

SMART SERVICES CRC

# Annual Report

Services economy growth through innovation



**Smart Services  
Cooperative Research Centre  
Annual Report 2009-2010**



Established and supported under the  
Australian Government Cooperative  
Research Centres Programme

# Contents

<b>Chairman’s Report</b> .....	<b>1</b>
<b>Chief Executive Officer’s Report</b> .....	<b>2</b>
<b>Executive Summary</b> .....	<b>4</b>
Achievements and Activities.....	4
Risks and Opportunities.....	5
Context and Major Developments during the Year.....	5
<b>National Research Priorities</b> .....	<b>7</b>
National Research Priority Goal Highlights.....	7
<b>Governance, Structure and Management</b> .....	<b>8</b>
Smart Services CRC Participants .....	8
Smart Services CRC Supporting Participants.....	8
Centre Management Structure.....	9
Smart Services CRC Organisational Chart .....	10
Board Structure and Activity.....	11
Changes to Participants .....	15
<b>Research Programmes</b> .....	<b>16</b>
Research Activities and Achievements.....	16
Research Collaborations .....	22
<b>Commercialisation and Utilisation</b> .....	<b>26</b>
Commercialisation and Utilisation Strategies and Activities .....	26
Intellectual Property Management .....	27
Communication Strategy.....	30
End-user Involvement and CRC Impact on End-users.....	31
<b>Education and Training</b> .....	<b>33</b>
Internal Conferences and Workshops.....	34
<b>Financial Information</b> .....	<b>35</b>
<b>Glossary of Terms</b> .....	<b>39</b>

## Chairman's Report



I am pleased to have received the strong support of the Participants since being appointed as Chair of Smart Services CRC in December 2009. In the period since my appointment the CRC has faced a number of challenges as a result of the difficult economic conditions. However, I am pleased to report that notwithstanding this the CRC has had a very successful year and achieved a number of advances in its research outcomes.

The 2009/10 year was the second full year of operation for the CRC and saw an investment of in excess of \$18m in research and development activities across 9 research programmes covering New Financial services, Government and Platform services and Mobile and Digital Media services. The CRC also continued to conduct a foresighting research programme into emerging trends and the development of tools to assist organisations in evaluating the potential impact of changes in services and the way they are delivered across the economy.

A core focus of the CRC since its inception has been to provide early stage demonstrators and prototypes for partner organisations to test research outcomes against live data at an early and regular stage of the research. I am pleased to advise that at 30 June 2010 Smart Services has developed 25 early stage demonstrators and prototypes from its research programmes. This has led to a fast transfer of technology to partners and at year end we have achieved 14 technology transfers and licences to existing partners and a number of external parties.

Smart Services continues to be at the forefront of thought leadership in the services sector. We were one of the key sponsors of the new Services Science Society in Australia which has been formed to be a focal point for bringing together this fast growing area of economic activity. The CRC has continued to build its international reputation with 31 papers peer-reviewed and presented at various conferences in China, Germany, Italy, USA, Finland and South Africa as well as in Australia.

During the year we negotiated a contract variation with the Commonwealth to reflect changes in some Participant contributions. We are also pleased to welcome Sirca Limited as a new Participant of the CRC. Sirca is a leading provider of financial trading data to both international and Australian financial institutions and regulatory bodies and will be an active end-user of Smart Services research outcomes. We also welcomed Marksx Pty Ltd, as a Third Party Participant. Marksx has an interest in the film production industry and will participate in our New Media Services research programme.

It has been pleasing to see that not only have our research outcomes been adopted by a number of our partners but two of the CRC developed technologies – Immersive Services iSee technology and our aged care Keep in Touch technology – were selected to be showcased as part of the NBN launch in Tasmania and as part of an extended NBN Testbed trial by the NSW Government.

Smart Services continues to be committed to building capacity for the continued growth in the services sector by supporting 37 current PhD candidates and a further 29 scholarships. It was pleasing to see the first 4 PhD candidates complete their studies and see them readily obtain employment in industry and research organisations.

I wish to take this opportunity to thank our Participants for their continued support and to the Australian Government for its continued financial support under the CRC programme. I also want to record my appreciation for the excellent contribution made by the previous Chairman, Mr Neville Roach and for the support provided by the Board, Management, Researchers and staff of Smart Services.

A handwritten signature in black ink that reads "Mark S. Wainwright". The signature is written in a cursive, flowing style.

Mark Wainwright  
Chairman & Director

## Chief Executive Officer's Report



The 2009/10 year has been an immensely rewarding and challenging year for Smart Services CRC. Despite the impact of the economic downturn and the implications for our Participants, Smart Services was able to maintain overall contributions and other income in excess of 99% of the initial plan for the year and to achieve all key milestones.

This enabled the Board to maintain a strong level of investment in our research programmes - in excess of \$18m. As a result of this stability and level of commitment our researchers delivered a wide range of exciting and high impact research outcomes.

Despite the continued positive research outcomes our Participants have been affected by a range of adverse exogenous factors which has meant that contribution levels from some Participants were reduced during the year. With the encouragement and support of the CRC Branch of the Department of Innovation, Industry, Science & Research and all of our Participants we have been able to attract two new partners – Sirca Limited with a strong financial industry background and Marksx Pty Ltd with interests in the film production industry – who will become active industry partners within our research programmes.

As part of the introduction of new Participants and changes in contributions from existing Participants we have entered into a contract variation with the Commonwealth to reflect refinements in our research programme, which recognise the changing events in the services sector and the evolving needs of our industry participants.

Our research continues to be based on a user inspired research approach to identify major issues and areas of industry need for new, breakthrough technologies. As part of this approach we identify potential opportunities through a strong collaborative effort between industry partners and research provider partners.

An important part of this approach is that Smart Services has built a combined strength in its researcher base with researchers having expertise in social science research and technical ICT areas. Together with our end-user partner focus this provides research outcomes that understand how end-users will adopt technology and how the outcomes can be delivered by industry in a viable and scalable manner.

As a result of this approach, at 30 June 2010, Smart Services has built a repository of 25 prototypes and early stage demonstrators, which in turn has led to 14 technology transfers and licences being taken up by a range of Participants and external parties. This includes a full commercial licence for our “Tabletop” surface computing technology by Colliers International.

The evolution of the Smart Services Innovation Foundry has enabled us to fast track a number of projects by bringing researchers and industry partners together on specific elements of research to undertake trials and early stage development work as a means of speeding up the transfer of knowledge to end-user Participants. This has led to one project in the New Media Services space where a trial with Fairfax Digital has led to an expanded project with additional contributions by Fairfax. Importantly Fairfax has adopted the “test” version and it continues to be used on a daily basis whilst improvements and refinements are made to make it more robust.

We are also very proud to have two Smart Services technologies selected for showcasing as part of the launch of the NBN in Tasmania and for extended trials with the NSW Government’s NBN Testbed trial. These technologies demonstrate the breadth of the research undertaken in the CRC for the services sector with applications of the technologies extending from the health, aged care and education sectors to customer centre technology and improved remote working uses of the technologies.

Importantly we are combining our research and development effort with a process to build sectoral capacity through encouraging students at PhD, Honours and undergraduate level to obtain educational and research exposure to the services sector of the economy. To date we have supported 37 PhD students (4 of whom have completed their studies) and granted a further 29 scholarships for Masters, Honours and undergraduates to work directly on projects of interest with our industry partners. We believe this provides both students and industry with a direct appreciation of the skills being developed with our research participants and demonstrates how those skills can be applied for early and high impact on behalf of industry participants.

I would like to express my appreciation of the support provided by the Board and the entire Smart Services CRC team who have worked tirelessly with our partners to facilitate the relationships and application of research outcomes throughout what has been a difficult but stimulating year.

With more exciting research outcomes being created by the partnership of our researchers and industry partners I am confident the CRC will deliver valuable results to all partners and the wider economy as we move to increase the commercial opportunities being created within the CRC.

A handwritten signature in black ink, appearing to read 'Warren Bradey', with a long horizontal flourish extending to the right.

Warren Bradey  
Chief Executive Officer & Director

# Executive Summary



## Achievements and Activities

During the 2009/10 Smart Services has achieved:

Agreement with IT Financial services group, Sirca Limited, to become a partner of the CRC.

Agreement with Boutique film production group, Marksx Pty Ltd to join the CRC as a Third Party Partner over the next 2 years to support research work in our social media programmes.

Confirmation by QLD Dept of Main Roads that they will participate with the CRC, under the umbrella agreement with the QLD State Government, in the Personalisation/Data Mining research programme.

Confirmation by the NSW Government that it will re-invest the SITCRC distribution for use in new CRC research projects.

Confirmation by e-health authority NEHTA that it will join in creating with the CRC a Tools Foundry for testing interoperability and conformance processes for ehealth records.

Signing of 14 technology transfers and licenses to CRC Participants and external parties.

Installation of the first commercial use license of the Tabletop technology by property group Colliers International.

Commencement of key Fast Track project for Editorial Decision System technology with Fairfax Digital and QUT.

Commencement of a Fast Track submission for Immersive Services technology for use as an international demonstration of research capability by UOW.

Formal inclusion of two CRC technologies in the launch of the NSW NBN Testbed project by Minister for Commerce Paul Lynch. This Testbed will utilise the CRC's Keep in Touch and Immersive Services technologies as a trial for six months.

Successful completion of LIXI/CSN research project in e-conveyancing and CSN/NEHTA in the area of e-health conformance and interoperability which has generated additional contributions to the CRC research programme.

Completed and showcased to partners 25 early stage demonstrators and prototypes of technologies developed from the continuing research programmes.

Achieved the submission of 59 publications during the 2009/10 year by researchers, including 31 peer-reviewed conference papers, 4 book chapters, 5 refereed journal articles and 4 commissioned reports and a wide range of presentations as invited guests at conferences and social media sites.

Recruited 41 students to the CRC related PhD and Student programme across all 6 University partners.

Submitted a contract Variation with the Commonwealth Government to reflect changes in Participant levels, the withdrawal of Telstra and SAP and the introduction of new participants Sirca and Marksx.

\$3.75m has been distributed to participants of SITCRC as part of the sale of the spatial voice technology to Dolby Inc.

## Risks and Opportunities

The global economic downturn led to some Participants reviewing the level of their contributions and some Participants to provide notice of their withdrawal. The uneven economic recovery across the various sectors of the economy and the commitment of government funds to short-term stimulus packages continues to create a risk for Smart Services CRC specifically and the research community generally will be under pressure.

As part of the risk mitigation strategy adopted by Smart Services to address the changes in contributions Smart Services has introduced two new Participants (Sirca and Marksx) and has broadened its approach in working with various agencies of Government rather than a single point of entry. In addition Smart Services has adopted a strategy to further mitigate risk by continuing to seek a number of new Participants who may join on project specific basis in the future to align with smaller companies' abilities to contribute funds and in-kind support.

At the same time Smart Services is working to deepen the engagement with existing Participants by increasing the number of Service Innovation Foundry projects where early stage prototypes are trialled against 'live' data of Participants and integration issues are tested against Participant legacy systems. This approach provides a clearer path to technology transfer for Participants and identifies the potential benefit that can be achieved from the research outcomes at an early stage and on a progressive basis.

The result of this approach has led Smart Services CRC to create in excess of 25 early stage demonstrators and prototypes for showcasing to participants and led to the achievement of 14 technology transfers and licenses with Participants and external parties.

