



Social Analytics for Business Enterprises

Call for Collaboration

Public Document

30 April 2013

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1. INTRODUCTION

- 1.1. The Infocomm Development Authority of Singapore (“IDA”) is issuing this Call for Collaboration (“CFC”) to invite Participants to submit Proposals on the development and deployment of Social Analytics (“SA”) for Business Enterprises.

2. IMPORTANT NOTICES

- 2.1. For the avoidance of doubt, this Public Document for the SA for Business Enterprises Call for Collaboration shall be read with and shall be subject to the Important Notices as set out in Annex A.

3. DEFINITIONS

- 3.1. The following word and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:

Social Analytics (SA) describes the process of monitoring, analyzing, measuring and interpreting digital interactions and relationships of people, topics, ideas and content¹. Interactions can occur within enterprises and external-facing communities. Social Analytics allows business enterprises to derive useful analytics insights on customers’ profiles and segments, understand customer insights as well as identify emerging trends and competition. In addition, it allows companies to identify and develop relationships with key advocates, and benchmark with competition.

Common Services refer to a set of SA service components that Users can subscribe to. It comprises social and enterprise data, analytics and delivery services, delivered on a common software and hardware platform. It shall also include supporting ad-hoc services (e.g. consulting and custom data integration) for enterprises.

Service Provider means Selected Participant who shall develop and provide the SA Services, including setting up the common infrastructure and platform, integrating and preparing Users’ data, developing, testing and tuning the analytics models underlying the SA services and delivering analytics outputs and reports to the Users.

User means a business participating in the programme for SA for Business Enterprises developed by the Service Provider.

Early Adopter means a User who participates in the initial implementation phase of the SA Services providing key requirements for the development and subsequently subscribing to these SA Services.

¹ Gartner IT Glossary

4. BACKGROUND

- 4.1 Currently, 1.5 billion people globally interact actively over social networks on a monthly basis. Singaporeans are among the most active social media users, with 3 million using Facebook and 900,000 on Twitter. This large and growing base of consumers on social media presents a significant opportunity for business enterprises to leverage upon to drive business outcomes and growth. McKinsey estimates \$1 trillion of business value can be leveraged from social technologies across business functions.²
- 4.2 SA efforts can help businesses to drive outcomes, for example, by reducing the cost of support, increasing word of mouth marketing, improving customer satisfaction, building brand advocacy, and driving revenue growth.
- 4.3 Sectors that stand to benefit most are those with heavy reliance on brand recognition, trust as well as those offering an experiential or customer-centric service (for example in sectors such as Retail, F&B, Tourism, etc).

5. SCOPE

- 5.1 For enterprises to realize the full business value of SA, they can enhance their capabilities in three areas: **Social Listening**, **Cross-Channel Analytics** and **Social Engagement solutions**.

² McKinsey Global Institute: “The social economy: Unlocking value and productivity through social technologies” (July 2012)

