

Annual Report



Services economy growth through innovation

Smart Services
Cooperative Research Centre
Annual Report 2008-2009



Established and supported under the
Australian Government Cooperative
Research Centres Programme

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Chairman's Report



I am pleased to report that, despite facing significant challenges resulting from the delayed commencement of operations and the impact of the turbulent financial environment on our Participants, Smart Services CRC has had a very successful year.

The first year of the CRC's operations saw an investment of over \$18 million in cash and in-kind primarily across 11 research projects covering Financial Services, Government Services and Digital Media Services. These projects resulted in the delivery of 16 demonstrations, excellent progress in such a short time. Other successful outcomes included the issue of 2 software licences, 2 major reports and the management of 11 patents.

The CRC has demonstrated the flexibility of its research team to respond to the changing needs of its Partners and quickly direct attention to new commercial opportunities for its IP portfolio. An excellent example of this is the TagIt project, a collaboration with the NSW Government Department of Education & Training's Centre for Learning Innovation, currently underway in the Smart Services Foundry and due for trial later this year.

A significant and special strength of Smart Services CRC is its ability to draw on the advanced skills and perspectives of world class experts, not only in Science, Technology and Engineering, but also in the Social and Life Sciences and Business disciplines, for its research program. This gives it the unique ability among ICT-related research centres in Australia to focus on the convergence of people and technology, a critical success factor for the commercialisation of research outcomes.

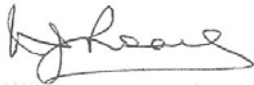
The CRC can rightly claim to be at the forefront of thought leadership in services-related research. This has been demonstrated by the quality of 25 peer reviewed research papers referred and presented on the global stage at various conferences in China, Italy, Germany, USA, France and South Africa, as well as here in Australia.

A leading edge innovation of Smart Services CRC has been the establishment of a Services Innovation Foundry, which provides Partners with a low cost, low risk environment that facilitates the transition of research to commercial outcomes. The Foundry is fully operational with seven projects underway in Sydney and Brisbane.

A special feature of the Foundry is a Virtual Test Centre (VTC) facility developed by CRC researchers which enables the testing of new services involving interaction of multiple organisations and systems and the monitoring of these services to ensure compliance with standards. Given that the services sector account for some 80% of GDP and that new services involving interactions between many service providers and users are continually being developed, the VTC and its underlying intellectual property has considerable potential for commercialisation.

The CRC also has a strong commitment to Education and has provided scholarships to 29 PhD students who are also given the opportunity to gain business and specialist domain experience through engagement with our partners.

While the CRC has had a very successful year in its operations, it has not been immune from the consequences of the difficult financial environment. This has resulted in the retirement of some Participants and a reduction in investments by others. A major program aimed at minimising the impact of these unfortunate developments is underway and we are confident that we will achieve additional investments from existing and new Participants during the current financial year.

A handwritten signature in black ink, appearing to read 'N. Roach', with a horizontal line underneath.

Neville Roach, AO
Chairman

Chief Executive Officer's Report



The 2008/09 year has been a challenging one for both the CRC and our Participants.

All of the CRC Participants have been affected by the international economic downturn during the year. This has meant that they have closely reviewed the funding allocated to new research and whether it can be sustained in the short-term. Whilst at year-end we have retained all of the current Participants there has been a clear indication that in the next year some Participants will retire and others will look to adjust the level of their contribution to the CRC. We are pursuing a plan to further strengthen our participant base and believe the research direction and outcomes will provide a strong basis for new investments.

In September, 2008 the Hon Arch Bevis MP, launched the Brisbane node of the CRC, which generated strong interest and attendance by over 100 guests to see a showcase of early CRC outcomes.

Notwithstanding these broader business challenges the Smart Services CRC research programme has started to provide valuable results to many Participants. The 2008/09 year was the first full phase of our research programme and the research outcomes included the generation of 16 early stage prototypes and demonstrators of new technologies.

This has led to some early commercial outcomes and technology transfers for our Participants. Three positive outcomes included:

1. The licensing of two technologies to the NSW Department of Education in the area of video editing and video tagging by users.
2. The delivery of a wealth management tool to Suncorp for incorporation into their internet banking product offering.
3. Agreement to fast track, through additional investment, a geospatial technology for a pilot trial with RACQ of a product which automatically locates the GPS co-ordinates of a member reporting a breakdown, whilst validating the member's membership details.

Our approach to research is based on **user inspired research** to identify new breakthroughs in technologies. As part of this approach we identify potential early opportunities through a strong collaborative effort between industry partners and research provider partners. The establishment of the Service Innovation Foundry has also assisted us to establish a clear conceptual approach and an environment that enables quicker testing and development of prototypes for assessment and take up by industry Participants.

The combined strength provided by our researchers with a social science background and those with a technical ICT background has meant we are able to pursue our vision of providing thought leadership on improving the delivery of services in a personal and meaningful way to end-users and businesses. As part of this the research teams have published over 25 peer reviewed reports and refereed conference papers. Further, we achieved over 1,300 downloads in the first two weeks of publishing our "State of the Media" Report on emerging trends in social media and the business models being adopted.

Importantly we are also building the opportunity for a significant student body to obtain exposure to the exciting developments evolving in the services sector. To date we have succeeded in building linkages with 44 PhD, Honours and other scholarship students to be involved with the CRC on an on-going basis and as part of our summer scholarship programme. This provides direct exposure for the students to the business requirements of our Participants and provides access to a unique talent resource for our Participants.

I would like to express my thanks to the entire Smart Services CRC team, who have worked tirelessly with our partners to facilitate the project and partner connections throughout the year.

With the brightening of the economic situation and the return of optimism to the business environment I am certain that the CRC will flourish in its objectives over the coming years.

A handwritten signature in black ink, appearing to read "Warren Bradey". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Warren Bradey
Chief Executive Officer & Director



Achievements and Activities

During the 2008/09 year Smart Services has:

Successfully launched the Brisbane node on 11 September, 2008 by the Hon Arch Bevis, MP and QUT Vice Chancellor, Prof Peter Coaldrake.

Opened both Brisbane and Sydney Service Innovation Foundry locations.

Completed and delivered \$1.90m Collaborative Services Network inter-operability test centre and environment on budget for the Department of Health and Ageing.

Completed the final stage of \$0.75m contract with Information Queensland.

Licensed technologies from initial research phase for new video editing tools to the NSW Department of Education.

Delivered wealth management tool as a research outcome from first phase of research and completed technology transfer to CRC industry partner in the financial sector.

Completed and showcased to partners 16 early stage demonstrators and prototypes of technologies developed from initial phase research programmes.

Commenced a fast tracking of Birdseye geospatial technology for pilot trial with RACQ.

Achieved over 1,300 downloads in the first two weeks after the release of initial State of the Art Media Report by QUT research team.

Recruited 44 students to the CRC related PhD and Student programmes across all 6 University partners.

Achieved release of 25 peer reviewed papers and articles to high quality conferences and publications.

Achieved wide media coverage with over 10 articles reporting on the Brisbane node launch and feature articles on the potential of Smart Services CRC research directions.

Risks and Opportunities

Faced increasing review of involvement in research programmes by Participants as part of the effects of the Global Financial Crisis.