To ensure the Smart Services CRC research projects are aligned to the direct needs of Participants the approach adopted is to ensure that at least one industry participant and one research participant co-champion research projects undertaken. This leads to a close alignment and understanding of industry problems and how research efforts can be harnessed to address the "key" problems facing the industry participants.

## Context and Major Developments during the Year

### Industry context in which the CRC operates

Smart Services CRC continued to make significant advances in its research programmes during the 2009/10 year despite the continuing economic difficulties being felt by all Participants. During the year our 9 research programmes developed over 25 early stage prototypes and demonstrators of our research outcomes.

The Services industry faced a difficult economic period and as a result of that Smart Services saw two Participants retire from the CRC and some others reduce their contribution levels during this period. However, at the same time Smart Services was able to attract two new partners to link with the CRC and become active research partners in our programmes.

The CRC continues to work closely with all Participants to deliver value on a progressive basis as part of the research outcomes. As part of this approach we have ensured that all research programmes have co-champions from industry partners and research organisations to maintain the direct relevance of research to industry needs and to provide access to live data for researchers in the development of their research work.

This approach has led to a number of 10 outcomes being licensed during the year by our Partners at an early stage for incorporation and further development within their own organisations. However, we are seeing a trend from both external parties and Participants that they require research work to be taken to a more completed stage before they are willing to invest further in innovation. The Smart Services Innovation Foundry provides us with a link whereby we are able to bring researchers and industry partners closer together in solving issues on integration and the adoption of innovative research outcomes. The use of early stage pilot trials enhances the knowledge of our researchers as to important issues and provides our industry partners with additional confidence that the innovations being developed are robust and scalable across larger end-user organisations. We will continue to utilise the Innovation Foundry to bridge the "gap" between research and industry adoption and believe it will be an important part of the future success of Smart Services in delivering significant value to Participants and the broader economy in a more productive and speedier manner.

## Value of outcomes to date

The research outcomes achieved to date by Smart Services CRC are being translated into useful innovations adopted by a number of our partners and external parties.

At 30 June Smart Services had achieved:

- 10 technology transfers and licences signed with Participants and external parties for use within their own organisation;
- Signing of our first full commercial licence with an external party for the Tabletop technology which in turn led to a sell-out of customer product in a record time;
- Utilisation of the Smart Services Keep in Touch and Immersive Services technologies for paid early stage trials by the NSW Government NBN Testbed trial in Southern Sydney;
- Showcasing of two Smart Services technologies as part of the launch of the NBN in Tasmania;
- Selection of Smart Services CRC by the National e-health Transitional Authority to develop an initial strategic plan for conformance and interoperability standards;
- Selection of Smart Services by e-lending peak body LIXI to assist in the strategic development of schemas and a services approach to interoperability testing of industry services; and
- Development of in excess of 25 early stage prototypes and demonstrators of Smart Service technologies for use by CRC Participants.

Whilst these outcomes are still being customised and developed by Participants for inclusion with their product offerings it is considered the technologies will improve their respective revenues and business outcomes in a significant manner.

Smart Services CRC will continue to focus its efforts to maximise value from our research outcomes through the transfer of the intellectual property to our partners for them to exploit directly with their customers. In areas where opportunities exist that are not of specific focus of our Participants the CRC will seek opportunities with local and internationally based third parties to exploit the technologies.

## Key Staff Appointments and/or changes

There are no changes to key staff during the 2009/2010 financial year.

The centre staff are noted in the Management Structure section as at 30 June 2010 on Page 10.

## Major Equipment

The Smart Services CRC Head Office is located at the Australian Technology Park, Eveleigh NSW. The Australian Technology Park is a scientific research and development precinct located approximately five kilometres from the Sydney business district.

A major node of Smart Services is located within QUT premises in Brisbane to support the Queensland based research activities.

The Service Innovation Foundries based in our Sydney and Brisbane Offices are fully operational and utilised for fast tracking projects from the research phase to demonstratable commercial applications by industry and research participants.

No major equipment was purchased during the 2009/2010 financial year.

# National Research Priorities



## National Research Priority Goal Highlights

Smart Services CRC aims to measure the national benefit of its research outcomes by monitoring the increase in Australian economic activity resulting from commercialisation undertaken using IP and knowledge developed as a result of Smart Services projects.

These increases in activity possibilities will arise from:

- financial returns to participants and other service providers using innovations to deliver new or improved services to existing and new markets;
- productivity gains by Australian firms or industries;
- export development and/or import replacement;
- consumer and user benefits through higher performance, higher quality, and cheaper products or services; and
- increasing intellectual capital and knowledge transfer.

Smart Services' targeted outcomes are aligned to the Australian Government National Research Priorities for Frontier Technologies, Promoting and Maintaining Good Health and Safeguarding Australia. The percentages below indicate the spread of where the CRCs research has focused.

**Table 1: National Research Priorities and CRC Research**

<b>FRONTIER TECHNOLOGIES FOR BUILDING AND TRANSFORMING AUSTRALIAN INDUSTRIES – Stimulating the growth of world-class Australian industries using innovative technologies developed from cutting-edge research</b>	<b>CRC RESEARCH (%)</b>
Frontier technologies	5
Smart information use	50
Promoting an innovation culture and economy	20
<b>PROMOTING AND MAINTAINING GOOD HEALTH – promoting good health and preventing disease, particularly among young and older Australians</b>	<b>CRC RESEARCH (%)</b>
Ageing well, ageing productively	5
Preventive healthcare	5
Strengthening Australia's social and economic fabric	5
<b>SAFEGUARDING AUSTRALIA – Safeguarding Australia from terrorism, crime, invasive diseases and pests, and securing infrastructure, particularly with respect to our digital systems</b>	<b>CRC RESEARCH (%)</b>
Understanding our region and the world	5
Protecting Australia from terrorism and crime	5

# Governance, Structure and Management



## Smart Services CRC Participants

- AARNet Pty Limited
- Austin Health
- Fairfax Digital Limited
- Infosys Technologies (Australia) Pty Limited
- Queensland University of Technology
- The Royal Automobile Club of Queensland Limited
- Royal Melbourne Institute of Technology
- State of Queensland acting through the Department of Public Works
- SAP AG
- Securities Industry Research Centre Of Asia-Pacific (SIRCA) Limited
- Sensis Pty Limited
- Suncorp-Metway Limited
- Swinburne University of Technology
- Telstra Corporation Limited by its Division of Telstra Business
- Telstra Corporation Limited by its Division of Telstra Enterprise & Government
- The University of New South Wales
- The University of Sydney
- University of Wollongong

SAP and Telstra withdrew as participants during the year as a result of changing economic conditions. We are pleased to advise Sirca Limited has agreed to join as a new participant with particular interest in the development of new services for the Finance Industry.

## Smart Services CRC Supporting Participants

- CSN Technology Pty Limited
- Dolby Australia
- National E-Health Transition Authority (NEHTA)
- NSW Government (Department of State & Regional Development)

We are pleased to advise that effective from 30 June 2010 Marksx Investment Group Pty Limited, an SME involved in supporting the Australian Film production industry, has agreed to become a Supporting Participant and will engage in projects through a Third Party Agreement in our new media services research project.

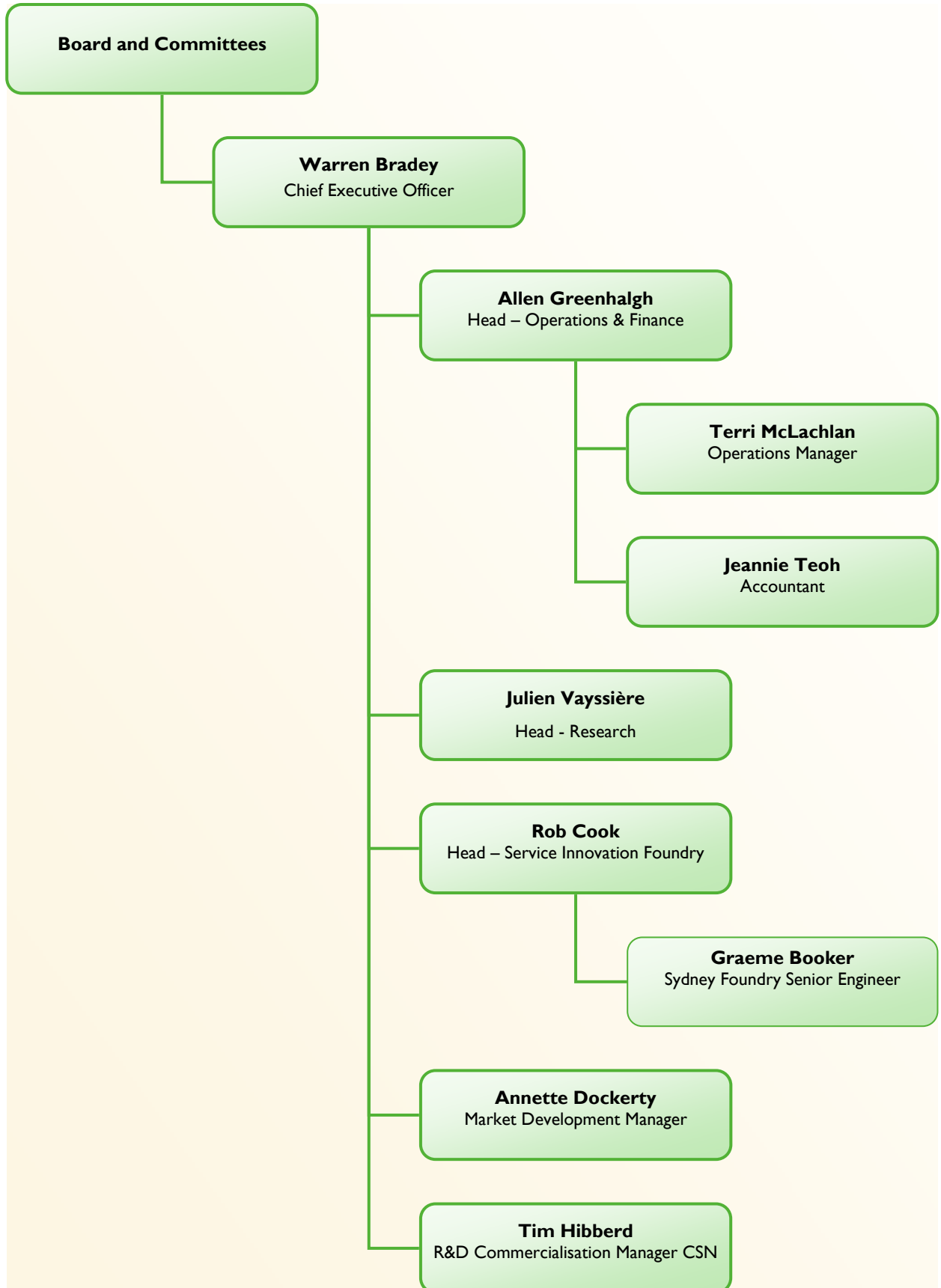
## Centre Management Structure

The Smart Services CRC operates as an incorporated management company with operational independence, subject to the terms of the Participants Agreement, allowing it to function financially at arm's length to the research providers. Day-to-day business is transacted under delegation from the Board through the Chief Executive Officer.