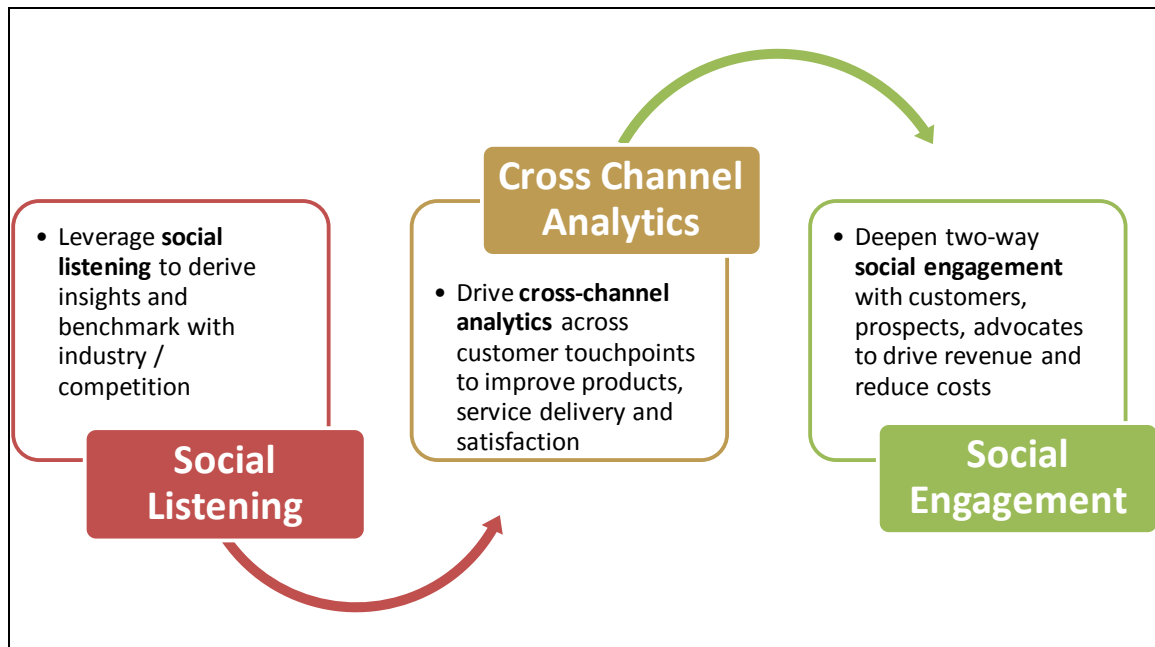


Figure 1. Social Analytics Capabilities

- 5.1.1 **Social Listening** is the practice of gathering data from social media sites such as social networks, microblogs, blogs, discussion forums, websites, podcasts, wikis and applying analytics techniques to derive insights and benchmark vs. competition and industry. Analytics techniques include trend analysis, sentiment analytics, persona analysis, etc.
- 5.1.2 **Cross-channel Analytics** integrates social media and information from multiple customer touchpoints (e.g. websites, mobile, in-store visits, structured market research surveys, call centres etc) to provide companies with a 360 degree view of the customer's experience and allow companies to improve products, service delivery and customer satisfaction.
- 5.1.3 **Social Engagement Solutions** enable enterprises to deepen two-way social engagement with customers, prospects and advocates that will in turn lead to revenue generation. Effective social engagement also reduces operational costs (e.g. customer support and marketing costs). Examples of social engagement solutions include customer communities and social engagement applications

6. OBJECTIVES

- 6.1 The SA for Business Enterprises Programme supports 2 key thrusts in IN2015, Singapore's InfoComm Technology (ICT) masterplan:

- 6.1.1. Enhance Economic Competitiveness through seeding strategic applications of SA in various sectors to improve operational efficiencies and enhance revenue growth of enterprises within these sectors.
 - 6.1.2. Increase Infocomm Growth and Competitiveness by enhancing the analytics capabilities of ICT companies through the implementations of the various strategic SA projects across the sectors with the intent to grow and export these capabilities.
- 6.2 The SA for Business Enterprises Programme aims to achieve the following objectives:
- 6.2.1. Increasing awareness of the value and benefits of SA. This CFC and industry outreach programmes aim to increase awareness of the value of SA solutions for businesses, and encourage greater adoption to improve productivity, enhance consumer insights and deepen customer engagement.
 - 6.2.2. Facilitating adoption of SA Common Services. Early adopters and other enterprises in target sectors can benefit from SA Common Services that help by lowering cost, easing implementation through common functionalities, infrastructure, and best practices.
 - 6.2.3. Driving adoption of more sophisticated usage of SA. Early adopters and enterprises are encouraged to adopt more sophisticated SA applications in the areas of Cross Channel Analytics and Social Engagement to achieve greater value and return on investment.
- 6.3 The objectives of the CFC are as follows:
- 6.3.1. To develop SA Common Services for specific sectors such that Users can relate social media signals within their respective industries more easily and derive deeper insights from the data ;
 - 6.3.2. To lower the cost of SA adoption by pooling together demand for SA functionalities needed industry-wide, and creating the supporting infrastructure for the provision of the SA Common Services.
- 6.4 Several sectors that are more customer-facing and with multiple engagement touchpoints have been identified as potential target sectors for SA adoption. These sectors are Retail, Food and Beverage and Tourism/Leisure. Other sectors that are keen to participate and where

business value can be demonstrated are also invited to submit proposals for this CFC.

- 6.5 This programme will entail the setup of supporting infrastructure and development of SA Common Services for specific industries.