Ensured continuity of research relevance by commencement of next phase research programme development well in advance of project rollover requirements.

Delivered early prototypes and demonstrators of technologies created to show advance commercial relevance for Participants.

Context and Major Developments during the Year

Industry context in which the CRC operates

Smart Services CRC benefited from being fully operational in the 2008/09 year and was able to make substantial progress on the 11 initial research projects. As part of the research approach of user inspired research we have been able to work with partners to identify early opportunities for technology transfer and, the research teams successfully created 16 new prototypes and early stage demonstrators.

The Global economic downturn has adversely affected all of our partners, however, it did not lead to any change in the research investment level in the current year. Nor is it planned to affect the level of R&D investment in the 2009/10 year. However, some participants have indicated they will need to change the level of their participation in subsequent years. The CRC is working with all participants to identify potential new partners to maintain the investment momentum in our research programmes.

The focus on identifying early stage opportunities arising from our research has led to the signing of a licence with the NSW Department of Education for new video editing and tagging technologies. We have also successfully transferred further wealth management research outcomes to Suncorp for incorporation into their internet banking offerings.

The approach being taken in all areas is to develop opportunities for early stage pilot trials with customers and external parties to ensure the robustness and viability of our research directions. As part of this we have commenced work towards a pilot trial in the areas of e-health collaborative service networks in Victoria and for a pilot trial of a new mobile positioning service for member based organisations providing regional services to travelling members.

Smart Services CRC continues to operate through research nodes in Brisbane, Sydney and Melbourne. During the year our Service Innovation Foundries were opened in Brisbane and Sydney to provide an environment for the provision of more dedicated resources and quicker trialling of research outcomes against live data.

Value of outcomes to date

At this stage of the CRC research programme the outcomes for commercial adoption are ahead of our expectations, having achieved in the year:

- licensing of new video and tagging technologies;
- delivery of a wealth management tool for incorporation into an existing product offering;
- increased funding for trialling of technologies developed from the CRC's research programmes; and
- increased funding received from the Department of Health and Ageing to develop an inter-operability test facility.

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

Dr Julien Vayssière was appointed Head – Research of Smart Services CRC on the 3 November 2008.

The centre staff are noted in the Management Structure section as at 30 June 2009 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.

The Sydney Service Innovation Foundry Office was completed and ready for use by Foundry projects and researchers in February 2009. This is located at the Australian Technology Park, Eveleigh NSW.

The Brisbane Service Innovation Foundry was established at the Queensland University of Technology in Brisbane in September 2008.

Apart from the normal office fit-out of the Sydney and Brisbane Foundries, and the installation of standard computer services as budgeted, no major equipment was purchased during the year.



National Research Priority Goal Highlights

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

These increases in consumption possibilities will arise from:

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

Smart Services' targeted outcomes are aligned to: National Research Priorities for Frontier Technologies, Promoting Good Health and Safeguarding Australia and relate to the convergence of people and technologies through the creation of new digital services, new online communities and the governance frameworks that support engagement and transactions. The percentages below approximate the spread of where the CRC's research has focussed.

Table 1: National Research Priorities and CRC Research

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



Smart Services CRC Participants for 2008/09 Year

- AARNet Pty Limited
- Austin Health
- Fairfax Digital Limited
- Infosys Technologies (Australia) Pty Limited
- NSW Government (Department of State & Regional Development)
- 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
- 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

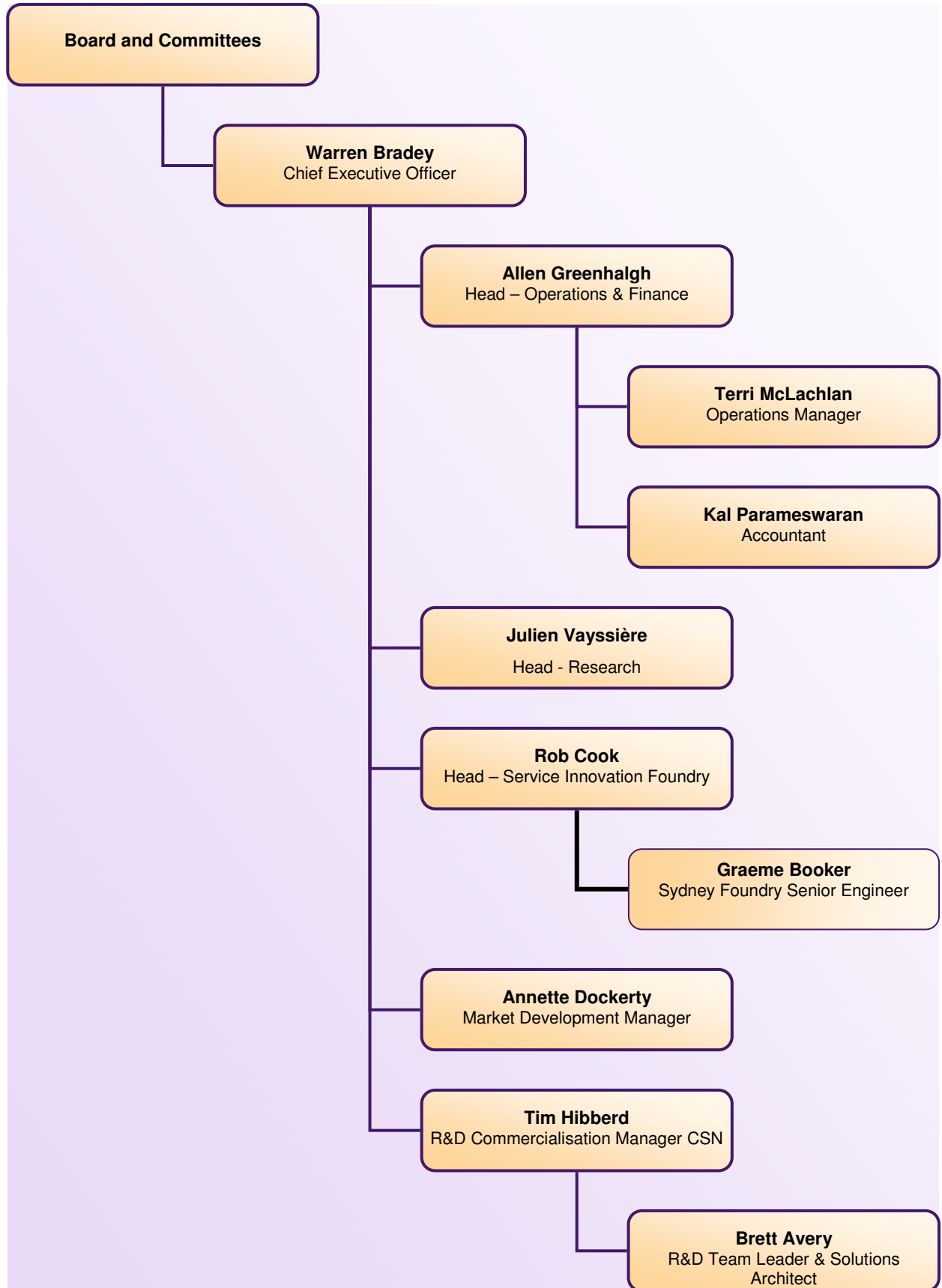
Centre Management Structure

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 2009 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
Mr Kal Parameswaran	Accountant
Mr Graeme Booker	Sydney Foundry Senior Engineer
Mr Tim Hibberd	R&D Commercialisation Manager CSN
Mr Brett Avery	R&D Team Leader & Solutions Architect

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

The following directors were appointed as at 30 June 2009.