The Centre Management staff as at 30 June 2010 were:

Name	Position / Role
Mr Warren Bradey	Chief Executive Officer
Mr Allen Greenhalgh	Head – Operations & Finance
Dr Julien Vayssière	Head – Research
Dr Rob Cook	Head – Service Innovation Foundry
Ms Annette Dockerty	Market Development Manager
Ms Terri McLachlan	Operations Manager
Ms Jeannie Teoh	Accountant
Mr Graeme Booker	Sydney Foundry Senior Engineer
Mr Tim Hibberd	R&D Commercialisation Manager CSN

## Smart Services CRC Organisational Chart



## Board Structure and Activity

The Board of Directors is the Centre's governing body responsible for the interests of the Participants, and comprises up to twelve Directors. Board Meetings are scheduled to be held bi-monthly, or as required at other times.

### Governing Board Members

Board members are appointed for a term of up to 2 years, with half the Board retiring (and are eligible for re-election) each year at the Annual General Meeting.

The following directors were appointed as at 30 June 2010.

Name	Organisation	CRC Position / Role	No of Mtgs Eligible to Attend	No of Mtgs Attended
Mark Wainwright	Independent	Chairman	3	3
Anna Cicognani	Fairfax Digital Limited	Governing Board Member	10	8
Archie Johnston	The University of Sydney	Governing Board Member	5	5
Arun Sharma	Queensland University of Technology	Governing Board Member	10	9
Ashok Lingutla	Suncorp-Metway Limited	Governing Board Member	10	5
Judy Raper	University of Wollongong	Governing Board Member	10	8
Laura Poole-Warren	University of New South Wales	Governing Board Member	5	5
Michael O'Sullivan	NSW Government (Department of State & Regional Development)	Governing Board Member	10	8
Neale Condon	Independent	Governing Board Member	10	10
Ramin Marzbani	Independent	Governing Board Member	5	5
Warren Bradey	Smart Services CRC Pty Ltd	Governing Board Member & CEO	10	10

The following Board Retirements occurred during the year.

Name	Organisation	Retirement Date
Neville Roach, AO	Independent	3 December 2009
Alan Chapman	QLD Government, Department of Public Works	3 December 2009
Gregory Hancock	The University of Sydney	3 December 2009
Karsten Schulz	SAP, AG	31 July 2009

The following Board Appointments occurred during the year.

Name	Organisation	Appointment Date
Mark Wainwright	Independent - Chairman	3 December 2009
Archie Johnston	The University of Sydney	3 December 2009
Laura Poole-Warren	University of New South Wales	3 December 2009
Ramin Marzbani	Independent	3 December 2009

The following Alternate Directors were appointed as at 30 June 2010.

Name	Organisation	Alternate For
Michael Fry	The University of Sydney	Archie Johnston
Simon Kaplan	Queensland University of Technology	Arun Sharma
Philip Ogunbona	University of Wollongong	Judy Raper

## Key Skills of Board Members

Name	Experience in senior management positions	Cross Sector experience	Experience as a Board Member in a commercial corporate Board	Formal Training in corporate governance	Financial Management and commercial skills	IP Commercialisation skills	Marketing skills	Services Industries	Telecommunications	Large software provider	Financial Services Industry	Media Industry	Research Provider(s)	Education	Government Services
Mark Wainwright	√	√	√	√	√	√	√	√					√	√	√
Anna Cicognani	√	√			√		√		√	√		√	√	√	
Archie Johnston	√	√	√	√	√	√							√	√	
Arun Sharma	√	√	√		√	√		√					√	√	√
Ashok Lingutla	√	√			√	√		√	√	√	√		√		
Judy Raper	√	√			√			√					√	√	
Laura Poole-Warren	√				√	√		√					√	√	
Michael O'Sullivan	√	√		√		√		√							√
Neale Condon	√	√	√	√	√		√	√			√				
Ramin Marzbani	√	√	√		√	√	√	√		√			√		
Warren Bradey	√	√	√	√	√	√	√	√			√	√	√	√	√

## Committees of the Board

The following Committees have been established by the Board to provide advice and recommendations to the Board of Directors:

- Audit, Risk Management & Remuneration Committee
- Contract Variation Committee
- Governance & Nominations Committee
- Research Advisory Committee
- Third Year Review Committee

### Audit, Risk Management & Remuneration Committee

The Audit, Risk Management & Remuneration Committee reviews and monitors risk management issues and the financial systems operating within Smart Services CRC. It also assesses resource planning and reviews remuneration levels and policies. It provides a link between the Board, the external auditors, and Smart Services CRC Management. The committee ensures procedures are in place to safeguard Smart Service's assets and interests, including accounting and financial reporting in compliance with applicable laws, regulations, standards, and best practice guidelines.

The Committee is also responsible for the strategic overview of commercial activities, Intellectual Property Management and Commercialisation activities.

The committee reviews the performance of key executives against both measurable and qualitative indicators. The Committee approves remuneration policies and the payment of both fixed and variable components of staff remuneration and benefits.

As at 30 June 2010, the Audit, Risk Management & Remuneration Committee Membership comprised:

Name	Organisation	CRC Position / Role
Mark Wainwright	Independent	Chair
Archie Johnston	University of Sydney	Governing Board Member
Arun Sharma	Queensland University of Technology	Governing Board Member
Michael O'Sullivan	NSW Government (Department of State & Regional Development)	Governing Board Member
Neale Condon	Independent	Governing Board Member

### Contract Variation Committee

The Contract Variation Committee was a special purpose Committee established during the year to review and consider the requirements set by the Department of Innovation, Industry, Science & Research in relation to the Smart Services Contract Variation submission.

As at 30 June 2010, the Contract Variation Committee Membership comprised:

Name	Organisation	CRC Position / Role
Mark Wainwright	Independent	Chair
Michael O'Sullivan	NSW Government (Department of State & Regional Development)	Governing Board Member
Neale Condon	Independent	Governing Board Member
Warren Bradey	Smart Services CRC Pty Ltd	CEO and Governing Board Member

### Governance & Nominations Committee

The Governance & Nominations Committee provides oversight of the Governance practices and Nominations Process of the CRC to ensure they remain relevant for the operations of the CRC and meet “best practice” guidelines, as applicable from standards groups such as the ASX and the Institute of Company Directors.

As at 30 June 2010, the Governance & Nominations Committee Membership comprised:

Name	Organisation	CRC Position / Role
Neale Condon	Independent	Chair and Governing Board Member
Laura Poole-Warren	University of New South Wales	Governing Board Member
Michael O’Sullivan	NSW Government (Department of State & Regional Development)	Governing Board Member

### Research Advisory Committee

The Research Advisory Committee reviews the research and development projects being undertaken within the CRC and provides advice to the Board on how to ensure research quality is maintained, research projects are relevant for industry application, and are meeting the milestones and outcomes agreed for the projects.

As at 30 June 2010, the Research Advisory Committee Membership comprised:

Name	Organisation	CRC Position / Role
Anna Cicognani	Fairfax Digital Limited	Chair and Governing Board Member
Arun Sharma	Queensland University of Technology	Governing Board Member
Judy Raper	University of Wollongong	Governing Board Member
Ramin Marzbani	Independent	Governing Board Member

### Third Year Review Committee

The Third Year Review Committee considers the requirements set by the Department of Innovation, Industry, Science & Research and provides guidance and input to the development of materials to be submitted as part of the review by the independent Review Panel.

As at 30 June 2010, the Third Year Review Committee comprised:

Name	Organisation	CRC Position / Role
Mark Wainwright	Independent	Chair and Governing Board Member
Arun Sharma	Queensland University of Technology	Governing Board Member
Ashok Lingutla	Suncorp-Metway Limited	Governing Board Member
Ramin Marzbani	Independent	Governing Board Member
Warren Bradey	Smart Services CRC Pty Ltd	CEO and Governing Board Member

## Project Leaders

As at 30 June 2010, the Project Leaders comprised:

Name	Organisation	CRC Position / Role
Michael Rosemann	Queensland University of Technology	Project Leader – Business Services Management
Farzad Safaei	University of Wollongong	Project Leader – Immersive Service Interfaces Project
Michael Fry	The University of Sydney	Project Leader – Multi-Channel Content & Mobile Personalisation Project
Judy Drennan Tony Ponton	Queensland University of Technology Suncorp-Metway	Joint Project Leaders – New Financial Services Project
Terry Flew	Queensland University of Technology	Project Leader – New Media Services Project
Wayne Wobcke	The University of New South Wales	Project leader – Personalisation Project
Fethi Rabhi	University of New South Wales	Project Leader – Service Aggregation Project
Keith Duddy Naveen Kulharni	Queensland University of Technology Infosys Technologies	Joint Project Leaders – Service Delivery Framework Project
Tim Mansfield	Queensland University of Technology	Project Leader – Services 2020 Project

## Changes to Participants

Participants Name	Commonwealth Approval (✓, Y (Yes) N (No))
Sirca Limited	Yes
SAP, AG	Yes
Sensis Pty Limited	Yes
Telstra Corporation	Yes

## New Participants

We are please to advise that the following company has joined the CRC as a participant:

- Securities Industry Research Centre Of Asia-Pacific (SIRCA) Limited, Australia's leading provider of financial data and eResearch services to international and local finance related companies, regulators and research groups has agreed to become a Participant of the CRC from 30 June 2010

## Retirements

The following Participants advised that due to the effect of changing economic conditions and priorities they would retire as a Participant of the CRC:

- SAP, AG retired from participation in the CRC effective from the 1 February 2010
- Sensis Pty Limited retired from participation in the CRC from 16 October 2009
- Telstra Corporation retired from participation in the CRC as at 16 October 2009

# Research Programmes



## Research Activities and Achievements

After a successful initial exploratory phase that featured eleven R&D projects (previous reporting period) and after listening to feedback from the Smart Services CRC community, we focused our resources during this reporting period on nine R&D projects that provide the best match between the innovation needs of our industry and government partners on the one hand, and the innovation capabilities of our research partners.

A number of changes in our research approach were:

- The research theme of **Business Services Management** was added to the Schedule of Activities as Research Programme 10 to reflect the growing importance of this research stream within the CRC, and the increased demand expressed by our industry and government partners for a comprehensive framework of tools and methodologies for the strategic management of business services portfolios. The more mature part of this research activity has already been transferred to the Services Innovation Foundry for usage by one of our industry partners.
- A number of activities related to **New Financial Services** were added to the Schedule of Activities to represent ongoing research on the creation of new business opportunities for the providers of financial services, particularly along the lines of mobile banking, micro-lending, the fostering of financial literacy in the community, as well as the development of new modes of online customer engagement for increasing the uptake of existing financial products.
- It was decided that **security, trust and privacy** are aspects of service provision that are best addressed individually in projects or left to be handled by individual service providers as part of the deployment plan of a given service rather than through one single R&D programme. The off-the-shelf solutions to these problems that service providers already have at their disposal are considered sufficient by them. Individual projects continue to identify the changing demands of consumers as to privacy for different types of services and where appropriate our R&D build in safeguards to meet the issues raised.
- The development of both **dashboards and training programmes** for assessing and managing risks in a generic manner across service industries are not considered to be as effective as originally expected given the diversity of the research sector. Education of service provider staff is tailored by existing commercial training providers. However, education of specific staff of service providers is included in the CRC projects, as part of the technology transfer process of the CRC.

The 2009/10 reporting period built on the strong foundation set in the previous year and continued addressing challenges faced by the service industry as identified by our industry, academic and government partners.

Outcomes come in different shapes to best fit a diversity of audiences. This led to developing 25 new software prototypes through to providing foresighting of practical strategic advice that industry partners can leverage.