7. REQUIREMENTS

7.1 Project Category

7.1.1. The solution offered by the SA Common Services for specific sectors should preferably span across all the 3 modules of Social Listening, Cross-Channel Analytics and Social Engagement. The following are some possible categories of solutions:

- **Social Listening, Cross-Channel Analytics and Social Engagement:** Modules specific for 1 or more sectors. All the 3 modules are implemented based on the requirements detailed below in this section. The functionalities supported by the SA services should provide insights contextualised for one or more sectors.
- **Social Listening and Social Engagement:** Modules specific for 1 or more sectors. The solution leverages industry specific Social Listening to drive Social Engagement leading to business impact. This is useful for Early Adopters that are still building their enterprise systems.
- **Advanced Social Engagement:** The focus is on innovative ways to engage customers or fans in social media, by leveraging analytics. Examples include building brand community platforms that utilise reward systems and gamification, supported by an analytics engine; and, social micro-segmentation in real time driven by multiple data sources including social media, mobile apps and e-commerce clickstreams. These solutions must demonstrate business values for a specific sector.

7.1.2. Proposals may also be submitted for Project Categories that fall outside of the above. Such proposals need to be accompanied with detailed and compelling justifications on how the proposed solutions are able to meet the requirements detailed in the following sub-sections.

7.2 Detailed Requirements

7.2.1. The schematic of the SA Services are shown in Figure 2. The SA Common Services comprise of a common infrastructure providing resources for computation and data management to support a set of SA functions that Users can subscribe to. This pooling of resources allows for economies of scale and consequently reduces subscription costs. The Industry-specific Templates overlay the Common Services to provide industry-relevant context for SA insights. Professional Services enable Users to address more enterprise-specific needs.

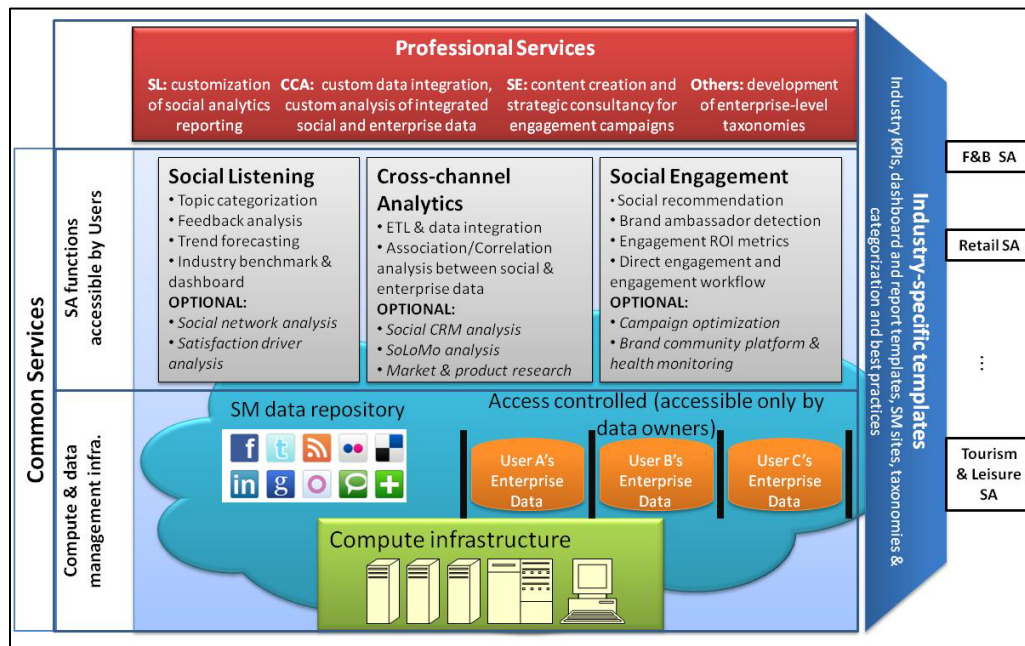


Figure 2. Industry-specific Social Analytics Services Schematic and Components

7.3 Common Compute and Data Management Infrastructure

7.3.1. All computational needs for a given sector are to be addressed by a common infrastructure. This infrastructure is preferably hosted in a public cloud. However, private cloud, hybrid cloud or managed hosting infrastructure options can also be considered. Regardless of its form, Service Providers are to manage how resources are provisioned to Users. The infrastructure must reflect today’s enterprise cloud capabilities, including elastic and distributed computing, on-demand access and metering, security and service level agreement.