Name	Organisation	CRC Position / Role	Number of Meetings Eligible to Attend	Number of Meetings Attended
Neville Roach, AO	Independent	Chairman	8	8
Alan Chapman	QLD Government, Department of Public Works	Governing Board Member	7	7
Anna Cicognani	Fairfax Digital Limited	Governing Board Member	7	6
Arun Sharma	Queensland University of Technology	Governing Board Member	8	7
Ashok Lingutla	Suncorp-Metway Limited	Governing Board Member	7	2
Gregory Hancock	The University of Sydney	Governing Board Member	8	7
Judy Raper	University of Wollongong	Governing Board Member	3	2
Karsten Schulz	SAP, AG	Governing Board Member	8	7
Michael O'Sullivan	NSW Government (Department of State & Regional Development)	Governing Board Member	8	5
Neale Condon	Independent	Governing Board Member	8	6
Warren Bradey	Smart Services CRC Pty Ltd	Governing Board Member & CEO	8	8

The following Board Retirements occurred during the year.

Name	Organisation	Retirement Date
Karim Barbara	Telstra Corporation – Enterprise & Government Division	25 March 2009
Lee Astheimer	University of Wollongong	26 February 2009

The following Board Appointments occurred during the year.

Name	Organisation	Appointment Date
Alan Chapman	QLD Government, Department of Public Works	9 September 2008
Anna Cicognani	Fairfax Digital Limited	9 September 2008
Ashok Lingutla	Suncorp-Metway Limited	9 September 2008
Judy Raper	University of Wollongong	23 April 2009

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
Neville Roach	√	√	√		√	√	√	√	√	√	√		√	√	√
Alan Chapman	√			√				√					√	√	√
Anna Cicognani	√	√			√		√		√	√		√	√	√	
Arun Sharma	√	√	√		√	√		√					√	√	√
Ashok Lingutla	√	√			√	√		√	√	√	√		√		
Gregory Hancock	√		√	√	√								√	√	
Judy Raper	√	√			√			√					√	√	
Karsten Schulz	√	√	√	√	√	√	√			√			√		
Michael O'Sullivan	√	√		√		√		√							√
Neale Condon	√	√	√	√	√		√	√			√				
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 Committee
- Governance & Nominations Committee
- Research Advisory Committee
- Remuneration & Resources Committee
- Research Investment Taskforce Committee

Audit & Risk Management Committee

The Audit and Risk Management Committee reviews and monitors risk management issues and the financial systems operating within Smart Services CRC. 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.

As at 30 June 2009, the Audit & Risk Management Committee Membership comprised:

Name	Organisation	CRC Position / Role
Gregory Hancock	The University of Sydney	Chair and Governing Board Member
Karsten Schulz	SAP, AG	Governing Board Member
Michael O'Sullivan	NSW Government (Department of State & Regional Development)	Governing Board Member
Neale Condon	Independent	Governing Board Member

Governance & Nominations Committee

The Governance and 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 Institute of Company Directors.

As at 30 June 2009, the Governance & Nominations Committee Membership comprised:

Name	Organisation	CRC Position / Role
Neale Condon	Independent	Chair and Governing Board Member
Michael O'Sullivan	NSW Government (Department of State & Regional Development)	Governing Board Member
Karsten Schulz	SAP, AG	Governing Board Member

Research Advisory Committee

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

As at 30 June 2009, the Research Advisory Committee Membership comprised:

Name	Organisation	CRC Position / Role
Arun Sharma	Queensland University of Technology	Chair and Governing Board Member
Alan Chapman	QLD Government , Department of Public Works	Governing Board Member
Anna Cicognani	Fairfax Digital Limited	Governing Board Member
Michael O'Sullivan	NSW Government (Department of State & Regional Development)	Governing Board Member
Judy Raper	University of Wollongong	Governing Board Member
Karsten Schulz	SAP, AG	Governing Board Member

Remuneration & Resources Committee

The Remuneration & Resources Committee reviews the performance of key executives against both measurable and qualitative indicators. The Committee approved remuneration policies on the payment of both fixed and variable components of staff remuneration and benefits.

As at 30 June 2009, the Remuneration & Resources Committee Membership comprised:

Name	Organisation	CRC Position / Role
Neville Roach	Independent	Chairman
Arun Sharma	Queensland University of Technology	Governing Board Member
Karsten Schulz	SAP, AG	Governing Board Member

Research Investment Taskforce

The Research Investment Taskforce established a protocol under which the Board and the Research & Development Advisory Committee can assess requests for the provision of additional resources for fast-tracking of unexpected outcomes R&D Projects through the Foundry in a manner which delivers appropriate returns to the Participants of the CRC and enhances the reputation of the CRC as a centre of service based research.

As at 30 June 2009, the Research Investment Taskforce comprised:

Name	Organisation	CRC Position / Role
Arun Sharma	Queensland University of Technology	Chair and Governing Board Member
Anna Cicognani	Fairfax Digital Limited	Governing Board Member
Michael O'Sullivan	NSW Government (Department of State & Regional Development)	Governing Board Member
Judy Raper	University of Wollongong	Governing Board Member
Karsten Schulz	SAP, AG	Governing Board Member

Project Leaders

As at 30 June 2009, the Project Leaders comprised:

Name	Organisation	CRC Position / Role
Terry Flew	Queensland University of Technology	Project Leader – Audience and Market Foresight Project
Michel Rosemann	Queensland University of Technology	Project Leader – Common Business and Service Frameworks Project
Peter Reimann	The University of Sydney	Project Leader – Education and New Media Technology Project
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	Queensland University of Technology	Joint Project Leader– One-Stop Personalised Financial Services Project
Sam Lahy	Suncorp-Metway Limited	Joint Project Leader– One-Stop Personalised Financial Services Project
Wayne Wobcke	The University of New South Wales	Project leader – Personalisation Project
Alistair Barros	SAP, AG	Project Leader – Service Delivery Framework Project
Tim Mansfield Simon Kaplan	Queensland University of Technology	Joint Project Leaders – Services 2020 Project
Anna Liu	The University of New South Wales	Project leader – Services Aggregation Project
Axel Bruns	Queensland University of Technology	Project Leader – Social Media Project

Changes to Participants

Participants Name	Commonwealth Approval (√, Y (Yes) N (No))
Telstra Corporation	NO
Sensis Pty Limited	NO

Telstra Corporation

Telstra Corporation advised intention to withdraw their Business and Enterprise and Government Divisions from participation in the CRC from 16 October 2009. Projects continue with Telstra Corporation and we are in discussions for Telstra to renew participation.

Sensis Pty Limited

Sensis Pty Limited advised its intention to withdraw their participation in the CRC from 16 October 2009.