During the year a Contract Variation was agreed with the Commonwealth. This Variation included adjusting for changes in partner research priorities and enabled the CRC to reshape the portfolio of R&D projects and milestones to reflect new research challenges for industry.

A large part of the research and development efforts conducted by Smart Services CRC is concerned with ICT - mediated services, and as a consequence a majority of our researchers belong to the Information Technology or Information Systems communities. However, the CRC research program also incorporates a significant level of input by social scientists that constantly probe, evaluate, contribute new ideas and drive entire projects relating to customer usage and emerging trends. This diversity of research expertise is unique to the Smart Services CRC and contributes to the high quality of the research outcomes of the CRC and the significant early uptake of research outcomes.

The outcomes generated by our nine research projects are presented in more detail below.

## Service Delivery Framework

The Service Delivery Framework project aims to improve the productivity of creating and re-purposing online services at every step along the service delivery chain. Services rendered purely in software are the main focus of this research effort while services delivered primarily by humans and potentially not mediated by IT are also catered for within the framework.

The project created USDL (Unified Service Description Language), a machine-processable abstract model for describing any type of service. All aspects of a service are covered: technical, business, legal and organisational. USDL is already used and extended by two other CRC projects (Services Aggregation and Business Services Management) and standardisation is now an important element of the framework.

The strength of the approach pursued by the project is in acknowledging the typical corporate IT landscape rather than assuming a blank slate. Synchronisation methods with existing IT asset repositories have been developed, as well as migration paths for services not delivered in electronic form (e.g. government services accessed by citizens through standard forms). The project also takes into account possible variations in a service over the course of its lifetime and provides tools for limiting the impact of such changes on service consumers while continuing to fulfil service level agreements.

The software prototype for the USDL Service Repository built in the previous reporting period has now been transitioned into the Services Innovation Foundry in collaboration with a CRC participant.

A new outcome of the project is the FormSys software. Recognising that most services exposed by government agencies and large organisations are typically accessed by service consumers through form documents, the FormSys software allows a domain expert with no technical knowledge to aggregate these services using an intuitive user interface and semi-automatically create specialised Web-based services for niche categories of service consumers.

**Key Outputs:** Service Repository prototype and USDL to show productivity gains in assembling and evolving service ecosystems

**Participants:** SAP, Infosys, Queensland University of Technology, University of New South Wales and Swinburne University of Technology

**Researchers:** Naveen Kulkarni (Infosys), Keith Duddy (Leader), Michael Henderson, Diane Corney (QUT), Muhammad Adeel Talib, Alan Colman, Jun Han (SUT), Helen Paik, Boualem Benatallah, Paul Compton, Ingo Weber, Srikumar Venugopal (UNSW), Alistair Barros, Karsten Ploesser, Shane Bracher, Mohammed Abdullah (SAP)

**Programmes:** Government Sector – Service Aggregation

## Services Aggregation

Services aggregation is a cornerstone capability of smart service technologies. It is through the aggregation of existing services into new services that both innovation and productivity gains for the services industry can be achieved.

The project is now investigating an important new deployment scenario for service aggregation, namely the use of Cloud-based infrastructures and services. After conducting a comparative performance evaluation of Cloud Computing offerings, the project moved on to defining a testbed for cloud deployment of complex services for the processing of financial news and data. The aim is to validate the scalability and performance claims of Cloud Computing in a demanding setting characterised by complex queries and data transformation and large datasets.

The project continues to explore the issues of security and quality of service management in large service ecosystems. Strong links with the Service Delivery Framework project were exploited in order to contribute to the security and Quality of Service aspects of a service described using the Unified Service Description Language (USDL) developed by the Service Delivery Framework project.

**Key Outputs:** Reports, methods and tools to enable aggregation across multiple platforms for multiple service providers

**Participants:** Infosys, Sirca, Queensland State Government, SAP, RACQ, Queensland University of Technology, University of Wollongong, University of New South Wales, Swinburne University of Technology

**Researchers:** Anna Liu, Fethi Rabhi (Leaders), Boualem Benatallah, Paul Compton, Helen Paik (UNSW) Mohan Baruwal Chhetri, Ryszard Kowalczyk, Bao Vo (SUT), Keith Duddy, Dianne Corney (QUT), Willy Susilo, Yi Mu, Jun Yan, Peishun Wang (UOW), Alexander Dreiling, Marek Kowalkiewicz (SAP)  
**Programmes:** Government Sector – Services Aggregation

## Business Services Management

This project created a powerful vision and executes on a detailed research roadmap for creating and leading a new applied discipline called Business Services Management (BSM). BSM is a horizontal, business-level approach to the strategic management of a portfolio of services in order to fulfil an organisation's strategic business objectives.

This vision is supported by a combination of tool development for decision-support and in-depth mapping of the network of services, consumed or provided, by a select group of CRC participants.

The project team created a software prototype of a modelling environment for expressing the high-level objectives of an organisation and checking the alignment of an organisation's service portfolio with its high-level objectives. This work leverages work done in other projects, particularly on the topic of service description languages. This initial software prototype was transferred to the Services Innovation Foundry in collaboration with Infosys and Queensland Government. In parallel, the research project is developing an accompanying methodology for eliciting an organisation's services landscape and strategic objectives.

Work on the mapping and bundling of services was also conducted in the project. Various approaches to the delivery of services to citizens by government agencies worldwide were surveyed, and a hands-on exercise with Queensland Government led to the application of the theory of social networks to the bundling of government services for optimal delivery to targeted groups of citizens.

The road ahead for this project is two-fold: promote Business Services Management as an IT-supported management capability for any organisation in the services sector, and keep developing a range of tools and methodologies that can be used by CRC participants to either do BSM themselves or offer BSM capabilities to their customers as a service.

**Key Outputs:** Development of methods and tools to map service ecosystems and model corporate strategies, publication of reports

**Participants:** QLD State Government, Infosys, Suncorp, Queensland University of Technology, University of Wollongong

**Researchers:** Michael Rosemann (Leader), Glenn Stewart, Taizan Chan, Erwin Fielt, Thomas Kohlborn (QUT), Aditya Ghose, Evan Morrison, Lam-Son Le (UOW)

**Programmes:** Government Sector – Service Aggregation

## Immersive Service Interfaces

The main outcome of this project this year is iSee, a Web-based scalable immersive environment for online collaboration using webcams and realistic spatial voice. This piece of software allows a potentially very large number of users to interact and collaborate in an immersive environment at the same time, using their real-world images captured by regular webcams rather than the avatars more commonly found in virtual worlds. We believe this approach is key for the adoption of such advanced immersive collaborative solutions in the corporate, government and education world.

What makes the system unique can be found in the technical development of the project: information is only transmitted between participants when it is needed and only in the quantity needed, which allows for higher scalability and the ability to use regular Internet connections, even with hundreds of participants interacting within the same immersive environment. In addition, a number of ground-breaking advances in distributed communication protocols have been made that will deliver superior scalability using existing computing and networking capabilities. The software is already used for CRC internal meetings and several patent applications are being drafted. The technology has also been showcased and forms part of a longer trial to demonstrate the capabilities that the NBN can deliver to the economy. This software is currently being transferred to the Services Innovation Foundry for a real-life testing together with a CRC participant organisation.

The project also kept exploring the use of workflow engines and virtual worlds for training, producing two demonstrators in the occupational training space with a focus on health.

In order to maintain a healthy pipeline of innovation, the project commenced exploring the topic of Free Viewpoint Multimedia, i.e. creating a video stream from an arbitrary point in space given sufficient coverage of a scene by a number of video cameras. This is a topic with important applications in media as well as videoconferencing, medical imaging, surveillance and security. The first research results, including a demonstratable software prototype, are very encouraging and we believe we are well placed to generate medium-term research results which will translate into commercial outcomes.

**Key Outputs:** Extended NBN testbed trail with NSW Government. Development of a prototype immersive facility to demonstrate applicability, scalability and flexible uses

**Participants:** NSW Government (DET/CLI & The Powerhouse Museum), AARNet, Austin Health, University of Wollongong, Swinburne University of Technology, Queensland University of Technology

**Researchers:** Farzad Safaei (Leader), Richard Caladine, Wanging Li, Daniel Franklin, Philip Ogunbona, (UOW), Mandy Salomon, Esther Milne, Trevor Barr (SUT), Ross Brown, Peta Wyeth, Rune Rasmussen (QUT)

**Programmes:** Government Sector – Immersive Collaborative Service Interfaces

## Multi-Channel Content Delivery & Mobile Personalisation

This project develops techniques for the delivery of services which are customised according to a user's context, identity and preferences. This includes adapting to delivery channel and platform, e.g. mobile, computer, in-vehicle or other channels.

The project focused first on emerging mobile platforms and networks, such as wireless broadband networks and in-vehicle environments with multi-modal delivery. A range of smartphone applications were developed, both for the iPhone and the Google Android platform, directly linked to use cases provided by CRC industry participants. Part of the value delivered by the project is acting as a source of expert advice on the rapidly-evolving field of mobile computing for all CRC participants.

Techniques for the automatic compression and summarisation of video content were further developed. This is an example where a delivery technique adapts to the device and the network and also to how the user wishes to consume content, through summarisation in addition to compression. These techniques intelligently understand which portions of a video stream can be left out without significantly impacting semantics for “formatted” content such as news bulletins or sports broadcasts.

Previous work on the real-time tracking of news sources and identification of entities (persons, locations, events, etc.) was transferred to a CRC partner in the Media sector through the Services Innovation Foundry. This work is now being furthered in order to extend the applicability of the software beyond media companies and improve the accuracy and specificity of the topics detected.

**Key Outputs:** Interpretative reports, tools & techniques, prototype to demonstrate efficient processing of data for multi-channel applications

**Participants:** Fairfax Digital, NSW Government (Australian Museum & Powerhouse Museum), RACQ, The University of Sydney, Queensland University of Technology, University of Wollongong

**Researchers:** Michael Fry (Leader), Bob Kummerfeld, Judy Kay, William Niu, Rainer Wasinger (USYD), Dian Tjondronegoro, Yuefeng Li, Yue Xu, Salahuddin Alazad (QUT), Daniel Franklin, Farzad Safaei, Mehran Abolhassan, Abhinay Mukunthan (UOW)

**Programmes:** Media Sector – Multi-Channel Content Delivery

## Services 2020

The Services 2020 project is investigating the application of social media approaches to the strategic process of “foresight”, a term used to describe the methodical investigation of future possibilities. The domain of the investigation has been online services in Australia, focussing in particular on Media, Government and Financial services. The long-term concern of the project is to evolve methods which are wide-ranging, transparent, accountable and cost-effective.

The project has now developed a firm understanding of how to undertake foresight work within a broad network, such as with CRC participants and researchers. The project began experimenting with applying social media approaches to foresight development, exploring which methodologies are most likely to render concrete, accountable results.

A first plan has been developed of how to develop and commercialise our emerging approach in ways that are directly applicable to guiding an enterprise through the complex strategic terrain of the coming decades. This plan is a combination of social practices and software into a comprehensive, innovative, large-scale strategic system we call "The Foresight Machine".

In this reporting period the project performed focused foresight work specific to Queensland Government with DEEDI (Department of Employment, Economic Development and Industry) and AARNet.

A new aspect addressed by the project this year was foresight work in the context of the National Broadband Network (NBN), both in its fixed and wireless incarnations, with a focus on eliciting applications that will leverage the network beyond what is already available or on the near horizon.