- 7.3.2. Service Providers are to incorporate the capability to crawl social media sites regularly, store, index and maintain them in a common repository. The frequency of repository-update should be reasonable to prevent outdated insights from being delivered to Users.
- 7.3.3. To protect the privacy of Users' enterprise data hosted in a common infrastructure, Service Providers are to implement secure access control.
- 7.3.4. In cases where Users prefer to have their enterprise data hosted within their premises, Service Providers are to offer functionalities to allow secure and fast connections to move data from Users' premises to the common infrastructure where analysis will take place.
- 7.3.5. The common infrastructure shall be deployed and operated wholly in Singapore with local support provided.
- 7.3.6. Participants shall provide the following information about the common infrastructure in their proposals:
- The location and proposed infrastructure for the SA Services (e.g. public cloud, private cloud, managed hosting)
 - Service Levels, including availability and problem resolution response times;
 - The approach to ensuring scalability under peak load conditions and to accommodate projected growth of new data and user base without compromise to service levels;
 - An architecture diagram highlighting the scalability of the configuration, volume of data that can be supported, and number of users that can be supported; and
 - Data recovery (DR) plans and strategies, architecture, implementation approach, test plans and service level agreements in the event of system failure.

7.4 Social Analytics Functions

7.4.1. *Analytics Functions Supported by Social Analytics Common Services*

- 7.4.1.1. The Social Listening module helps Users to better understand their customers, brands and markets through

making sense of relevant conversations and activities that take place in social media.

- 7.4.1.2. To enable Users to listen to social media signals that are relevant to their industries, Industry-specific Templates need to be embedded into the design of the Social Listening module, as depicted in Figure 3.

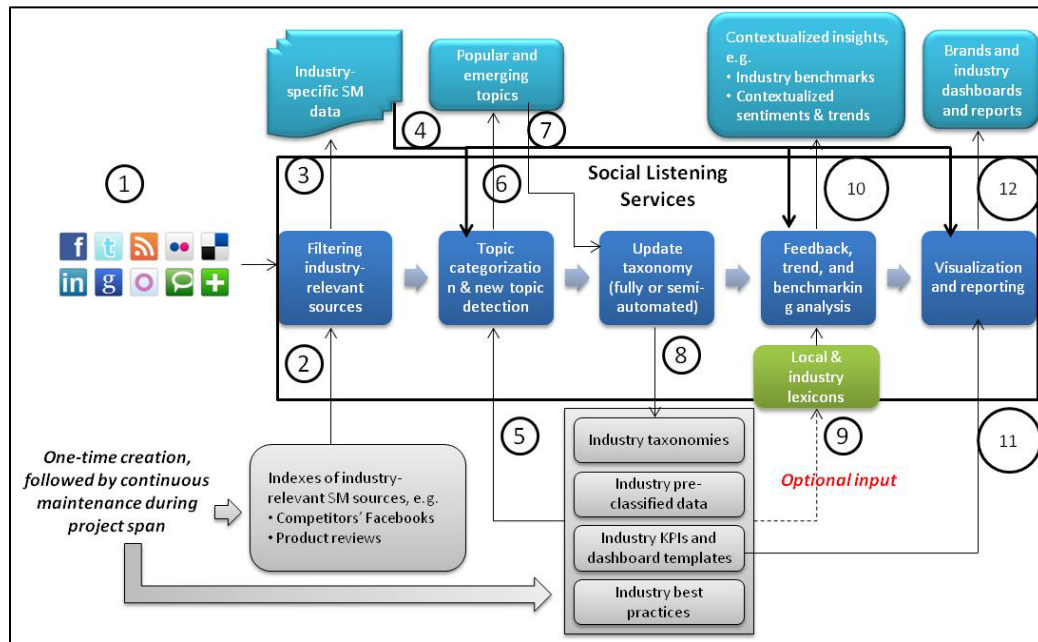


Figure 3. Design of Social Listening Common Service

- 7.4.1.3. Besides Industry-specific Templates, other design considerations for Social Listening include:

- Use of text analytics with NLP, supported by local and industry-specific lexicons
- Sensing of unexpected emerging topics
- Contextualisation of social insights taking into consideration social network and other data (eg spatio-temporal data)

- 7.4.1.4. Participants are welcome to propose other Social Listening module designs that can demonstrate value proposition minimally equivalent to the system in Figure 3.