Research Activities and Achievements

Through eleven initial research projects the CRC started addressing challenges faced by the service industry and already has delivered significant outcomes to most of our industry, academic and government partners. Outcomes come in different shapes to best fit a diversity of audiences. This includes developing new software prototypes through to providing foresighting of practical strategic advice that industry partners can leverage. In the past year the research programmes generated 16 early stage demonstrators and prototypes. The research outcomes achieved also include over 25 peer reviewed publications, white papers and industry presentations that allow the CRC to establish thought leadership in the field of service innovation.

A large part of the research and development efforts conducted by the 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 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 early research outcomes of the CRC, as demonstrated by the quick adoption of two innovative new services by our industry partners over the last year.

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

Education and New Media Technology

This project develops new educational services that add value to digital collections, as they are typically available from public archives, museums, newspaper archives and repositories of teaching material. Central to the project is the use of Web 2.0 technologies so that custodians, teachers and students or members of the public may take part.

The project created a prototype showing how teaching material held in standard repositories such as Moodle could be seamlessly imported and interacted within a popular virtual world environment such as Second Life.

The project also explored how the use of workflow engines in an educational context can deliver more flexible teaching within a virtual world. Between the two extremes of letting students roam free within the virtual world or rigidly constraining where they can go and what they are allowed to do, our approach allows a configurable degree of freedom while ensuring the lesson plan is followed and learning objectives are met.

This latter activity generated a serendipitous outcome beyond the planned scope of the project: this technique is now being trialled in an online banking context for providing banking customers with an interface for understanding and tracking the process of a home loan application.

Key Outputs: Suite of lightweight prototypes demonstrate immersive training and education capabilities

Participants: NSW State Government, Centre for Learning Innovation, Austin Health, University of Sydney, University of Wollongong, Queensland University of Technology, Royal Melbourne Institute of Technology

Researchers: Peter Reimann (Leader), Ian Johnson, Steven Hayes, Martin King, Kim Jackson, Judy Kay, Ross Brown, Di Dong, Christian Ritz, Raad Radd, Montse Ros, Kwan Wu Chin, Stephen Davis & Ian Burnett, Katrina Neville, Peter Burton, Rune Rasmussen

Programmes: Government Sector – Immersive Collaborative Service Interfaces

Audience & Market Foresight

This project delivered to our media partners and to the CRC community as a whole foresight into how audience and industry use of media is changing in the context of market fragmentation, audience diversity, and the formation of emergent media user segments.

The project produced a summary of findings on *Trends and Foresight in Digital Media* that has been publicly released. A survey phase was also conducted, partly using established online news outlets themselves as a channel for reaching survey participants but also making use of popular social media and new journalism sites, which delivered actionable insight to our industry partners on the topic of *Consumer Use of Digital News and Information*. We were able to outline strategies to build and retain readership for each of the different segments of online news consumers we identified, in the context of online news sources that are associated with an established newspaper.

In addition to targeting news media, the project widened its scope of enquiry into other uses of media channels, such as online purchasing, both from a consumer and a small business perspective. This work delivered recommendations for media industry companies that are not e-commerce companies *per se* on how to approach the pre-purchasing phase of consumer activity as a media activity.

The insights gained through this project also played a significant role in shaping the research agenda for all media-related research in the next wave of CRC R&D projects.

Key Outputs: Publication of initial report on Trends in Digital Media, Strategic reports, novel market research and interpretative techniques

Participants: Fairfax Digital, Sensis, Royal Melbourne Institute of Technology, Queensland University of Technology.

Researchers: Terry Flew (Leader), Margaret Jackson, Supriya Singh, Clive Morley, Jonathan O'Donnell, Marita Shelly, Larry Neale, Edwina Luck, Ellen Bloxsome, Anna Daniel, Stephanie Russell, Christy Collis, Mimi Tsai, Ben Hamley, Sheila Bellamy, Axel Bruns & Christina Spurgeon

Programmes: Media Sector – User-Focussed Services

Common Business and Service Frameworks

This project created a powerful vision and started executing 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 fulfill an organisation's business objectives. It leverages and informs other horizontal research efforts pursued by other CRC R&D projects at a more technical level. A white paper detailing the BSM vision has been released publicly.

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 visual modelling language 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 leverages work done in other R&D projects of the CRC, particularly on the topic of service description languages.

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 develop a range of tools that can be used by CRC participants to either do BSM themselves or offer BSM capabilities to their customers as a service.

Key Outputs: Publication of reports, development of methods and tools to map service ecosystems and model corporate strategies

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

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

Programmes: Government Sector – Service Aggregation

Immersive Service Interfaces

The project developed the first version of a scalable immersive environment for online collaboration using webcams and realistic spatial voice. This piece of software will allow very large numbers of users to interact and collaborate in a virtual world at the same time, using their real-world images (captured by regular webcams) rather than the avatars more commonly found in virtual worlds.

What makes the system unique can be found in the backend: 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.

We have observed over the last year a definite transition: virtual worlds are no longer perceived as belonging only to the realm of gaming and online socialising, but now have their potential recognised for applications traditionally considered as more serious such as conferencing, online collaboration, education and training. Being able to sense those changes in perception in order to re-position our research within a large context is a clear addition that social scientists brought to the project. Both within and outside the group of CRC participants, we are exploring new avenues for application of virtual worlds.

Key Outputs: A prototype immersive facility to demonstrate applicability, scalability and flexible uses

Participants: NSW State Government, Centre for Learning Innovation, Austin Health, AARNET, Infosys, University of Wollongong, Swinburne University of Technology

Researchers: Farzad Safaei (Leader), Philip Ogunbona, Wanqing Li, Jan Herrington, Tony Herrington, Ian Olney, Amir Hesami, Dinliang Liang, Daniel Franklin, Hooman Shidanshidi, Richard Caladine and Mandy Salomon

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.

In addition, the project presented a solution for the automatic adaptation of Web content to the display capabilities of different types of mobile devices and Web browsers, aiming to increase the productivity of persons developing content for mobile phones.

Techniques for the automatic compression and summarisation of video content were 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 this case. 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.

Another achievement was the One-Stop News demonstrator: news personalised for a user, automatically categorised and sorted according to a user’s preference and presented on a mobile device. This online service recognizes entities within news streams (persons, locations, events, etc.), automatically proposes related pieces of information and aggregates the results.

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

Participants: Fairfax Digital, Sensis, RACQ, Telstra, University of Sydney, University of Wollongong

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

Programmes: Media Sector – Multi-Channel Content Delivery

Services 2020

The purpose of the Services 2020 project is to discover trends and future breakthroughs with an impact on services and the service economy in Australia, with a particular focus on the use of ICT.

The project uses accepted foresight methods to develop an understanding of the issues and challenges facing Australian service industries in collaboration with industry, government and academic participants. The project looks at paradigm shifts in technical, social, business, informational, organisational, demographic, and political aspects, and attempt to foresee likely, high impact changes.

These predicted changes are then used to examine how organisations will need to adapt in terms of structure, operations and service delivery. Finally, the changed outlook will be used to identify high priority areas for research to underpin these differences and the likely timeframes in which they will be required.

The project delivered a successful series of foresight workshops in Melbourne, Sydney and Brisbane, which attracted a diverse audience from the extended CRC participant ecosystem. In order to allow this global conversation to continue after and between workshops, a web site was created for online collection of information from the whole CRC community (services2020.net) and is now up and running.