**Key Outputs:** Facilitation of workshops, trend analysis reports, strategic knowledge and insights, identification of future issues and trends affecting the delivery of services and how we might plan for those proactively

**Participants:** All CRC Participants, with key drivers from QLD State Government, Infosys, Queensland University of Technology, Swinburne University of Technology

**Researchers:** Tim Mansfield (Leader), Simon Kaplan, Erwin Fiel (QUT), Peter Hayward, Joseph Voros, Mandy Salomon, Scott Rickard, Trevor Barr (SUT)

**Programmes:** Government, Media & Finance Sectors – Global Services Futures

## New Financial Services

This project is focussed on creating innovative new services within the Financial Services sector by combining research in information technologies and social sciences with a deep understanding of the sector.

Over this reporting period the project intensified research on new types of services that can deliver benefits to both providers of financial services and the community.

Mobile banking has been identified as an area where disruptive new ideas are required that go beyond porting existing services to mobile platforms. This need was addressed both by conducting studies of user acceptance of mobile banking solutions and related inhibitors in Australia, and by investigating innovative mobile banking solutions overseas, with a focus on developing countries.

In the wake of the global financial crisis, a new research stream was initiated that addresses the creation of innovative solutions for increasing financial literacy with children, teenagers and young adults. Online games are currently being investigated as the vehicle of choice for financial education.

**Key Outputs:** Prototypes of innovative new services for the financial sector

**Participants:** Suncorp, SAP, Infosys, Queensland University of Technology, Royal Melbourne Institute of Technology

**Researchers:** Judy Drennan (QUT) & Tony Ponton (Leaders) (Suncorp), Kathrin Fleischmann, Daniel Ricketts, Sarath Indrakanti, Karsten Schulz, Glenn Neuber, Christopher Myers (SAP), David Seeto, Jason Chisholm, Milne Davidson (Suncorp), Kerry Raymond, Ian MacColl, Peta Wyeth (QUT), Supriya Singh, Margaret Jackson (RMIT)

**Programmes:** Finance Sector – Trust and Privacy

## Personalisation

This project assesses the ability to tailor products and services to individuals, or targeted clusters of individuals, one of the key competitive advantages for a media company and other business handling large volumes of data. The objectives of this project are to develop techniques and tools for industry partners to better identify individual customer behaviour and to apply these tools and techniques directly to improve products and services in a way that align them to the individual needs of end-users.

The project performed applied research work very successfully on two different blue-chip Web properties from one of the CRC industry participants. These are online services which serve a very large audience and, for one of them, is an Australian household name.

Advanced recommender systems were developed and validated for two target domains: online dating, where people are recommended to people for the purpose of matchmaking, and online commerce web sites, where products are recommended to people. In the latter case, we target people who have a strong interest, but little technical knowledge, in the domain in question. The system allows a casual user to search for relevant products using “lifestyle” rather than technical attributes and then refine the search by answering a series of questions created by the system.

The two systems delivered very good results on historical test data, and the recommender system for online dating will be trialled in a live setting in the second half of 2010. By improving the quality of recommendations made by the web site to its users we hope to directly increase revenues. Beyond the practical application of such a recommender system, large research challenges are being addressed which resulted in a significant number of research publications.

**Key Outputs:** Assessment of data mining tools & techniques, development of prototype demonstrating improved ability to commercially personalise customer access to media sites

**Participants:** Fairfax Digital, University of Sydney, University of New South Wales, Queensland University of Technology

**Researchers:** Wayne Wobcke (Leader), Paul Compton, Michael Bain, Ashesh Mahidadia (UNSW), Richi Nayak, Yue Xu (QUT), Judy Kay, Irena Koprinska, Kalina Yacef, Luiz Pizzato, Tomasz Rej (USYD)

**Programmes:** Media Sector – User-Focussed Services

## New Media Services

This project delivers to all CRC partners that are producers of media content foresight and innovation that help them better leverage existing media assets for increasing their audience and revenues.

The project looks in a systematic manner at the creation of new online business models for both the media industry and also for organisations that are custodians and providers of media assets, such as museums and education or cultural institutions. In the case of museums for example, we investigated the copyright and traditional knowledge aspects of exposing existing cultural collections online.

Another aspect of the project looks at technical innovation as a way to create disruptive changes in the digital and media industry. Software prototypes were created at the intersection of video, virtual worlds and online content and a software prototype was transitioned into the Services Innovation Foundry for use by a CRC partners for fostering the interactive use of existing video content in a classroom setting.

The research work conducted on Social Media over the previous reporting period was applied to the concrete case of a community website run by one of the CRC partners and resulted in a number of recommendations for creating and sustaining an online community of business process experts.

**Key Outputs:** Reports on new business models for media providers, recommendations for sustainable online communities, recommendations for presenting traditional cultural content online and software prototypes for rich multimedia content

**Participants:** Fairfax Digital, NSW State Government (DET/CLI, Australian Museum, The Powerhouse Museum), Infosys, RACQ, Queensland University of Technology, RMIT University, Swinburne University, University of Wollongong, University of Sydney

**Researchers:** Terry Flew (Leader), Axel Bruns, Ben Hamley, Edwina Luck, Larry Neale, Christina Spurgeon, Christy Collis, Anna Daniel (QUT), Supriya Singh, Margaret Jackson, Clive Morley, Ian Burnett (RMIT), Mandy Salomon (SUT), Christian Ritz, Stephen Davis, (UOW), Bob Kummerfeld (USYD)

**Programmes:** Media Sector – User Focussed Services

## Research Collaborations

Smart Services CRC Research agenda is primarily carried out through collaborative research projects between its participants. In addition Smart Services CRC engages in both ICT forums and Service Sector agendas, and seeks to collaborate with other organisations via third party engagements in research and commercialisation / utilisation projects where it is of clear advantage to do so.

In all Research Projects, Industry Parties and Research Partners nominate as co-champions to ensure research focus is practical and high quality.

The research Projects and the Parties engaged in this collaborative Research as active project participants, research providers, technology companies and end-users is represented in the table below.

Parties	Business Service Management	Immersive Service Interface	Multi-Channel Content Delivery	New Financial Services	New Media Services	Personalisation	Service Delivery Framework	Services Aggregation	Services 2020
AARNet		√							
Austin Health		√							
Fairfax Digital			√		√	√			
Infosys	√			√	√		√	√	
NSW Government		√	√		√				√
QUT	√	√	√	√	√	√	√	√	√
QLD Government	√							√	√
RACQ			√		√			√	
RMIT University				√	√				
SAP AG				√			√	√	
Sirca Limited								√	
Suncorp	√			√					
Swinburne		√			√		√	√	√
UNSW						√	√	√	
USYD			√		√	√			
UOW	√	√	√		√			√	

## Services Innovation Foundry

The Services Innovation Foundry provides a pathway for research to transition to light weight prototypes suitable for early stage trials. During the year the Foundry has matured its operations and delivered a program of projects for Smart Services participants and other parties.

The Innovation Foundry is operating from premises in Sydney at the headquarters at Australian Technology Park and in Brisbane at the Smart Services offices at QUT. The Foundry conducts its activities using a minimum of permanent staff who provide project management, professional software engineering, mentoring and systems infrastructure support. The Foundry projects are delivered using teams drawn from:

- Foundry staff;
- Researchers who were responsible for innovating the underlying technologies;
- Smart Services partners that intend to apply the innovations once the Foundry projects have proved that they deliver the expected value in practice; and
- Contracted software engineering staff where necessary.

This project regime has proven to be successful in delivering results that meet partner needs within a short and constrained timeframe.

The Innovation Foundry offers five primary services, each important to the overall functioning of the Smart Services CRC:

1. Foundry projects that take the first steps towards transitioning research into participant application by building lightweight prototypes over a three month period. The aim is to adapt research to specific participant needs and engage early stage participant commitment to apply the innovation.
2. FastTrack projects that construct commercial-ready prototypes that can be developed directly into services that the participant can use. These projects are conducted over six months and attract considerable participant investment and involvement in the projects.
3. Hosting services that are delivered to participants, either directly from Smart Services, or as a result of development during Foundry and FastTrack projects. By hosting the services, at least temporarily, Smart Services makes it easier for participants to commit to engage in projects, and creates a vehicle for Smart Services to demonstrate its wares to new prospects.
4. Providing portal and other infrastructure for Smart Services to conduct research and a repository for collecting all research and Foundry outputs.
5. A portfolio of demonstration service innovations that Smart Services can use to encourage participants to trial research outputs, and to interest prospective new partners to work with Smart Services. This portfolio consists of about twenty live demonstrations at 30 June 2010.

Two of Smart Services participants, Fairfax Digital and Suncorp, have particularly embraced the Innovation Foundry concept to the extent of engaging in multiple projects and pursuing the application of more than one each within their organisations. Both have developed internal innovation processes as a result of interacting with the Foundry, so that they now have developed mechanisms for examining and trialling new concepts and technologies. The Foundry is working towards similar goals with other participants, changing the nature of the way that participants conduct innovation.

A number of projects have been completed including the BirdsEye project, involving SAP and RACQ reported in the previous Annual Report, and the initial Scoop Foundry project whose success has led to Fairfax investing in an ongoing FastTrack project.

The CRC also engages in third party research where the organisation is not able to participate in the CRC as a full partner. An example is the Colliers Tabletop project involving the University of Sydney (CRC Participant) and Colliers International (Third Party Participant). This project demonstrates the innovative ways in which users can interact with surface-based applications in the Molonglo Valley land release Sale Display Office at Colliers, Canberra.

The Services Innovation Foundry has also developed a portfolio of demonstrations of Smart Services innovations that it is using to interest existing participants in adaptations to meet their needs and to encourage prospective partners and participants to engage with Smart Services capabilities and projects. These demonstrations are being packaged for easy access by Smart Services staff and researchers as they work with interested parties.

As at 30 June 2010, the list of demonstrations includes:

Project	Description
BirdsEye	Interactions between a smart-phone application and a server to identify a broken-down vehicle's position to the RACQ and track roadside assistance to help.
Business & Personal Processes In Virtual Environments	This demonstration uses Virtual Worlds technology to help service consumers better understand complex interrelated services and build a persistent mental map of the process at hand.
Collaborative Services Network	A novel network enabling secure information to be transferred across health care teams in the community.
Content repurposing	Automatically formatting web content so that it can be displayed on displays, on smart-phones or on other devices.
Dangerous Australians	Mobile application to identify dangerous animals in Australia without re-purposing content from other platforms.
Formsys	Enables non-technical users to create web-based services from existing forms to prevent duplication.
iSee	A 3D virtual environment for groups of users to meet and conduct conferences, workshops, lectures, meetings and other business and social events with real time video connection of crowds.
Keep-in-Touch	Novel asynchronous approach to enabling families to keep in touch with parents and health carers.
The Foresight Machine: Services 2020	The Foresight Machine is an assemblage of social practices and software aimed at facilitating the methodical investigation of future possibilities, also known as foresight.
Mobile Shopping	A smart-phone application to assist a shopper to find nearby shops that supply items on the shopping list.
Money Games & Financial Literacy	An interactive experience that allows pre-teenage children to develop saving behaviours in an enticing and engaging way.
Personal Services Manager	A 3D virtual user interface for navigating a complex set of services involved in buying a house
Property Organiser	A smart-phone application that discovers properties available to purchase and then tracks the user's comments including photos as the property is inspected.
Scoop Editorial Support System	Crawls the network finding breaking news reported by media around the world, and on social media sources such as Twitter, and highlights new stories to editorial staff.
Services Broker (USDL)	The processes needed to create a catalogue of the services offered within a large organisation leading to service discovery, aggregation, cross-selling and common service delivery.
Service Customisation Framework (Road4SDF)	This tool takes an existing technical service interface and re-purposes it for consumption of the service by a consumer who requires a slightly different service interface, while retaining the gist of the original one.
Service Aggregation with QoS	Allows a service designer to predict the overall Quality of Service (QoS) of a service aggregation from the individual QoS of each of its component services as well as select component services for aggregation with a specific QoS target in mind.

