and delivery capabilities empowering consumers to make highly informed decisions at the point of interest. Connecting vast amounts of disparate data to geography delivers the context creating new experiences. Its ingredients are both quantitative and qualitative spatial relationships with large data sets of structured and unstructured content.

CASE STUDY: COMMONWEALTH BANK HOME BUYING AUGMENTED REALITY MOBILE APP

In 2010, CBA launched an augmented reality mobile app targeting home buyers with innovative features. Supported by property site, Realestate.com.au and local property info and analytics company, RP Data, the app uses augmented reality to allow buyers to search for properties on the market. Using a person's location, the app is highly contextual and delivers a rich visual experience.

According to Forrester, the success of this app exceeded the banks expectations within the first six months and produced the following results:

- Exceeded 100,000 downloads between months four to five. Between February 2010 – November 2011, the app had reached 212,000 downloads
- The service is generating 25 to 30 calls and 12 completed online forms per week
- Overall, 1% of the bank's leads are generated through the app
- Delivering convenience through in-application searches, consumers rely on maps (45%) and AR (45%) equally, with 10% relying on traditional text based search.

Source: Forrester, Case Study: Home buying with Mobile Augmented Reality, December 22, 2011

4 DIGITAL MEDIA AND COMMUNICATIONS TECHNOLOGIES (CONT.)

Once connected into the enterprise communications and contact management framework, opens up a complete new set of service models, customer experiences and value added services.

AR should not be confused with virtual reality. AR enhances the real world experience, not replace it. Importantly, it has a convergent and symmetrical role in the buying cycle bridging between awareness, search, consideration and decision and empowers customers to gather all the necessary information to make a purchase decision simply and conveniently. Through integrating financial services through this process engenders a deep experience of trust.

To understand the customer experience that My Trusted Adviser could deliver, consider the following example.

MY TRUSTED ADVISER IN ACTION

Tom is keen to buy a new car and goes online to pre-register the details of the car he is interested in with his bank's smart buyer app. He has already done some extensive online searching and research – including watching videos from the car manufacturer on the vehicle's specifications. While out and about one weekend, Tom receives a MMS alert from his bank alerting him to the fact that the car is now on sale at a particular dealer.

Tom uses his GPS in his smartphone to locate the dealership and guide him there. He then uses his bank's AR app to bring the vehicle into view. The display shows him:

- Data on the special price of the vehicle, compared with next best offers from other dealers
- Details on the average operating, servicing and running costs
- Details on the various financing options, such as leasing versus personal loan or outright purchase
- His account details, confirming he has sufficient funds in a mortgage offset account to cover a deposit
- Insurance options and costs for comprehensive insurance, including discounts for usage-based pricing using vehicle telematics.

Equipped with the full knowledge to make his decision, Tom wants to speak with his bank before proceeding to gain legal advice on leasing and initiates via one click x video call to My Expert Anywhere, David. David is available and discusses with Tom a leasing and insurance arrangement to best suit his needs. Tom confirms via his mobile app.

While Tom fills in the paperwork with the dealer, he receives an SMS alert from David confirming that the approvals are done and the paperwork has been sent to the dealer.

SUMMARY

- Australian homes are now filled with increasing numbers of connected devices and high-speed networks, and have access to a growing range of cloud-based services. Customers or workers in The Connected Home or office will increasingly be equipped with diverse new forms of interacting and collaborating.
- 2012 ushered in a new era in mobile technology with the launch of LTE (4G) in the Australian market. The rapid rate of adoption, as predicted, correlates to the increasingly significant consumption of video on wireless networks. Cloud offers the industry an alternative for their complex enterprise applications, to minimise the capability limitations associated with wireless devices.
- The ability to manage digital media content lifecycles is critical for financial institutions. This requires strategies to acquire, distribute and manage media assets in a reliable, cost efficient manner, and to integrate them with the enterprise systems.
- Optimising IP network performance in an increasingly digital media environment is significantly enhanced through adopting application assured networking, which allows enterprises to policy control performance.
- Three customer experience themes developed demonstrate how digital video media can be incorporated to create new, highly engaging, customer interactions. These concepts are:
  - Expert Anywhere – Implement business systems to let customers in a branch, at home, or on the road access experts, advisers or specialists located at other branches, contact centres or centres of expertise.
  - My Banker On Demand – extend the relationship between customers and the staff they know by enabling the customer to contact staff using the device of their choice, in the environment of their choice and, most importantly, at the moment of their choice.
  - My Trusted Adviser – increase 'trust' and 'symmetry' in the relationship by creating new, value adding, and augmented experiences via advanced digital interactivity that enables customers to interact in highly creative and exciting ways.
- Each of these concepts is enabled by an ecosystem of customer contact technologies, such as unified communication, analytics, IP multi-media customer platform and digital content management and distribution technologies.