The project produced a report on trends, challenges and issues facing the Australian Service Sector in the next ten years, as well as a report on engagement models with individual CRC projects to assist them with foresight at a project level.

The project also started focused foresight work that is specific to Queensland Government with DEEDI (Department of Employment, Economic Development and Industry).

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: Simon Kaplan, Alan Chapman (Leaders), Tim Mansfield, Mandy Salomon

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

One-Stop Personalised Financial Services

This project aims to create and validate prototypes for the delivery of next-generation banking services to individual banking customers. Rather than exploring concepts based on a traditional product-centric approach, the customer experience served as the primary point of focus.

The project created, tested and validated a prototype of a next-generation Internet Banking service. Beyond online statements, this Web-based application allows users to strategically manage their finances through an intuitive interface that provides up-selling opportunities for banking organisations as well as attracts and retains customer. The project was very successful at engaging social scientists in applied research centred on the development of a software prototype, which added a lot of value to the work performed by IT researchers.

The project also researched how financial information from various sources and with varying degrees of data quality can be aggregated in order to enhance the picture of his or her financial situation the user gets from the tool. This work will leverage research performed in other CRC projects on the disciplined management of service interconnections along a service supply chain.

Key Outputs: Wealth Management Prototype for consumers

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

Researchers: Judy Drennan & Sam Lahy (Leaders), Kathrin Fleischmann, Daniel Ricketts, Sarath Indrakanti, Karsten Schulz, Glenn Neuber, Kim Fuller, Belinda Carter, Christopher Myers, David Seeto, Tony Ponton, Eamon Ahern, Jason Chisholm, Kerry Raymond, Richard Thomas, Christine Bruce, Helen Partridge, Sylvia Edwards, Ian MacColl, Jennifer Bartlett, Sylvia Edwards, Dipti Chaturvedi, Supriya Singh, Margaret Jackson

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. The objectives of this project are to develop techniques and tools for industry partners to better identify individual customer behaviour and need and to apply these tools and techniques directly to improved products and services.

The project performed applied research work very successfully on two different blue-chip Web properties from one of the CRC industry participants.

The project delivered actionable outcomes to the industry participants by analysing in depth data captured by the online service. This helped the industry participant validate a controversial past business decision and learn a whole lot more about their customers. The project also laid the theoretical basis for a recommender system which will improve the quality of recommendations made by the web site to its users, a measure which is directly linked to revenues. Beyond the practical significance of such a recommender system, large research challenges are being addressed.

The project team also developed a system for improving search on another Web property where most users are casual users with 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.

Finally, the project developed a fraud detection system for a Web property where users place ads for second-hand products. The system features a combination of statistical and semi-structured text analysis for detecting scams, and potentially improving the quality of the site and the productivity of the team running the site.

Key Outputs: Reports on existing market applications, assessment of data mining tools & techniques, development of lightweight prototype demonstrating improved ability to commercially personalise customer access to media sites

Participants: Fairfax Digital, RACQ, University of Sydney, University of NSW, Queensland University of Technology

Researchers: Wayne Wobcke (Leader), Michael Bain, Ashesh Mahidadia, Paul Compton, Richi Nayak, Yue Xu, Yeufeng Li, Amanda Spink, Judy Kay, Alfred Krzywicki, Yang Sok Kim, Irena Koprinska, Kalina Yacef, Luiz Pizzato, Tomasz Rej, Peter Cai, Ashesh Mahidadia & James Curran

Programmes: Media Sector – User-Focussed Services

Service Delivery Framework

The Service Delivery Framework project aims at improving the productivity of creating and re-purposing services at every step along the service delivery supply chain. Services rendered purely in software are the main focus of this research effort and services delivered primarily by humans and potentially not mediated by IT are also catered for in 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 by two other CRC projects (Services Aggregation and Business Services Management).

A software prototype was built for the Service Broker, a Web-based repository of USDL service models for creating, storing and accessing models through both a Web-based and a programmatic interface. The Service Broker and USDL were validated with one of the CRC industry participants and used for mapping a number of services in order to identify cross-selling opportunities across three different lines of business.

The project also worked on a number of tactical innovations for lowering the cost and acceptance barrier of exposing internal services for consumption by the outside world, such as for example semi-automatically creating online services based on the official forms used today for requesting government services.

Key Outputs: Service Broker demonstrator/prototype to show productivity gains in assembling service ecosystems.

Participants: QLD State Government, SAP, Infosys, Suncorp, Queensland University of Technology, University of NSW, Swinburne University of Technology

Researchers: Alistair Barros (Leader), Shane Bracher, Mohammed Abdullah, Uwe Kylau, Nina Kissel, Kim Fuller, Keith Duddy, Diane Corney, Michael Henderson, Alan Colman, Adeel Talib, Jun Han, Alan Coleman, Helen Paik, Boualem Benatallah, Tobias Raub, Srikumar Venugopal, Ingo Weber, Marissa Takahashi, Glenn Neuber and Maolin Tang

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 looks at the technical barriers to the effective aggregation of services in general and also explores service aggregation in practice in the context of location-based services.

The project developed and delivered BirdsEye, a cloud-based platform and user-facing Web and mobile application for tracking the location of multiple users and enabling location-based collaboration between them. BirdsEye was evaluated positively by one CRC industry participant who is currently planning for a piloting trial as a next-generation roadside assistance service. The platform is generic and can be re-used for the aggregation of any services where location is a determinant aspect of service delivery.

The project also produced a number of reports on the topic of security, service lifecycle management and quality of service management issues. The investigation of security issues in service aggregations used BirdsEye as a motivating example and was able to deliver practical advice to the CRC industry partner prior to the deployment of the software for a trial piloting phase. A prototype for demonstrating how a service described using USDL can be optimally selected using non-functional attributes was also developed.

The project also conducted a comparative performance evaluation of Cloud Computing offerings. This yielded results that are directly usable by CRC industry partners. This work attracted a lot of attention outside of the CRC and allowed the CRC to demonstrate thought leadership in this nascent field.

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

Participants: QLD State Government, Telstra, SAP, Infosys, Queensland University of Technology, University of Wollongong, University of NSW, Swinburne University of Technology

Researchers: Anna Liu (Leader), Boualem Benatallah, Paul Compton, Helen Paik, Evi Syuker, Mohan Baruwal Chhetri, Keith Duddy, Ryszard Kowalczyk, Bao Vo, Willy Susilo, Yi Mu, Jun Yan, Keith Duddy, Maolin Tang, Dianne Corney, Lifeng Ai, Alexander Dreiling, Wasim Sadiq, Peishun Wang, Tobias Raub, Kim Fuller, Marek Kowalkiewicz, Sarath Indrakanti

Programmes: Government Sector – Services Aggregation

Social Media: Tools for User Generated Content

This project aims at producing insight, advice and tools for CRC industry participants to take advantage of user-generated content and existing Social Media sites and technologies.

The social scientists involved in the project produced a series of reports on Social Media. In addition to providing an overview of the many different online phenomena that fall under the Social Media umbrella, those reports provide organisations with practical advice on how to build, promote and maintain sustainable online communities where all parties involved reap benefits from active participation. These reports were released publicly and generated a lot of visibility for our research. We now count several thousand downloads for the report.

