



Preventing fraud in mCommerce

SBRI competition for development contracts
November 2012

Summary >

The Technology Strategy Board is to invest up to £1.5m to stimulate new solutions for mobile commerce (mCommerce) to counter the threat of theft and fraud.

This SBRI competition is an opportunity to develop new ways to go shopping, enable enterprise, to simply transfer money or to transact anything of value – but to do it in a way that creates confidence and security in these new platforms. The challenge is how can we make mCommerce meet the needs of **all** consumers?

The next generation of personal computing is rapidly developing on smart phones and tablets and, as a result, the next generation of online commerce will be mobile.

These sensor-rich, connected devices intimately linked to each consumer, present an unparalleled platform to understand the needs and wants of users and to satisfy them. But while these mobile platforms offer greater convenience than ever, they also present an ever-greater opportunity for theft and fraud.

This competition will fund organisations to develop mCommerce products/services that demonstrate secure attributes and reduce the probability of fraud. Up to £1m is available for phase 1 of the competition and up to a further £500k may be available in a second phase to further develop successful phase 1 projects. It is open to single companies or organisations from the private, public and third sectors, including charities. Projects will last up to five months and successful projects will attract a 100%-funded development contract of up to £50k. Projects will be supported further towards commercialisation by the Technology Strategy Board and the Home Office helping companies gain exposure to commercial organisations via the Forum for

Innovation in Crime Prevention.

This competition opens on **19 November 2012**. The deadline for registration is noon on **9 January 2013** and the deadline for applications is at noon on **16 January 2013**.

Background and Challenge >

The mCommerce market is expected to see a huge increase in activity over the next few years. *Mobile Commerce – From Evolution to Revolution*, published by investment bank GP Bullhound in September 2012, draws together information from many sources and reports a number of trends and statistics that highlight the rate of change.

It reports 6bn global mobile subscriptions and smart-phone ownership rates that will soon exceed 50% in Europe and the US. It sees mobile use growing quickly, outpacing growth in PC use, and mostly growing at the expense of PC use. Most users are looking to get the 'PC experience' on their phones. The report sees a huge potential customer base for mCommerce because the number of mobile subscribers is three times as large as the Internet user base.

The publication sees mCommerce as an evolution of eCommerce but expects growth of mCommerce to further transform the behaviour of consumers. It says online retail sales are forecast to grow to \$327bn dollars in the US by 2016, with mCommerce sales growing by 47% between 2011 and 2015 to be 9% of the eCommerce market.

However, the report adds that 59% of consumers would buy more via their mobile if the experience was better. It says the poor user experience is holding consumers back, as is a fragmented payment system and a lack of trust in using a mobile device to make a payment. Apps that work in isolation are seen as a further obstacle.

The Forum for Innovation in Crime Prevention, set up by the Home Office and chaired by Jeremy Browne, Minister of State for Crime Prevention,

has identified a need to encourage new and innovative products and services to emerge from the UK supplier base, with an emphasis on services that also resolve some of the underlying common issues that have been highlighted. Outputs from this competition will show how it is possible to design products and services that enable mobile commerce in a convenient and secure manner. Whether they offer existing mCommerce functionality in a more secure manner, or offer new ways to enable business via mobile technology, the goal is to create innovative solutions that can be adopted by the market.

We are working closely with the Home Office, which holds responsibility for fraud protection policy. We are also working closely with bodies that represent constituents who may benefit from well designed mCommerce solutions. The Design Council will also be helping us to ensure that good design is embedded into successful projects so that they offer the maximum benefit to the end user.

Scope >

Successful projects are encouraged to consider the areas outlined below.

Inclusive design We all know that some user groups find it hard to understand and use digital technology and can be left behind. But this latest generation of smart phones, tablet computers and apps provides a greater opportunity than ever to work for all users. How might solutions capture the widest market possible – those with a fear of complex technology, with poor eyesight or dexterity, even those with poor numeracy or literacy?

Consumer pull One of the most powerful forces in the adoption of innovation is consumer desire. How might solutions be designed to be attractive and clear propositions that facilitate their adoption at scale? This might mean a more compelling delivery of an existing mCommerce proposition, but it might also mean the development of a new way to use mobile platforms to enable micro-enterprises.