- 7.4.1.5. Users should be allowed to access some analytics functions in the Social Listening module. Minimally, these functions should include those described in Table 1. More advanced

functions can optionally be proposed to be incorporated to address more niche listening needs.

Table 1. Social Listening Functions

Functions	Descriptions
<i>Topic categorisation</i>	Assigning social media posts into relevant categories that are either pre-defined by Users or newly identified as emerging. The service can notify users when certain categories of products suddenly receive a spike of mentions in social media. The capability to find new topics is important as it helps to anticipate new, unexpected situations that can be opportunities or threats to Users.
<i>Feedback analysis</i>	Providing feedback analysis of comments posted in social media. Users, for example, can call this function to gauge if their brands are perceived positively or negatively by their customers.
<i>Trend analysis</i>	Mapping and presenting topics or users' preference over time. Users can analyze why and how new situations develop and monitor trends. Previously unknown seasonal patterns of fans' behaviours revealed can potentially guide users on the right timing to engage their community.
<i>Industry benchmarking</i>	Allowing Users to benchmark specific industry KPIs against their competitors. The comparison is based on proxies derived from social media, which can include review scores, brand "Likes" counts and users' preference.

7.4.1.6. The Cross-Channel Analytics module merges users' social media and enterprise data, opening up possibilities to mesh SA insights with other customer touch points in Users' business environment.

7.4.1.7. To demonstrate value, the design of the Cross-Channel Analytics module should not just support integration between social and non-social data, but also analytics components that derive insights from the integrated data, as shown in Figure 4.

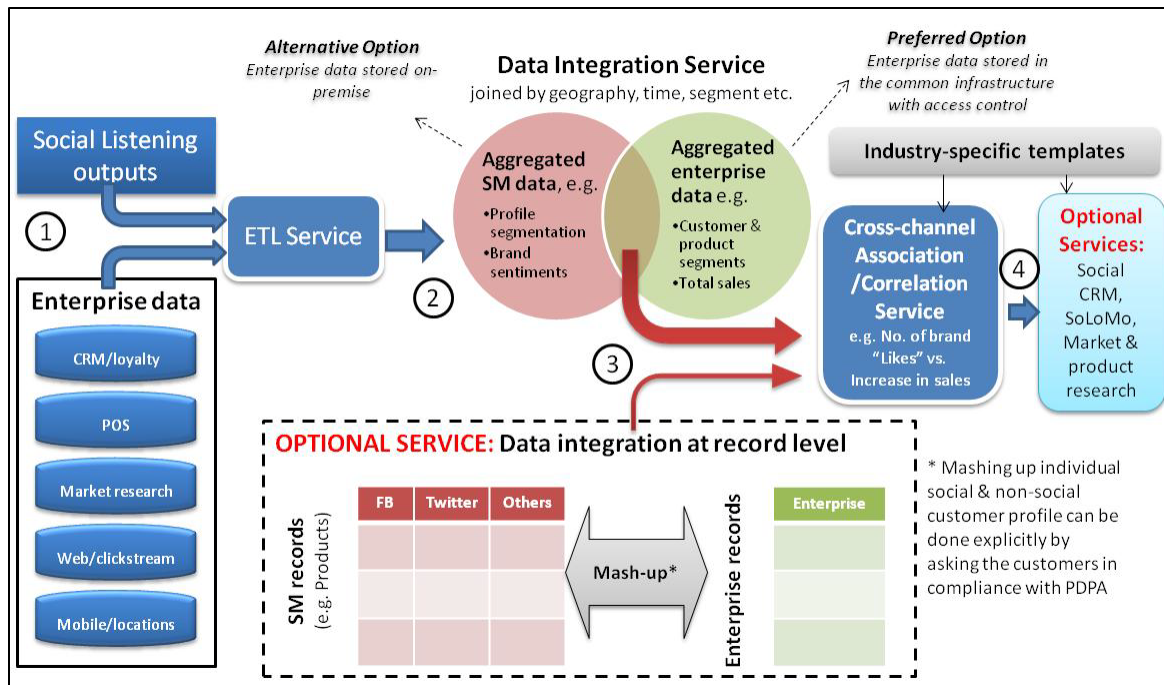


Figure 4. Design of Cross-Channel Analytics Common Service

7.4.1.8. Besides providing an analytics layer to process integrated data, other considerations in the design of the Cross-Channel Analytics module include the following:

- Social and enterprise data integration at different levels
- Design considerations to accommodate sensitive enterprise data analytics

7.4.1.9. Minimally, Users should be allowed to view or perform ETL (Extract, Transform and Load of data from systems) services on their social, non-social and integrated data. Basic association (or correlation) analysis connecting patterns from social and non-social spaces should also be made accessible for Users. Table 2 summarizes these minimal Cross-Channel Analytics functions. More advanced functions, such as Social Customer Relationship Management (CRM) and Social, Location, Mobile (SoLoMo) analyses, can also optionally be incorporated.