Project	Description
Sunario	Individual wealth management application aggregating information to predict an individual's financial performance in various situations.
Swarm	Using a smart-phone application and a server to discover what friends and colleagues are doing and to arrange meetings or other interactions.
Tabletop	Use of the Tabletop by a museum curator, brainstorming using sticky notes, a cultural tour of Sydney and other applications
Tag!t	Allows automation of annotating video clips for educational courses.
Training in virtual Worlds	This demo based on a healthcare scenario illustrates how the combination of Virtual Worlds and Business Process Management tools helps teachers deliver flexible lesson plans into virtual worlds.
USDL Web Service Client	A tool that generates Web Services client interfaces within the Eclipse development environment from service descriptions stored in a USDL service repository.
Virtual Test Centre	A tool for the dynamic testing and validating of interactions between services in action.

# Commercialisation and Utilisation



## Commercialisation and Utilisation Strategies and Activities

The Smart Services CRC commercialisation strategy includes several approaches to adoption with specific participants, services and technology. The CRC approach includes:

- Transitioning through the Smart Services Innovation Foundry early stage research outputs and demonstrators into participants & other end-user applications;
- Pilot online services that have been successfully trialled by groups of participants within Smart Services and are ready to be developed into commercial services;
- Studies, report and early-warning service highlighting anticipated disruptive changes, their projected impacts and recommended strategies for obtaining business advantage; and
- User interfaces, software and prototypes for more easily creating increasingly sophisticated, useful and useable services. These will be incorporated into the pilot online services, and will seek alternative markets for broader deployment.

Smart Services outputs will be transferred to market by the following methods:

- Service provider and technology supplier participants will lead projects to pilot online services. They will subsequently use these proven services as key elements of their businesses, and incorporate them into their systems integration and product portfolios;
- Technology outputs will be offered to supplier participants for commercialisation and export, and where there is a sufficiently compelling business case, to potential investors to form start-up companies;
- Direct third party licensing will be offered to organisations in the services sector broadly and initially in the finance, media and government sectors;
- Service provider participants will use successful implementations of online services and Smart Service customisation, localisation and personalisation technology to adapt services for foreign cultures and their markets;
- Supplier participants, including SMEs, will incorporate Smart Services CRC technology into their products and export them through their normal product channels; and
- Regularly published reports will anticipate the potential for new and disruptive structures and emerging service trends and lead to pilot trials and technology developments to capitalise on the identified opportunities.

The three major methods of delivery from Research to industry Utilisation are:

1. The Service Innovation Foundry to the Smart Services CRC participants;
2. Participants, to service providers in Australia and elsewhere; and
3. Technology licensing or acquisition by third party customers and investors.

During the year of R&D the CRC funded 9 R&D projects and 12 Service Innovation Foundry Projects with outcomes including:

- 25 early stage proofs of concept demonstrators showcased to industry;
- 14 Software licences for technology transfer; and
- Grants and additional Third Party funding of \$103,000, which includes Comet for Keep in Touch, LIXI e-conveyancing project, and NEHTA eHealth standards project.

## Intellectual Property Management

All project developments within Smart Services CRC are conducted within the framework of a project agreement ('Project Details') between the industry, government participants and universities involved in the project and Smart Services CRC. These agreements address the ownership of the resulting IP and the commercialisation rights and benefits.

**IP commercialisation:** Smart Services CRC regards commercialisation, and achieving the best possible results from commercialisation, as a responsibility of both the participants and Smart Services CRC Board. Smart Services CRC commercialises IP either through the direct transfer of IP to Participants for exploitation or by the CRC identifying external parties to utilise the IP. The CRC looks to collaborate with participants to commercialise IP and encourages participants to build on their own commercialisation expertise. In addition Smart Services CRC will facilitate commercial exploitation of IP with third parties where this is in the interests of Smart Services CRC to do so.

**IP usage:** All participants have the right to use all IP generated in Smart Services CRC for their own internal research and commercial purposes. This gives service provider participants the important potential to use CRC IP to provide improved services internally or externally. All participants in a project have the right to use all the IP generated in the project for commercial purposes including sub-licensing subject to any restrictions in Project Details. Smart Services CRC as an entity also has the responsibility to further exploit all IP generated in Smart Services CRC for commercial purposes. This flexible policy is designed to allow multiple routes to market, recognising the dynamics of the services sector, while maximising participant motivation to utilise the research outcomes.

**IP ownership:** Through Project Details, Smart Services CRC Board and the project participants decide which participants (including the CRC) will own the IP generated in the projects and what rights the project participants have to use the IP commercially in particular fields. Any participant who owns IP automatically provides a licence back to other Project Participants and the CRC to use the participant-owned IP in any research or commercial way Smart Services CRC Board determines is appropriate, subject to any limitations in the Project Details.

**Benefits of Smart Services CRC IP management:** The combination of IP ownership, usage and commercialisation policies aims to maximise the manner in which the benefits of Smart Services CRC impact the service industries in Australia as broadly as possible. This approach encourages multiple commercialisation channels to various industry sectors, whilst retaining the potential for licensing to service suppliers, including SMEs, to develop and market CRC technology worldwide.

**Maximising Benefits to Australia:** The Smart Services CRC IP arrangements covering the ownership, usage, management and commercialisation of IP are consistent with the National Principles of IP Management for Publicly Funded Research.

IP management and commercialisation/utilisation decisions are reviewed, assessed and ratified by the Smart Services CRC Board and its Committees. Both, Participants and the CRC will actively commercialise Smart Services CRC technologies. Smart Services CRC managers will liaise with the major participants, identifying projects of interest, seeking collaborating participants and SMEs, defining project details, arranging for participant funding for commercialisation and guiding proposals through the approval process.

The Board is responsible for making decisions on:

- establishment of research projects and their commercial priorities, and the agreements amongst the parties about the intended use of the resulting intellectual property;
- first rights of refusal for any form of exclusive access to project outputs;
- approval of commercial licences for non-exclusive use of intellectual property; and
- exclusive licences and assignments of IP.

IP was created in the project works carried out during the year, with early stage project IP primarily being treated as trade secrets and Know-How. After further development we identify which IP should be protected through patenting.

## Patents

Currently we have ten patents being managed by the CRC, one has been filed as a provisional patent, three are in the PCT stage and six are in the national phase.

### Provisional

Title	Date Filed	Application Number
A System, Method and Software Application for the dissemination of data across a plurality of Computing Systems (Multipoint)	20 November 2009	2010900683

### Patent Co-operation Treaty (PCT)

Title	Date Filed	Application Number
A System, Method & Computer Program for Determining the Probability of a Medical Event Occurring (MET)	28 April 2010	PCT/AU2010/000487
Systems and Methods for Collaboration Interaction (Tabletop – Brainstorming)	10 May 2009	PCT/AU2009/000622
A System, Method and Software Application for the Control of File Transfer (Tabletop - File Transfer)	30 June 2010	PCT/AU2010/000823

### National Phase – Australian Patents

Title	Date Filed	Application Number
Systems and Methods for Communicating (SWARM)	27 June 2006	Granted
A System and Methods for file Transfers to a Pervasive Computing System (Tabletop – On Top)	2 November 2007	2007231829
An Interface Element for a Computer Interface (Tabletop – Black Hole)	11 March 2010	2008299576
A System and Method for Manipulating Digital Images on a Computer Display (Tabletop – Flipping)	11 March 2010	2008299579
A System and Method for Capturing Digital Images (Tabletop – Capture)	11 March 2010	2008299578
Systems and Methods for Remote File Transfer (Tabletop – Remote Resource)	11 March 2010	2008299577

### National Phase – European Patents

Title	Date Filed	Application Number
Systems and Methods for Communicating (SWARM)	19 June 2006	04797114.8
A System and Method for Manipulating Digital Images on a Computer Display (Tabletop – Flipping)	11 March 2010	08799990.0
A System and Method for Capturing Digital Images (Tabletop – Capture)	11 March 2010	08799989.2
Systems and Methods for Remote File Transfer (Tabletop – Remote Resource)	11 March 2010	08714266.7
An Interface Element for a Computer Interface (Tabletop – Black Hole)	11 March 2010	08799988.4

## National Phase – United States Patent Applications

Title	Date Filed	Application Number
Systems and Methods for Communicating (SWARM)	26 May 2006	10/580800
A System and Methods for file Transfers to a Pervasive Computing System (Tabletop – On Top)	14 May 2009	12/264031
An Interface Element for a Computer Interface (Tabletop – Black Hole)	11 March 2010	12/677756
A System and Method for Manipulating Digital Images on a Computer Display (Tabletop – Flipping)	11 March 2010	12/677767
A System and Method for Capturing Digital Images (Tabletop – Capture)	11 March 2010	12/677765
Systems and Methods for Remote File Transfer (Tabletop – Remote Resource)	11 March 2010	12/677760

## National Phase – Other Countries Patent Applications

Title	Date Filed	Application Number
Systems and Methods for Communicating (SWARM) – Japan	26 May 2006	2006-540101
Systems and Methods for Communicating (SWARM) – Hong Kong	26 February 2007	07102154.1
An Interface Element for a Computer Interface (Tabletop – Black Hole) – Japan	11 March 2010	2010-524305
A System and Method for Manipulating Digital Images on a Computer Display (Tabletop – Flipping) - Japan	11 March 2010	2010-524308
A System and Method for Capturing Digital Images (Tabletop – Capture) – Japan	11 March 2010	2010-524307
Systems and Methods for Remote File Transfer (Tabletop – Remote Resource) - Japan	11 March 2010	2010-524306

## Granted Patents

Title	Date Granted	Patent Number
Systems and Methods for Communicating (SWARM)	2 September 2010	2004292679

## Communication Strategy

The Smart Services CRC overarching communication strategy continues to position the CRC and its key researchers as Thought Leaders in the area of Services sector research, as demonstrated by the quality of 31 (2009: 25) peer reviewed research papers presented on the global stage at various conferences in China, Italy, Germany, USA, Canada, France and South Africa, as well as here in Australia. A further 28 papers, book chapters and presentations were also written by Researchers and presented at a range of invited events.

Other key objectives for our communication strategy include:

- Build the market profile of Smart Services CRC across key audiences to support partner relations and partner acquisition;
- Consistently position Smart Services CRC as a leader in world class R&D, innovation and commercialization;
- Articulate the vision for the CRC and the delivery of services for the future;
- Demonstrate the outcomes of Smart Services CRC research projects to a broad audience;
- Inspire and attract top students, key staff and researchers to the company;
- Communicate value and the CRCs success in:
  - Contributing to the national priorities;
  - Creating wealth for local industry;
  - Creating new Australian businesses;
  - Supporting and developing education; and
  - Workforce and entrepreneurial skills.