Security is important, but is it desirable? For some consumers considerations of mCommerce safety will be paramount, but for others it will be something that they are unaware of or dismissive of. How do we keep them safe even though they may be naïve about the threats?

Design for consumer behaviour

The psychology of online security is complex and general levels of consumer understanding are low. How might consumers best be guided towards mCommerce behaviours that do not expose them to fraud and theft?

Projects will be assessed against the following criteria:

- how they tackle inclusive design; consumer pull; security; and design for consumer behaviour to improve on existing m-Commerce solutions
- how the proposal demonstrates:
 - > innovation
 - > enhanced user experience
 - > enhanced technical performance
 - > reduction in opportunity for fraud?
- will the products be exploited across more than one operating system?
- can the applicant demonstrate the exploitation potential for current/new clients?

SBRI and funding allocation >

SBRI enables public sector bodies to connect with innovative ideas and technology businesses to provide innovative solutions to specific challenges and needs.

The public sector is able to find innovative solutions by reaching out to organisations from different sectors, including small and emerging businesses. New technical solutions are created through accelerated technology development, whilst risk is reduced through a phased development programme. SBRI also provides applicants with a transparent, competitive process and a reliable

source of early-stage funding.

SBRI competitions are open to all organisations that can demonstrate a route to market for their solution. The SBRI scheme is particularly suited to small and medium-sized business, as the contracts are of relatively small value and operate on short timescales. Public, private and third sectors, including charities, may apply. Developments are 100% funded and focus on specific identified needs, increasing the chance of exploitation. Suppliers for each project will be selected by an open competition process and retain the intellectual property generated from the project, with certain rights of use retained by the contracting authority. This is an excellent opportunity to establish an early customer for a new technology and to fund its development.

In this competition, we will use the SBRI mechanism to reach out to SMEs with the prime objective of developing innovative mCommerce products and services using the flexibility and scalability of mobile-based solutions.

By using the SBRI process we will be able to better direct R&D resources into the development of user-focused solutions that will have features and benefits that do not normally emerge early in the product life cycle. This SBRI will therefore be able to alter the market development of these products towards greater consumer adoption, especially penetrating hard-to-reach market segments.

Projects will be expected to develop new services in an area that faces complex challenges. By integrating payment/value services and mobile platforms, a typical project will make significant advances on existing products. This will be achieved by gaining new knowledge and skills to enable the integration of components that resolve the identified issues in the competition scope and allow this technology advancement to be validated in the market.

Up to £1m has been allocated to phase 1 of this competition and it is anticipated that contracts will be in the region of £25k to £50k. A further £500k of investment may be available to successful phase 1 projects (see the *Guidance for Applicants* for further information). Projects should last a maximum of five months. The assessors will consider fair market value in making their evaluation.

This competition is open to single companies or organisations from the private, public and third sectors, including charities.



Application process >

This SBRI competition opens on **19 November 2012**. The deadline for registration is noon on **9 January 2013** and the deadline for applications is noon on **16 January 2013**. Contracts will be issued by **1 March 2013**.

NB: All deadlines are at noon



Key dates >

Competition opens	19 November 2012
Registration deadline	9 January 2013 noon
Deadline for receipt of applications	16 January 2013 (noon)
Contracts awarded	1 March 2013

Further information >

To apply for this competition you must first register with us. You can do this by going to the web page for this competition at www.innovateuk.org under Competitions. The specific *Guidance for Applicants* document for this competition provides further and essential information on applying. It will be available on the web page for this competition when the competition opens on **19 November 2012**.

For more information about SBRI see www.innovateuk.org/sbri

Competition Helpline:

0300 321 4357

Email:

competitions@innovateuk.org

Publicity >

As part of the application process all applicants are asked to submit a public description of the project. This should adequately describe the project but not disclose any information that may impact on intellectual property, is confidential or commercially sensitive. The titles of successful projects, names of organisations, amounts awarded and the public description will be published once the award is confirmed as final. Information about unsuccessful project applications will remain confidential and will not be made public. E-mail pressoffice@tsb.gov.uk with any queries.

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The SBRI scheme is one of the tools the Technology Strategy Board uses to drive innovation. The Technology Strategy Board is a business-led executive non-departmental public body, established by the Government. Its role is to promote and support research into, and development and exploitation of, technology and innovation for the benefit of UK business, in order to increase economic growth and improve quality of life.

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