5 CONCLUSIONS

THIS REPORT HAS DEMONSTRATED HOW VIDEO CAN ENHANCE ENGAGEMENT LEVELS BY IMPROVING TRUST AND SYMMETRY IN THE RELATIONSHIP BETWEEN FINANCIAL INSTITUTIONS AND CUSTOMERS AND WORKERS.

This report has demonstrated how video can enhance engagement levels by improving trust and symmetry in the relationship between financial institutions and customers and workers. In particular, the digital media bank will result in much deeper and more loyal customer relationships while also improving productivity with workers who are increasingly mobile and reliant on the devices they own and prefer to use.

What did we find? When used or designed appropriately in the experience, video can significantly improve customer and worker engagement.

- We need to consider the role that our senses (particularly vision) and thus video play in customer experience design. This is important as customers increasingly seek to control the time, place and form in which they receive information.
- The use of video is already widespread among many of the world's leading and pioneering financial institutions, with results reported to include: increased staff engagement, reduced travel costs, increased market share, improved cross-sell, increased sales conversion rates and improved customer satisfaction and advocacy.
- In the Asia Pacific region, branches equipped with digital media displays broadcasting a variety of content have begun to emerge. These include video applications that enable real-time, video-facilitated, sales and service interactions between customers and 'specialists' based elsewhere within the organisation. Some are already using digital product, training and educational video on the online and internet channels. Kiosks were widely reported for intended use in high traffic areas.
- With half of online Australians already engaged with video online and a third using video calling, the five video-enabled concepts we researched with consumers were found to be appealing and highly likely to be used by a quarter to a third of Australians. All concepts can significantly improve perceptions of banking services and result in improved satisfaction, advocacy and consideration.

What do we need to consider? There are four key strategic developments occuring with digital media and communications technologies that will define how digital media banks operate and compete.

- Australian homes are filled with increasing numbers of connected devices – this may explain why 80% of consumers in our research preferred to use the five video-based financial services concepts we presented them from within the home.
- Australia has become one of the most heavily penetrated smartphone and tablet markets in the world, and 32% of people now prefer to use their own devices in the workplace.
- The digital media bank will use pervasive new forms of media, be capable of targeting niche and mass audiences alike, and capitalise on shifting consumer behaviour.
- Optimising the performance of investments made in IP networks is an increasingly complex task and in a world of rich digital media those networks play a critical role in delivering a compelling customer experience.

What do we need to do? We need to include comprehensive strategies that integrate digital media management and distribution capabilities into enterprise communications systems.

- Create experiences based on Omni-channel strategies that incorporate video within the customer experience design.
- Virtualise expertise throughout the enterprise by unifying communications – enable customers and workers to access expertise remotely, increasingly through their own choice of device.
- Include Application Assured Networking to optimise the customer experience of real-time applications that are desktop/transaction based: video conferencing, IP telephony and mulit-cast applications such as media streaming.
- Incorporate intelligent, adaptive, skills-based routing, business intelligence and analytics within the contact centre operation to ensure that each interaction is informed and efficient for customers.
- Create new experiences through advanced digital interactivity, thereby enabling customers to interact with their financial institution in highly creative and exciting ways.

The GFC's impact on trust between financial institutions and their customers the world over remains a key topic of industry concern. As the shift from relationships based on life stages to digital lifestyles occurs, the digital media bank will have the opportunity to utilise digital media and communication technologies to deliver trust and symmetry participating in the day to day lives of their customers in a value adding way.

6 ABOUT THE AUTHOR

Rocky Scopelliti is the Group General Manager Industry Development at Telstra Enterprise & Government. Rocky is Telstra's industry specialist in Financial Services and is also responsible for leading Telstra's team of industry specialists, who are chartered with thought leadership across verticals including Media & Entertainment, Retail, Mining, Construction, Utilities, Resources, Manufacturing, Transport and Logistics.

Rocky has extensive senior management experience covering Product Development, Strategy and Planning, Business Development, Research and Strategic Marketing.

Over the past four years, Rocky has authored a number of thought leadership research reports that provide recommendations on technologies that financial services institutions can leverage in order to better serve customers, improve productivity and drive growth. These include:

- ICT as a Driver to Improve Service to Generation Y for Financial Services
- Servicing Micro Businesses – What Financial Services Need To Know
- Mobile Innovation – The next frontier for growth and productivity for insurers
- 2012 for the Financial Services CIO – Why agile IT strategies are key to meeting the requirements of a new financial age.

Educated in Australia and the United States, at Sydney University and Stanford University, Rocky has a Graduate Diploma in Corporate Management and a Masters in Business Administration.