A tool called TagIt was developed to allow the real-time collaborative tagging of video sequences. This tool has since been licensed to DET/CLI for commercial exploitation in an educational context. This technology allows users to tag using keywords specific sequences of a video, thereby allowing the generation and utilisation of fine-grained annotations on video content, as well as creating a new feedback channel for video content.

A software prototype for web-based video editing was released, allowing end users to mash up videos and edit any video within a web browser, with no plug-in or extra software installation required. A prototype was also developed for distance education through virtual worlds in the art of producing TV content by mixing training inside a virtual world with training using real-world artefacts.

Key Outputs: Market review and issue analysis reports, identification of new tools, development of lightweight demonstrator showing examples of practical business applications of social network. Licensing of TagIt technology to our industry partner

Participants: Fairfax Digital, Sensis, Telstra, RACQ, Swinburne University of Technology, Queensland University of Technology, University of Wollongong, Royal Melbourne Institute of Technology

Researchers: Axel Bruns (Leader), Darren Sharp, Lisa Gye, Christian Ritz, David Stirling, Stephen Davis, Ian Burnett, Trevor Barr, Ann Knowles, Sue Moore, Peter Burton, Mark Bahnisch and Scott Rickard

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 actively 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.

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	Audience & Market Foresight	Common Business & Service Frameworks	Education & New Media Technology	Immersive Service Interfaces	Multi-Channel Content Delivery & Mobile	One-Stop Personalised Financial Services	Personalisation	Service Delivery Framework	Services 2020	Services Aggregation	Social Media: Tools for User Generated Content
AARNet				√							
Austin Health			√	√							
Fairfax Digital	√				√		√		√		√
Infosys		√		√				√	√	√	
NSW Govt			√	√							
QUT	√	√	√		√	√	√	√	√	√	√
QLD Govt		√						√	√	√	
RACQ					√	√	√				√
RMIT	√		√			√					√
SAP AG						√		√		√	
Sensis	√				√						√
Suncorp		√				√		√	√		
Swinburne				√				√	√	√	√
Telstra Bus		√			√					√	√
Telstra E&G											
UNSW							√	√		√	
USYD			√		√		√				
UOW		√	√	√	√					√	√

Services Innovation Foundry

During the year the Services Innovation Foundry has moved out of the establishment phase and is now fully operational, providing a pathway for research to transition to light weight prototypes suitable for early stage trials. The following table represents Foundry Projects either in early planning stage or in progress and the Parties engaged.

Parties	Editorial Decision Support	Tagit and Video Edit	eHealth Collaborative Services Network	Personal Services Manager	Birdseye	Sunalyser	Tabletop
ABC Corporation							√
Fairfax Digital	√						
NSW Govt		√					
QUT	√			√		√	√
RACQ					√		
SAP AG					√		
Suncorp				√		√	
Telstra E&G			√				
UOW		√					
USYD							√
CRC Foundry	√	√	√	√	√	√	√

As mentioned above, 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 Medical Emergency Team project involving Austin Health (CRC Participant) and the University of Melbourne (Third Party Participant). This project is in the later stages of completing final technical due diligence, to demonstrate the portability of a preventative decision support system across multiple hospital data sets, leading to the potential creation of a nationwide, web based service for Health.



Commercialisation and Utilisation Strategies and Activities

Smart Services CRC is focused on the delivery of new services and technology solutions through Participant engagement in collaborative projects.

The Smart Services CRC commercialisation and utilisation strategy includes several paths to adoption with specific industry participants, service sectors and technology trends, with outcomes directed to market take-up primarily through the following:

- 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.
- Supplier participants, including SMEs, will incorporate Smart Services CRC technology into their products and export them through their normal product channels.
- 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:

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

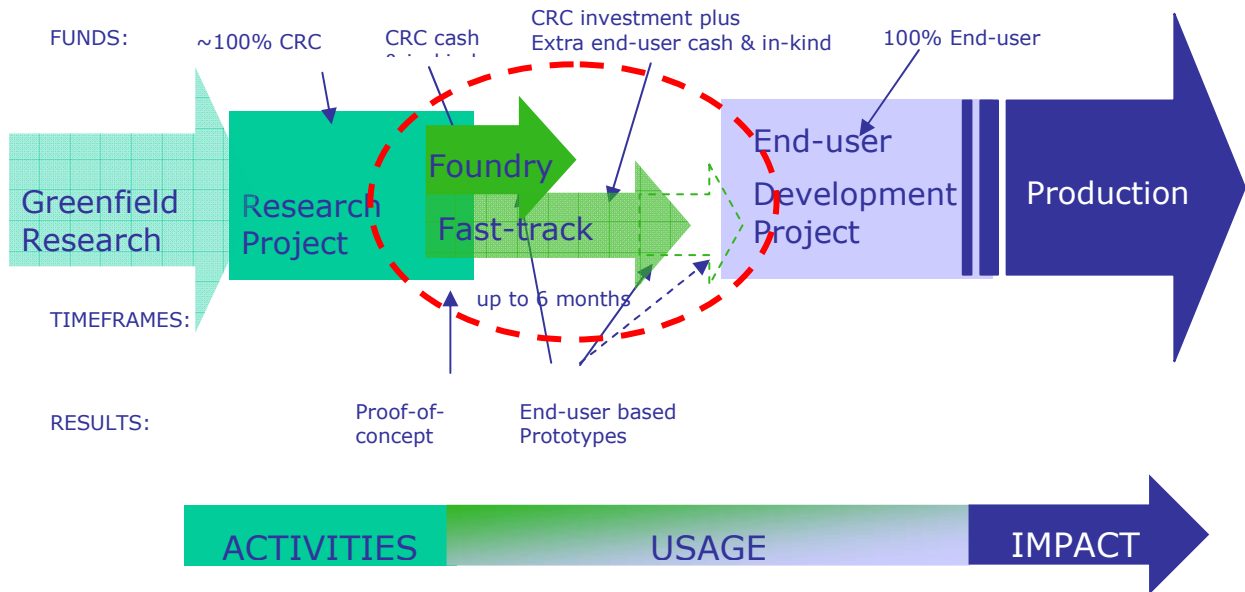
During the year of R&D the CRC funded 11 R&D projects with outcomes including:

- 16 early stage proofs of concept demonstrators showcased to industry.
- Software licence for two technologies (TagIt and Video Edit) issued to NSW Government for utilisation in education and training.
- Technology transfer of "Sunalyser" to Suncorp for further internal development prior to commercial implementation.
- Comet grant for Keep In Touch (KIT) technology and trials undertaken in a Sydney retirement village. The trials revealed our first early adopters as a 95 year old man and his 60 year old daughter who was pleased that she was engaged, through KIT, in her Fathers medication and monitoring program. The next stage will be to undertake longer multi-site trials of KIT.
- The interoperability virtual test centre (VTC) testing of services against agreed standards was launched at CeBIT 2009 as an available service.

- Commencement of a proof of concept demonstration of Collaborative Services Network for Loddon Mallee Regional Health Alliance to provide e-health opportunities in the area of Residential Aged Care.