The primary approach to link with Australian industry continues to be through participating with peak service industry bodies such as the Australian Services Roundtable, AIIA, AIMIA, CEDA, NICTIA and similar organisations. On the international front we continue our involvement with the Services Science Research Society.

During the year Smart Services CRC was a founding member of the Services Science Society, a body created as a thought-leader and think tank for Australian Service Science Research. CRC members hold representative roles on the Board of this not-for profit society and have been invited speakers at the society launch events.

With outcomes from our 9 research projects, 25 demonstrators and 14 technology transfers and licences achieved to date, the CRC is now in a position to engage with broader Australian businesses in a meaningful and beneficial way.

Our engagement with SME's has been approached on a targeted basis where we can identify opportunities of CRC research outcomes that may be integrated into the specific needs of a particular SME. The tight economic conditions over the past 12 months have meant that the opportunity to work with SME's has been limited. However, the successful partnering of the CRC with Marksx in the social media and film production area for new projects in 2010/11 shows that the strategy adopted can deliver value.

Throughout 2010/11 we will continue our SME Engagement Program based on 2 contact models:

1. Direct targeting of companies that can build IT solutions for known applications and end-users that utilise CRC IP and in collaboration with CRC partners; and
2. Presentations to broader groups via their industry associations to inform, educate and enable companies to approach the CRC and leverage IP for commercialisation.

The CRC has identified a number of SME's that align with our objectives and will continue to build these and new relationships as an ongoing 'living' strategy throughout the year.

## End-user Involvement and CRC Impact on End-users

During the year Smart Services CRC has worked closely with a number of companies transferring knowledge, expertise and Intellectual Property rights for utilisation within their business practices and to benefit their clients/end-users.

These outcomes are included in the table below.

End-user name	Relationship with CRC (e.g. Industry, Participant, International)	Type of activity and end-user location	Nature / scale of benefits to end-user (e.g. exports increase, productivity, employment)	Actual or expected benefit to end-user (\$ terms)
Colliers International	Third Party / End User	License & Maintenance Agreement for the Tabletop System	Productivity gains in promoting real estate sales	Significant productivity gains from faster sale of property portfolio
CSN Tech Pty Ltd / Dept of Health & Ageing	CRC Spin off Company / End User	Development of collaborative network and inter-operability test centre environment for sharing health information amongst industry professionals	Development of working test centre environment for collaborative services network in the home assisted care sector of the economy	Addressing potentially significant savings in health system of up to \$1.4bn over 5 years
Keep in Touch Australia Pty Ltd	CRC spin off company / Commercialisation Party	End-user trials firstly in Parkbridge Estate as part of NBN Testbed program and secondly in retirement village in Wollongong	Reducing social & isolation challenges for elderly & improving productivity of care	Addressing potential productivity benefits in excess of \$100m over 10 years
Fairfax Digital	Industry Participant / End User	Confirmatory Licenses for Fraud Detection Software	Productivity increases in online advertising, brand protection and improved service to customer	Benefit in preserving revenue estimated at \$0.5m p.a.
Fairfax Digital	Industry Participant / End User	Confirmatory Licenses for Property Organiser Software	Increased revenue & productivity & stickiness of outcomes	Expected to increase and maintain market share in competitive market
Fairfax Digital	Industry Participant / End User	Confirmatory Licenses for Video Player for iPhone Software	Internal demonstration purposes	Improved execution engagement in video display opportunities
Fairfax Digital	Industry Participant / End User	Confirmatory Licenses for Lifestyle Search and Recommender System for Cars Software	Increasing engagement with new car buyer and product innovation	Expected to increase and maintain market share in competitive market
Fairfax Digital	Industry Participant / End User	Confirmatory Licenses for individual Preference based and for Personalisation of Methods for Online Dating Software	Improvements in success of recommendation leading to increased use of site	Subject to further product development, expect 5-10% increase in site usage
Fairfax Digital	Industry Participant / End User	Increased efficiency in dealing with news (trial)	Increased revenue and productivity	Estimated annual benefit of \$2m within 4 years

End-user name	Relationship with CRC (e.g. Industry, Participant, International)	Type of activity and end-user location	Nature / scale of benefits to end-user (e.g. exports increase, productivity, employment)	Actual or expected benefit to end-user (\$ terms)
NSW Government Dept of Education & Training, Centre for Learning Innovation	Government Participant / End User	License Agreements for the Tag!t Software	Enables targeted use of video as a teaching tool supported by metrics that extend 1:1 teacher/student interaction, personalisation and evaluation	Significant savings will be achieved through improved delivery of lesson plans and significant improvements in learning. Savings potential in excess of \$100m over 10 years
NSW Government Dept of Education & Training, Centre for Learning Innovation	Government Participant / End User	License Agreements for the Immersive Services Software	Enables close to real classroom experience among many locations enabling a broader curriculum for all students	Benefit of the order of \$100m pa expected across all industry opportunities
NSW Government – Australian Museum	Government Participant / End User	Confirmatory License for the Dangerous Australians Software	Demonstrates capability of smart phone apps in a two way educational environment	Provides new learning environment with revenue benefit of application sales \$100K
PIER	Third Party	Demonstrator License for immersive video	Servicing education exports and productivity	Projected revenue over 10 years of \$30m for new product further revenue from education services
Swinburne University	University Participant / Research Provider	Non Commercial License for research purposes - Smart Internet Technologies	Benefit to new research of previous IP being applied collaboratively	Commercial license to be negotiated, intangible benefits
University of Georgia	Third Party / Research Provider	Research Collaboration Agreement for international collaboration	Demonstrate value of work of CRC in engaging international research	Benefit in collaboration and information exchange
University of Melbourne	Third Party / Research Provider	Non Commercial License for research purposes – Smart Internet Technologies	Enable extended live trial to occur in area of detection of medical emergencies	Patient savings of up to 50 preventable deaths per annum per major hospital

## Education and Training



The Smart Services CRC to date has supported 37 PhD candidates, 5 Masters and 1 Honours scholarship. It is pleasing to see the first 4 PhD candidates and 1 Honours candidate complete their studies and see them readily obtain employment in industry and research organisations.

We have also expanded the reach of our Vacation Internship Scholarship Program, which is aimed at undergraduate students, awarding a total of 23 new Vacation Scholarships which is additional to the 15 awarded last year. This has delivered impressive results and has helped develop a number of prototypes and early stage demonstrators in project areas such as Multi-Channel Content Delivery, Personalisation & Services Aggregation.

The topics investigated by PhD students are decided jointly between the student, his university and the CRC. PhD students do not directly contribute to R&D projects, However it is a requirement that their topic falls within the problem space of an existing CRC project. This helps the CRC maintain a healthy and balanced portfolio of research questions, where PhD students pioneer risky research topics that might eventually turn into research activities in R&D projects once the risk has been mitigated through the PhD work.

The opportunities for PhD Scholars are continuing to expand within Smart Services CRC. In addition to scholarship funding, students gain invaluable exposure to projects and industry partners. They also receive additional training, summer work at partner institutions and a community of like-minded students and researchers.

A very successful illustration of the CRC supporting a short-term internship for the purpose of technology transfer was provided earlier this year through embedding one of our Students from Queensland University of Technology within Fairfax Digital for the purpose of transferring his work on the Scoop prototype.

The CRC management team maintains an on-going conversation with each PhD student and their supervisor through six monthly meetings in order to identify promising research ideas, provide feedback to the students and help the students connect with the wider Smart Services CRC community. This approach is complemented by our Annual Student Conference where industry partners are invited to discover the work of all our PhD students through a half-day poster presentation and one-on-one discussions. The previous meeting was held in December 2009 at the University of Sydney and a similar one will be held in Brisbane in December 2010.

## Internal Conferences and Workshops

### Project Workshops

Regular Workshops are held for each of our eleven Research Projects which are well represented by the Project Teams and Management.

### Participant Meetings

Smart Services CRC Participant Meetings were held on the 26 -27 August 2009 (Brisbane), 3 December 2009 (Sydney) and the 21 April 2010 (Sydney). The meetings were well attended by our participants, researchers and students of the CRC. External parties attended these sessions to view new technologies which are put forward as a showcase at each meeting.

### Smart Services CRC Student Conference

Our Student Conference was held on the 1 & 2 December 2009 at the University of Sydney. This was well represented by our students and they received invaluable experience on Presentation Skills, Media & Commercialisation Training and IP Management.

### Smart Services CRC Annual Conference

Our Annual Conference was held on the 2 & 3 December 2009 at the University of Sydney. This conference was designed for all our participants, researchers and students of Smart Services CRC.

### Czech Visit

On the 4 February 2010, the Smart Services CRC hosted a visit from a delegation from the Czech Republic at the Australian Technology Park. This included the President and various officials from the Senate of the Czech Republic.

During the visit, the CRC demonstrated some of our technologies in the area of government services including Tabletop, CSN, Immersive Services, Personal Services Manager and Service Broker.

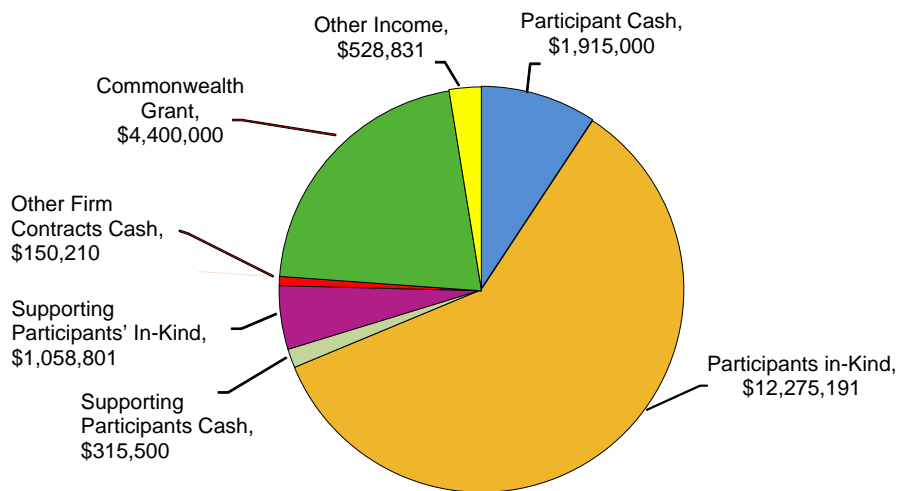
# Financial Information



2009-10 was the third year of the Smart Services CRC after the signing of the Commonwealth Agreement during the 2007-08 year. The 2009-10 year was the second full year of program expenditure. Resources applied across CRC activities totalled \$21.4 million for the year and resources available to the CRC were \$20.6 million with the difference being funded from carry forward cash balances.

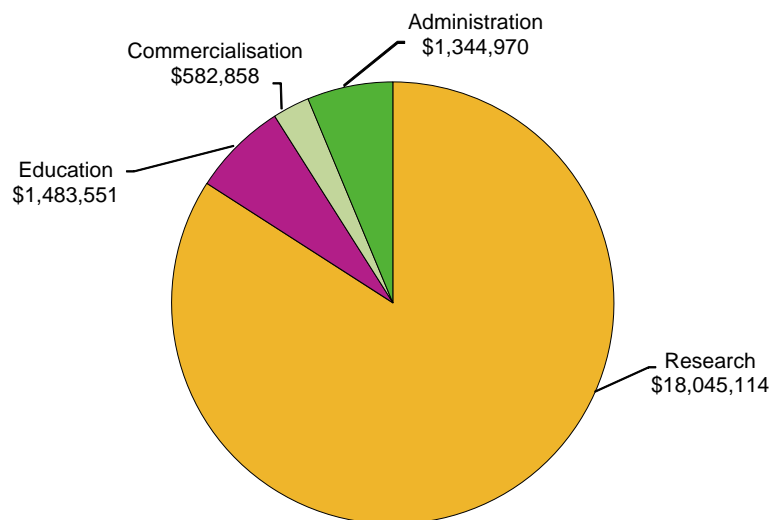
The charts below show the sources for resources available and the use across the various CRC programs for the resources applied.