7 ACKNOWLEDGEMENTS

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Bernard Salt is a best-selling author of four books on popular demographics. His latest book, The Big Tilt, looks at the way society might change as baby boomers tilt towards retirement. Bernard actually holds two concurrent fulltime positions. He is a Partner with KPMG based in Melbourne where he provides advice to business. And in January he was appointed Social Editor with The Australian newspaper where he contributes two weekly columns and ad hoc opinion pieces. Bernard is widely regarded as one of the most in-demand corporate speakers in Australia; he has spoken to audiences in all parts of Australia and New Zealand as well as throughout the US, Europe and Asia. Bernard is perhaps best known as a prolific media commentator; he appears regularly on television programs like Sunrise, the Today Show, SBS Insight, 60 Minutes, 4 Corners, A Current Affair and Today Tonight. He was part of the presenting team in the SBS series, The Nest, which screened in 2009 and 2010. This series tracked the lives of several 20-something Generation Ys who were living at home with their parents. Bernard holds a Master of Arts degree in Geography from Monash University. In October 2011, he was appointed an adjunct professor with Curtin University Business School. Bernard is working on a new book to be released in March 2013.

TELSTRA

Telstra is a leading provider of network-centric communication and managed services to large enterprise and government organisations in Australia and around the globe. Telstra serves more than half of the world's top 500 companies through its international operations that facilitate access to over 240 countries and territories.

Telstra offers superior value for money through its range of award-winning world-class products and services that are underpinned by the next generation Telstra Next IP™ network and Next G™ network – fully owned and managed based on the stringent quality standards of Australia's largest network manager. Telstra's solutions are developed and tested in close co-operation with partners such as Cisco, Microsoft, Ericsson and Alcatel and designed and deployed for customers by one of Australia's largest and most qualified Professional Network Services organisations.

Telstra's service to enterprise and government customers is internationally recognised for its high quality, including full International Customer Service Standard (ICSS) certification, backed by Telstra's Customer Service Commitments and delivered by one of Australia's largest and highly qualified field and technical workforce with a culture of continuous improvement. Telstra is a financially strong and reliable partner for large enterprise and government organisations who cannot afford downtime and use ICT solutions to improve productivity and drive growth in a sustainable way.

8 GLOSSARY

Application Assured Networking (AAN)	A way of optimising performance of traffic on IP networks through dynamic allocation of bandwidth.
Assisted GPS (A-GPS)	Locating devices using GPS alone is prone to inaccuracy or delay in certain circumstances (particularly in highly built up areas). A-GPS uses mobile network information to improve both the accuracy and speed of GPS location.
Augmented Reality (AR)	Is a live, direct or indirect, view of a physical, real-world environment whose elements are augmented by computer-generated sensory input such as sound, video, graphics or GPS data.
Big Data	The combination of structured and unstructured data and analysis to deliver intelligent insights enabling timely actions.
Cloud Computing	The delivery of computing and storage capacity as a service to a heterogeneous community of end-recipients.
Co-browsing	Co-browsing is short for collaborative browsing. It refers to the process of two people, on different end devices (usually PCs or mobile devices) being able to simultaneously and collaboratively view, navigate and otherwise interact with a website or web-based application.
Collaboration	Collaboration technology refers to software designed to help people (often located remotely from each other) work effectively together to complete a shared task. Typical collaboration features include voice conferencing, video conferencing, instant messaging, document storage, file sharing shared, document creation and mark up.
Communications-Enabled Business Processes (CEBP)	CEBP refers to the integration of unified communications and collaboration with core business applications, allowing the organisation to substantially redesign core business processes (rather than simply improving the efficiency of existing processes).
Customer Relationship Management (CRM)	The system(s) and processes used by organisations to managed and track contacts with its various individual customers and the information it holds regarding them. CRM systems are typically used by customer-facing staff to help support and guide customer contacts.
Enterprise Collaboration	Enterprise collaboration technology refers to the subset of collaboration technology focused on enabling people within an organisation to collaborate effectively.
Enterprise Mobility	Enterprise mobility is an umbrella term for a variety of approaches aimed at enabling access to enterprise tools, systems and resources from mobile devices.
Home Gateway	A residential gateway is a home networking device, used as a gateway to connect devices in the home to the Internet or other WAN.
Geospatial Visualisation	The process of viewing geospatially tagged information on maps or satellite imagery, enabling users to discover correlations between data sets.
Instant Messaging (IM)	Instant messaging is a collective term for a set of technologies that allow a real-time text-based communication between two or more participants (who are typically remote from each other) via a network. Many instant messaging services are popular among Internet users including AIM, Jabber, Windows Live Messenger and Yahoo! Messenger. Many social networking applications include instant messaging as a component.
Interaction Voice Response (IVR)	Interactive Voice Response is a technology or system allowing a user to provide input via voice or using a touch on keypad and provides responses via either recorded or synthesised speech.
Interaction Voice and Video Response (IVVR)	Interactive Voice and Video Response complements IVR technology by allowing output from the system to include either recorded or streaming video as well as recorded or synthesised speech.
Global Positioning System (GPS)	A global navigation system based around a network of satellites deployed by the United States government. Devices equipped with GPS receivers can locate their position quite accurately by measuring and comparing the time taken for signals to reach the receiver from various satellites in the network.
Information and Communication Technology (ICT)	ICT is an umbrella term that includes information technology, communication technology and the integration between them.
Location	In this content, location refers to the systematic determination, recording and publishing of information indicating the current or historical geographic location of a user of a location service.
Location-Based Service (LBS)	A service or application that utilises the user's location information (see Location) to help deliver or customise the service or application.