The Services Innovation Foundry ('Foundry') with a development laboratory presence in Sydney and Brisbane plays a significant role in the CRC's commercialisation strategy, providing a transition pathway from research to commercialisation via prototyping, testing and customisation of core development platforms for end-user services. The Foundry facilitates quick trialling and testing of concepts to speed up the adoption by industry to new service creation.

Smart Services CRC Output, Usage, Impact Strategy



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 itself. 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 will be 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.
- 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 eleven patents being managed by the CRC, two have been filed as provisional patents, six are in the PCT stage and three are in the national phase.

Provisional Application

Title	Date Filed	Application Number
A System, Method & Computer Program for Determining the Probability of a Medical Event Occurring (MET)	28 April 2009	2009901842
A System, method and software application for the control of file transfer (Tabletop – File Transfer)	30 June 2009	2009903040

Patent Co-operation Treaty (PCT)

Title	Date Filed	Application Number
A System and Method for improving throughput in a Network Device (Bandwidth Maximiser No. 2)	7 June 2008	PCT/AU2008/000826
A System and Method for Capturing Digital Images (Tabletop – Capture Frame)	11 September 2008	PCT/AU/2008/001344
Systems and Methods for Remote File Transfer (Tabletop – Remote Resource)	11 September 2008	PCT/AU/2008/001343
A System and Method for Manipulating Digital Images on a Computer Display (Tabletop – Flipping)	11 September 2008	PCT/AU/2008/001345
An Interface Element for a Computer Interface (Tabletop – Blackhole)	11 September 2008	PCT/AU/2008/001342
Systems and Methods for Collaboration Interaction (Tabletop – Brainstorming)	19 May 2009	PCT/AU2009/000622

National Phase – Australian Patent Applications

Title	Date Filed	Application Number
Systems and Methods for Communicating (SWARM)	27 June 2006	2004292679
Methods and Systems for Facilitating Secure Communication (Trust Cloud)	7 September 2006	2006294401
A System and Methods for File Transfer to a Pervasive Computing System (Tabletop – On Top)	2 November 2007	2007231829

National Phase – European Patent Applications

Title	Date Filed	Application Number
Systems and Methods for Communicating (SWARM)	19 June 2006	04797114.8
Methods and Systems for Facilitating Secure Communication (Trust Cloud)	7 September 2006	06774932.5

National Phase – United States Patent Applications

Title	Date Filed	Application Number
Systems and Methods for Communicating (SWARM)	26 May 2006	10/580800
Methods and Systems for Facilitating Secure Communication (Trust Cloud)	20 March 2008	11/992465
A System and Methods for File Transfer to a Pervasive Computing System (Tabletop – On Top)	14 May 2009	2009/0125508

National Phase – Other Countries Patent Applications

Title	Date Filed	Application Number
Systems and Methods for Communicating (SWARM) – Hong Kong	26 February 2007	07102154.1
Systems and Methods for Communicating (SWARM) – Japan	26 May 2006	2006-540101
Systems and Methods for Communicating (SWARM) – South Korea	19 June 2006	10-2006-7012903

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 25 research papers referred and presented on the global stage at various conferences in China, Italy, Germany, USA, France and South Africa, as well as here in Australia.

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 commercialisation
- Articulate the vision for the CRC and the delivery of services for the future
- Demonstrate the outcomes of Smart Services CRC research projects
- 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.

With outcomes from 11 research projects, 16 demonstrators and 9 new projects in the pipeline for next year, the CRC is now in a position to engage with SMEs in a meaningful and beneficial way.

In the early part of 2010 we will launch 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.
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)
Keep in Touch Australia Pty Ltd	CRC spin off company	End-user trials in a Sydney retirement village.	Enables aged people to remain in home care position longer and improves contact with primary carer and family members to monitor well being and medication.	KIT estimate of market in Australia to be at least \$50m.
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.	Will enable significant savings in health system of up to \$1.4bn over 5 years.
NSW Government Dept of Education & Training, Centre for Learning Innovation	Government Participant/end user	Software licence for the trial & utilisation of TagIt and Video Edit for video based teaching and learning.	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 expected to be in excess of \$100m
Suncorp	Industry Participant	Technology Transfer of "Sunalyser" for further internal development prior to commercialisation.	Web-Based Wealth Management Service for end users to plan, predict and achieve their financial goals through all major life stages.	Will support broader service provided by banks to their customers as part of a customer relation strategy.
RACQ	Industry Participant	Trial of "Birdseye" in QLD	A cloud-based platform and user-facing Web and mobile application for tracking the location of multiple users and enabling location-based collaboration between them – next generation mobile roadside assistance service	Will improve productivity of call centre identification of customers and generate productivity savings in excess of \$10m p.a.

Education and Training



During the current year, Smart Services CRC awarded an additional 27 PhD Scholarships bringing the total to 29 PhD Scholarship Students. Students in the first and second rounds are well underway with their research. The Scholarships awarded during this period are a mixture of full and top-Up PhDs, plus some Honours and Masters Degrees students.

We also awarded 15 Summer Scholarships during this period which helped develop a number of prototypes and early stage demonstrators in project areas such as Multi-Channel Content Delivery and Social Media.

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.

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 CRC management team maintains an on-going conversation with each PhD student and their supervisor through six-monthly meetings in order to detect promising research ideas early, provide feedback to the students and help the student connect with the wider Smart Services CRC community.

Internal Conferences and Workshops

iClinix Launch

We officially launched the “THOMM – The Hospital based Clinical Hand Over Management Tool” at the NSW Department of State & Regional Development (DSRD).

iClinix and Smart Internet CRC (our former CRC) jointly developed this mobile computer based clinical task management tool for doctors to use in busy hospital wards.

Senior members of NSW Health, DSRD, Premiers Department, Industry and Partners of the CRC were present at this event.

Smart Services CRC Launch (Sydney)

The CRC was successfully launched on Thursday 3 July, 2008 by the Minister for Innovation, Industry, Science & Research, Senator The Honourable Kim Carr.

The event was strongly supported by Participants and a wide range of broader contacts who are interested in the work Smart Services is undertaking in the services sector.

Over 200 guests attended the function at the Australian Technology Park in Sydney plus a further 12 journalists.

Smart Services CRC Launch (Brisbane)

The CRC successfully launched the Brisbane node of the CRC on 11 September 2008 at the Queensland University of Technology. Special guests included Hon Arch Bevis MP, Prof Peter Coaldrake, Vice Chancellor of the Queensland University of Technology and Prof Lutz Heuser, Head of Research, SAP AG.

The Launch included showcasing some early stage technologies being commercialised by the Smart Services CRC and it was well attended with in excess of 100 guests.

CRC Participants and the CRC received good press coverage as a result of the launch with over 10 articles being published in a range of national papers (The Australian) and online publications.

Smart Services CRC Participant's Meetings

Participant Meetings were held on the 25 July 2008, 28 November 2008 and the 14 April 2009. The meetings were well attended by our participants, researchers and students of the CRC.

Project Workshops

Audience and Market Foresight Project: We held an initial Workshop for the Audience and Market Foresight Project on the 17 July 2008. This was held at the Australian Technology Park, Eveleigh.