**2009-10 Year Resources Available to Smart Services CRC**



The Auditors Report issued in respect of the detailed Statutory Accounts is included below.

**2009-10 Year Resources Applied by Smart**



**AUDITOR'S REPORT TO THE COOPERATIVE RESEARCH CENTRES PROGRAM, DEPARTMENT OF INNOVATION, INDUSTRY, SCIENCE AND RESEARCH REPRESENTING THE COMMONWEALTH IN RESPECT OF SMART SERVICES CRC PTY LIMITED**

**FINANCIAL INFORMATION FOR THE YEAR ENDED 30 JUNE 2010**

**Scope**

We have audited the financial information of the Smart Services CRC Pty Limited ("the CRC") for the year ended 30 June 2010. The parties to the Cooperative Research Centre are responsible for the preparation and presentation of the financial information. We have conducted an independent audit of the financial information in order to express an opinion on it to the parties to the Smart Services CRC Pty Limited.

The financial information has been prepared for the parties to the Smart Services CRC Pty Limited for the purposes of fulfilling their annual reporting obligations under clause 15(3)(vi) of the Commonwealth Agreement and for distribution to the Cooperative Research Centres Program, Department of Innovation, Industry, Science and Research, representing the Commonwealth of Australia. We disclaim any assumption of responsibility for any reliance on this report or on the financial information to which it relates to any person other than those mentioned above, or for any purpose other than that for which it was prepared.

Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurance as to whether the financial information is free of material misstatement. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial information, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects, the financial information is presented fairly in accordance with Australian accounting concepts and standards and requirements of the Commonwealth Agreement in terms of Clauses 15.3 (iii) and 15.3 (iv), so as to present a view of the sources of funding and the application of funding of the Smart Services CRC Pty Limited and the application of which is consistent with our understanding of its financial activities during the year and its financial position.

While we have not performed any audit procedures upon the estimates for the next period and do not express any opinion thereon, we ascertained that they have been formally approved by the Board of Directors as required under the Joint Venture Agreement.

*Total Financial Solutions*



*Horwath refers to Horwath International Association, a Swiss Verein. Each member of the Association is a separate and independent legal entity.*



*Liability limited by a scheme approved under Professional Standards Legislation*

**Member Horwath International**

WHK Horwath Sydney ABN 97 895 683 573  
Level 15 309 Kent Street  
Sydney NSW 2000 Australia  
Telephone +61 2 9262 2155 Facsimile +61 2 9262 2190  
Email [sydney@whkhorwath.com.au](mailto:sydney@whkhorwath.com.au)  
[www.whkhorwath.com.au](http://www.whkhorwath.com.au)  
A WHK Group Firm

Based on our audit we certify that:

1. Contributions, both cash and in-kind are made and recorded in accordance with the Budget (as included in Schedule 3 and applying Clauses 9 to the Commonwealth Agreement);
2. In accounting for the Commonwealth Funding and Contributions the CRC has exercised proper accounting standards and controls (as required by Clause 9.1);
3. The CRC has met its obligations to the Commonwealth in relation to treatment of Capital Items (as required by Clause 7.2 (e));
4. The Cash Contributions and Commonwealth Funding have been paid into and expended from the CRC's account and in accordance with the Commonwealth Agreement and all interest on the balance of the account has been credited to the account (as required by Clause 9.3)
5. That the reports specified under clause 15.3 (iii) and (iv) presents fairly that the Commonwealth Funding and the Contributions have been expended solely for the Activities and in accordance with Schedule 3 of this Contract and Australian accounting concepts and applicable Australian Standards; and that all CRC transactions have been conducted through the Account.

The audit opinion expressed in this report has been formed on the above basis.

The CRC has complied with the requirements of Clause 6 in that the receipt and application of Funding and Contributions are in terms of Clause 6.7 of the Commonwealth Agreement and in accordance with Schedule 3 of the original Commonwealth Agreement as follows:

#### **Cash Contributions Receipts**

The actual Cash Contributions received for the year ended 30 June 2010 were consistently within the values committed in the Budget as specified in Schedule 3 of the original Commonwealth Agreement.

#### **In-Kind Contribution Receipts**

The actual Participant's In Kind Contributions received for the year ended 30 June 2010, were consistently within the values committed in the Budget as specified in Schedule 3 of the original Commonwealth Agreement.

#### **Variation Agreement**

Smart Services CRC Pty Ltd has completed with the Commonwealth, in a Variation Agreement dated 20 September 2010, a variation of the committed Cash and In Kind contributions in respect of Schedule 3 of the Commonwealth Agreement.

## **Audit Opinion**

In our opinion the attached financial information as set out in the statutory accounts presents fairly in accordance with Australian accounting concepts and applicable Australian Standards and requirements of the Commonwealth Agreement Clauses 6, 7.2(e), 9.1, 9.2 and 9.3.

*WHK Horwath Sydney*

**WHK HORWATH SYDNEY**

*R. Wong Pitt Chow*

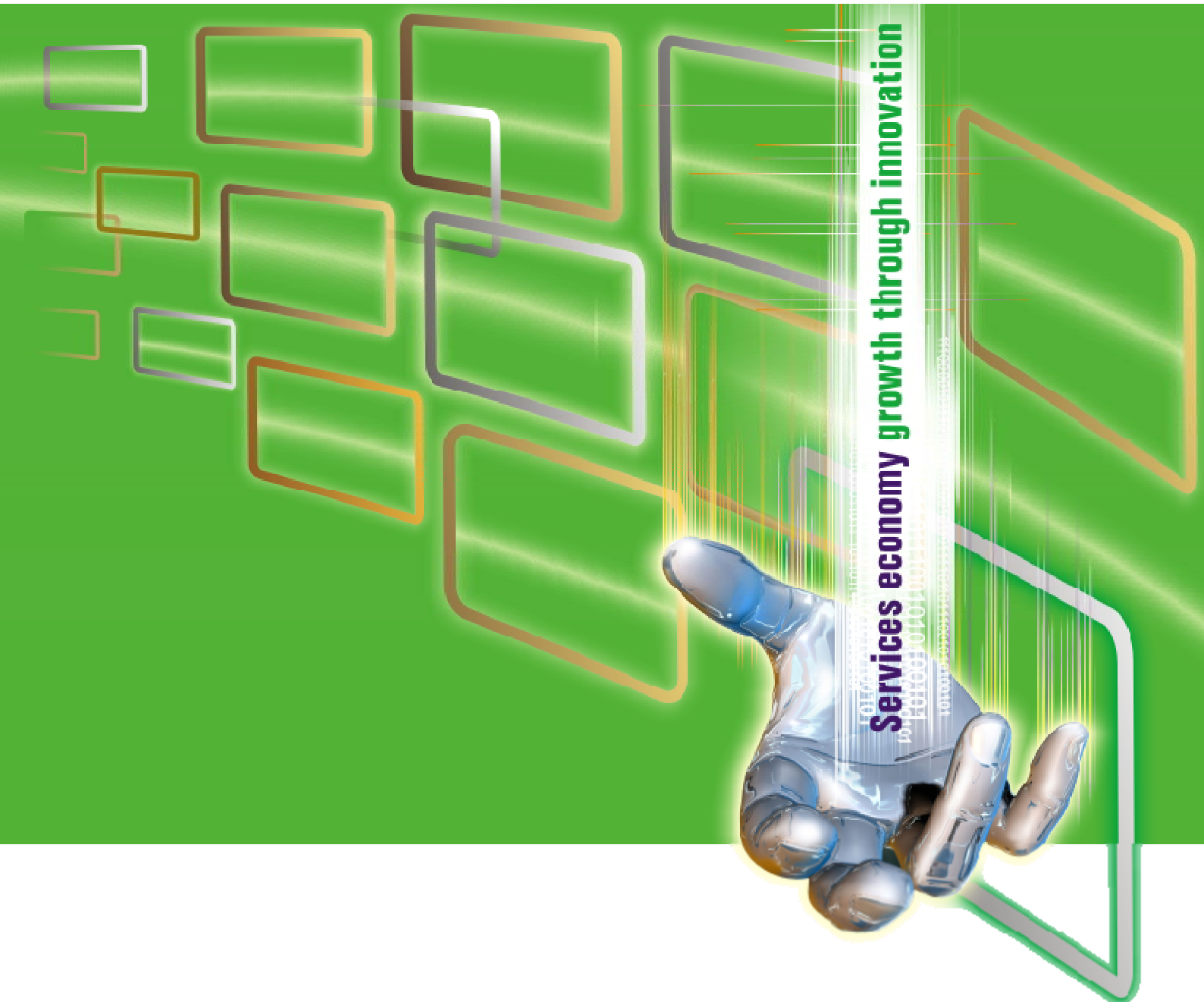
**ROGER WONG  
PRINCIPAL**

Dated this 21<sup>st</sup> day of October 2010

# Glossary of Terms



Australian Information Industry Association	AIIA
Australian Interactive Media Industry Association	AIMIA
Australian Securities Exchange	ASX
Business Services Management	BSM
Committee for Economic Development of Australia	CEDA
Cooperative Research Centre	CRC
Collaborative Services Network	CSN
Department of Employment, Economic Development and Industry	DEEDI
Department of Education & Training/Centre for Learning Innovation	DET/CLI
Department State & Regional Development	DSRD
Education & Training	E&T
Full time equivalent	FTE
Information & Communication Technology	ICT
Intellectual Property	IP
Information Technology	IT
Keep-in-Touch Australia	KIT
Lending Industry XML Initiative	LIXI
National Broadband Network	NBN
National E-Health Transition Authority	NEHTA
The National ICT Industry Alliance	NICTIA
New South Wales	NSW
Patent Co-Operation Treaty	PCT
Dr of Philosophy	PhD
Queensland	QLD
Queensland University of Technology	QUT
Royal Automobile Club of Queensland	RACQ
Research & Development	R&D
Royal Melbourne Institute of Technology	RMIT
Securities Industry Research Centre Of Asia-Pacific Limited	Sirca
Smart Internet Technology CRC	SITCRC
Small and Medium Enterprises	SME's
Service Orientated Architecture	SOA
Swinburne University of Technology	SUT
United States of America	USA
Unified Service Description Language	USDL
University of New South Wales	UNSW
The University of Sydney	USYD
University of Wollongong	UOW



**Services economy growth through innovation**

Smart Services CRC | Suite 9003, 2 Locomotive Street | Australian Technology Park Eveleigh NSW 2015 Australia

T: 61 2 8374 5080 | F: 61 2 8374 5090 | E: [innovation@smartservicescrc.com.au](mailto:innovation@smartservicescrc.com.au) | [www.smartservicescrc.com.au](http://www.smartservicescrc.com.au)

© 2010 Smart Services CRC Pty Ltd. All rights reserved.

All trademarks mentioned in this document are the property of their respective owners.