8 GLOSSARY (CONT.)

Long Term Evolution (LTE)	Marketed as 4G LTE, is a standard for wireless communication of high-speed data for mobile phones and data terminals.
Micro blogs	Micro blogs allow users to exchange small elements of content such as short sentences, individual images, or video links.
Mobile Broadband	Is the name used to describe various types of wireless high-speed internet access through a portable modem, telephone or other device.
Multi-channel	Multi-channel contact usually refers to interactions that transition between one or more channels (e.g. voice, instant messaging or video) during the course of the interaction.
Multi-media Message Service (MMS)	An extension of the Short Message Services (SMS) paradigm that allows mobile users to send and receive video messages and still images from their mobile phone.
Multi-modal	Multi-modal contact usually refers to interactions, components of which take place on multiple channels (e.g. voice, instant messaging or web) simultaneously. An example of a multi-modal interaction is where an agent talks to a customer on a telephone while showing them information using co-browsing (see Co-browse) on a PC.
Omni-channel	Omni-channel is very similar to, and an evolution of, multi-channel retailing, but is concentrated more on a seamless approach to the consumer experience through all available shopping channels, i.e. mobile internet devices, computers, bricks-and-mortar, television, catalogue, and so on.
Presence	In this content, presence refers to the systematic determination, recording and publishing of information indicating the current or historical status and availability of a user of a presence service. Presence is frequently combined with location (see Location) to infer context information regarding an individual.
Short Message Service (SMS)	A messaging communications service provided on mobiles phones and mobile networks that allows users to send and receive text messages of up to 160 characters from their mobile phone. SMS text messaging is the most widely used data application on the planet, with 2.4 billion active users, or 74% of all mobile phone subscribers sending and receiving text messages on their phones
Skype	A proprietary voice-over-Internet Protocol service and software application owned by Microsoft. The service allows users to communicate with peers by voice, video, and instant messaging over the internet.
Smartphone	Is a mobile phone that offers more advanced computing ability and connectivity than a contemporary feature phone.
Smart TV	Smart TV, which is also sometimes referred to as "Connected TV" or "Hybrid TV", (not to be confused with IPTV, Internet TV, or Web TV), is the phrase used to describe the current trend of integration of the internet and Web 2.0 features into modern television sets and set-top boxes, as well as the technological convergence between computers and these television sets/set-top boxes.
Social Network Service or Social Network Application	Social network services refer to a class of predominantly web-based service allowing people who share some form of relationship to share status, profile and interest information as well as various forms of media including files, photos, videos, music and applications. Some of the most widely known social network services are Facebook, MySpace, Bebo and Twitter.
Tablet Devices	Is a complete mobile computer, larger than a mobile phone or personal digital assistant, integrated into a flat touch screen and primarily operated by touching the screen. It often uses an onscreen virtual keyboard or a digital pen rather than a physical keyboard.
Unified Communications (UC)	A unifying approach for integrating various real-time communications channels (e.g. voice-calling, video-calling, and instant messaging) and non-real-time communication channels (e.g. mail, voicemail, email and video-mail) into a consistent framework. In UC systems, communications and their characteristics can generally be transferred seamlessly from one channel to another and can be made available for integration with other business applications.
Unified Communications and Collaboration (UC&C)	The integration of various collaboration features and functions into a unified communications framework.
Unified Messaging (UM)	The subset of unified communications (see Unified Communications) that deals exclusively with the integration of non-real-time channels such as mail, email, voicemail and video-mail.
YouTube	A video-sharing website on which users can upload, view and share videos. The site uses Adobe Flash Video and HTML 5 technology to display a wide variety of user-generated video content, including movie clips, TV clips, and music videos, as well as amateur content such as video blogging and short original videos.

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1. If under 30 years of age, don't need to have certain wealth, but need to show 'potential': i.e. be a white collar professional or a tertiary student
2. If between 30 and 35 years of age, need to earn at least $120,000 p.a. (for the household) or need to have a mortgage over $200,000 (can be home or investment property)
3. If between 35 and 39 years of age household income needs to be over $120,000 p.a.
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