Personalisation Project: We held an initial Workshop for the Personalisation Project on the 8 August 2008. This was held at the University of New South Wales, Sydney.

One-Stop Personalised Financial Services Project: The One-Stop Personalised Financial Services Project held an Interaction Design Workshop on the 23 February 2009. The workshop was designed to find out what are the key features users want in the next-generation financial services, with a focus on online banking.

2020 Project: We have held three Workshops for the 2020 Project on the 5 November 2008 (Brisbane), 25 March 2009 (Melbourne) and 13 May 2009 (Sydney). The purpose of the Services 2020 is to provide strategic foresight to our participants in the services sector. Workshop #1 and #2 uncovered themes of uncertainty about progress and technological dominance in modern life and Workshop #3 provided space to explore the themes uncovered in the first two workshops and engaged the participants in uncovering more key factors in our strategic environment.

All of the workshops were well represented by the Project Teams and our participants.

Smart Services CRC Student Conference

Our first Student Conference is planned for the 1 – 2 December 2009 at the University of Sydney. There will be a half day dedicated to Presentation Skills and Media Training followed by Commercialisation Training conducted by AIC and IP Management by our Patent Attorney in the afternoon.

The second day will concentrate on the student's delivering presentations to the participants and the researchers of the CRC followed by a Poster Session.

Smart Services CRC Annual Conference

Our Annual Conference is planned for the 2 - 3 December 2009 at the University of Sydney. This conference is designed for all participants, researchers and students of the Smart Services CRC.

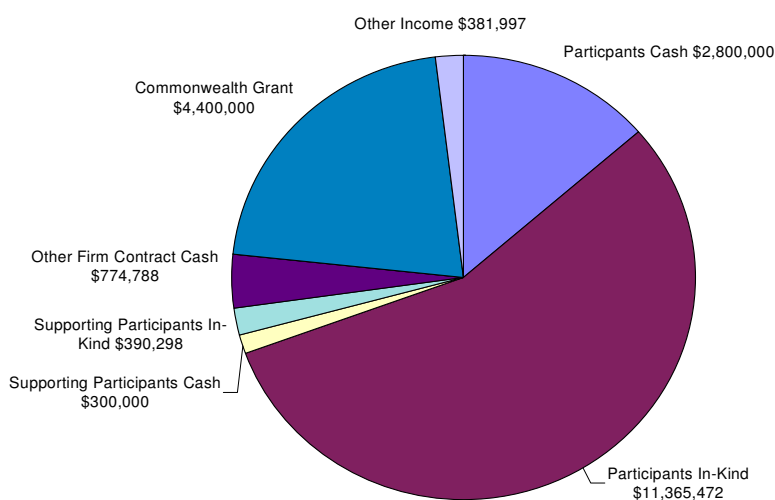
Financial Information



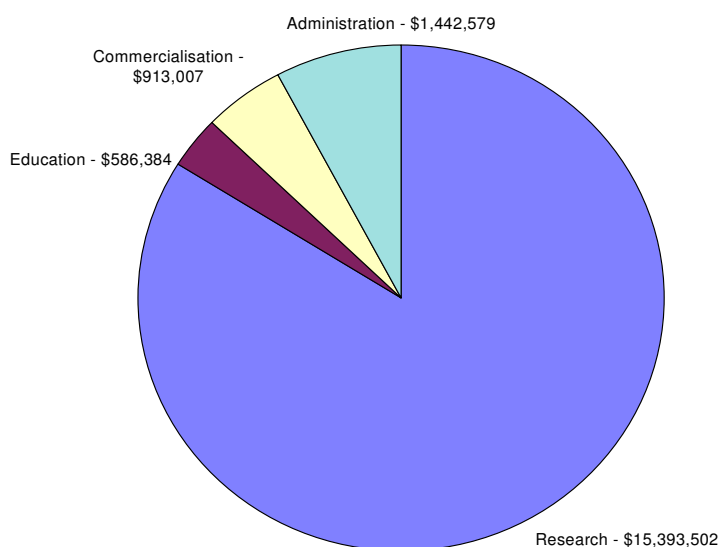
2008-09 was the second year of the Smart Services CRC after the signing of the Commonwealth Agreement during the 2007-08 year. The 2008-09 year was the first full year of program expenditure. Resources applied across CRC activities totalled \$18.3 million for the year and resources available to the CRC were \$20.4 million.

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

2008-09 Year Resources Available to Smart Services CRC



2008-09 Year Resources Applied by Smart Services CRC



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

**INDEPENDENT AUDIT REPORT
TO THE MEMBERS OF
SMART SERVICES CRC PTY LIMITED**

Report on the financial report

We have audited the accompanying financial report of Smart Services CRC Pty Limited (the company), which comprises the balance sheet as at 30 June 2009, and the income statement, statement of changes in equity and cash flow statement for the year ended on that date, a summary of significant accounting policies and other explanatory notes and the directors' declaration.

Directors' responsibility for the financial report

The directors of the company are responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards (including the Australian Accounting Interpretations) and the Corporations Act 2001. This responsibility includes establishing and maintaining internal control relevant to the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances. In Note 1, the directors also state, in accordance with Accounting Standard AASB 101: "Presentation of Financial Statements", that compliance with the Australian equivalents to International Financial Reporting Standards (IFRS) ensures that the financial report, comprising the financial statements and notes, complies with IFRS.

Auditor's responsibility

Our responsibility is to express an opinion on the financial report based on our audit. We conducted our audit in accordance with Australian Auditing Standards. These Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Independence

In conducting our audit, we have complied with the independence requirements of the Corporations Act 2001.

**INDEPENDENT AUDIT REPORT
TO THE MEMBERS OF
SMART SERVICES CRC PTY LIMITED**

Auditor's Opinion

In our opinion, the financial report presents fairly, in all material respects, the financial position of Smart Services CRC Pty Limited as at 30 June 2009, and of its financial performance and its cash flows for the year then ended in accordance with Australian Accounting Standards (including the Australian Accounting Interpretations).

WHK Horwath Sydney

WHK HORWATH SYDNEY

R. Wong Pitt Quay

**ROGER WONG
PRINCIPAL**

Dated this 22nd day of October 2009

Glossary of Terms



Australian Information Industry Association	AIIA
Australian Interactive Media Industry Association	AIMIA
Officer of the Order of Australia	AO
Australian Technology Park	ATP
Business Services Management	BSM
Committee for Economic Development of Australia	CEDA
Chief Executive Officer	CEO
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 of Health & Ageing	DOHA
Doctor	DR
Department State & Regional Development	DSRD
Enterprise & Government	E&G
Education & Training	E&T
Full time equivalent	FTE
Information & Communication Technology	ICT
Intellectual Property	IP
Keep-in-Touch Australia	KIT
Member of Parliament	MP
National ICT Industry Alliance	NICTA
New South Wales	NSW
Patent Co-Operation Treaty	PCT
Dr of Philosophy	PhD
Queensland University of Technology	QUT
Royal Automobile Club of Queensland	RACQ
Research & Development	R&D
Royal Melbourne Institute of Technology	RMIT
Small and Medium Enterprises	SME
Service Orientated Architecture	SOA
Television	TV
United States of America	USA
Unified Service Description Language	USDL