Table 2. Cross-Channel Analytics Functions

Functions	Descriptions
Data integration and Extract, Transform and Load (ETL)	Joining of social and (non-social) enterprise data. The sources of enterprise data can include the following: <ul style="list-style-type: none"> • Customer Relationship Management (CRM) or loyalty database • Point of Sales (POS) data • Market research data • Clickstreams or digital data (e.g. from e-commerce sites) • Location data from mobile apps or sensors
Association (or correlation) analysis between social and enterprise data	Analysing if certain patterns in social and non-social data are associated with each other. This outcome can highlight an opportunity to perform certain actions in the social channel, or vice versa.

7.4.1.10. The Social Engagement module helps Users to plan, conduct, monitor and review their engagement activities in social media optimally.

7.4.1.11. Besides providing the functionalities to engage fans in social media directly or systematically through a workflow engine, the design of the Social Engagement module should overlay an analytics layer to support more targeted engagement, as shown in Figure 5.

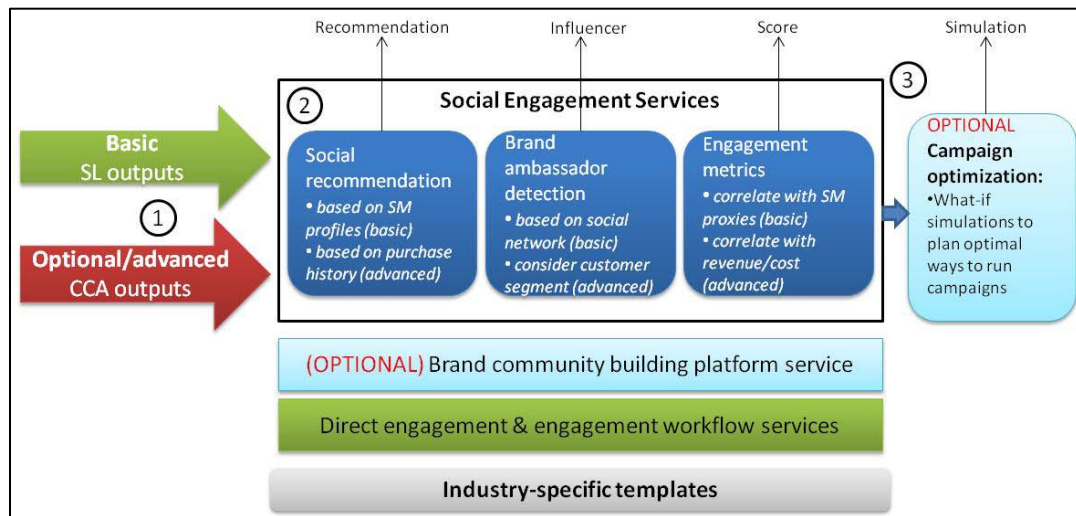


Figure 5. Design of Social Engagement Common Service

7.4.1.12. The design should also consider the following points:

- The ability to incorporate Social Engagement analytics functions (e.g. social recommendation, brand ambassador detection and engagement metrics) in both regular operation and ad-hoc campaign settings
- Complementing data-driven social engagement with insights from industry best practices and campaign strategies.
- Optimizing engagement based on insights from combined social and enterprise data analytics

7.4.1.13. Table 3 lists down a minimal set of basic Social Engagement functions to be supported. More advanced functions that drive engagements not just from social media proxies, but also from relevant enterprise data, community building practices or campaign predictive simulation can optionally be added.

Table 3. Social Engagement Functions

Functions	Descriptions
Social recommendation	Recommending users content types (e.g. messages, apps or offers) that can be delivered to customers or fans, taking into consideration their social media profiles or segmentation groups.
Brand ambassador detection	Identifying customers or fans that, if engaged, are likely to be influential in spreading the message to the social community. This analysis should minimally be based on customers or fans’ social network connections.
Engagement metrics	Associating engagement efforts with proxies from social media such as the number of “Likes” or re-tweets. This can tell users which engagements are effective and which are not.
Direct engagement and engagement workflow	This auxiliary service helps users respond to comments made via social media channels and direct questions to the right teams in the organization for follow up.

7.4.2. Provision of Social Analytics Common Services

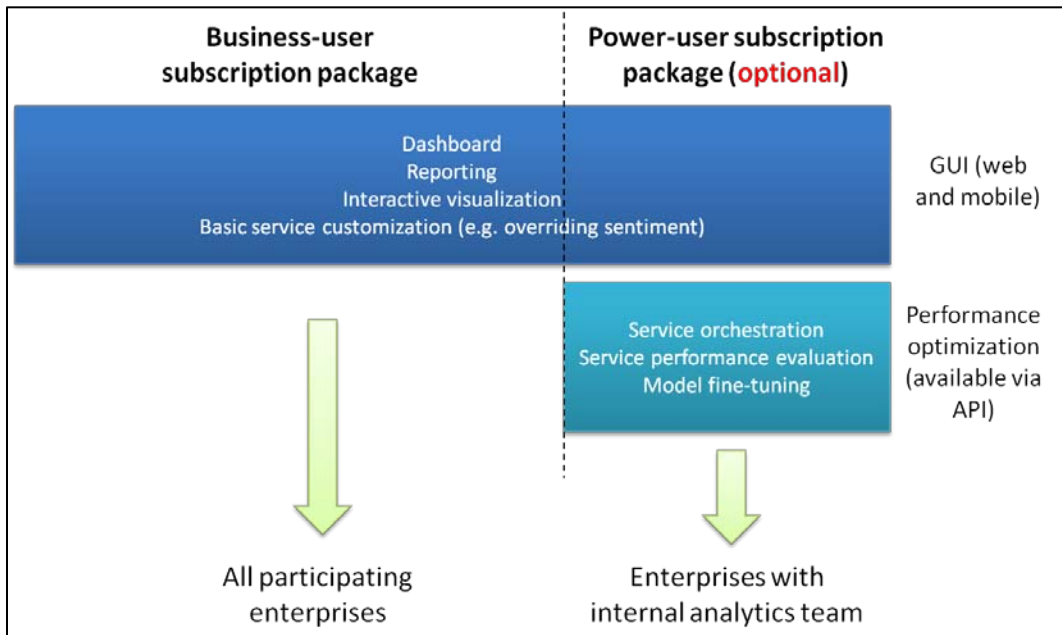


Figure 6. Common Service Provisioning

- 7.4.2.1. Figure 6 shows the provision of Common Services.
- 7.4.2.2. In the default Common Services package meant for Business Users, insights generated from Social Listening, Cross-Channel Analytics and Social Engagement modules are delivered in intuitive dashboards and reports, that are accessible minimally via the Web and optionally via tablet or smartphone.
- 7.4.2.3. The visualization must be equipped with interactive features, allowing users to drill down to detailed insights, and optionally connecting a few insights together. Basic forms of customization such as selecting alternative ways to plot insights must be supported.
- 7.4.2.4. Service Providers can optionally provide a Power User package tailored for analysts in the User organization. Preferable features of this package are as follows:
- Service orchestration: a tool for analysts to concatenate relevant components of Common Services into a workflow to answer business questions. For example, to effectively identify brand ambassadors or fans, users can consider the feedback expressed by the identified brand ambassadors and analyze their past purchase behaviours. To do this, analysts can orchestrate Brand Ambassador Detection, Feedback Analysis and ETL (on CRM database) services into a workflow.
 - Service performance evaluation: a tool for analysts to benchmark the accuracy and performance of Common Services, e.g. cross-validating the accuracy of Topic Categorization.
 - Model fine-tuning: a tool for analysts to modify algorithms or parameter values that are used within the SA Common Services.

7.4.3. *Common Services Specifications to be Included in the Proposals*

- 7.4.3.1. Participants shall provide the following information about each of Common Services in their proposals:

- Description and objectives, including the business challenges being addressed and relevance to the selected Sector
- Description of technological components underlying the individual SA services, and how the interplay among them can be related to achieving the goals of the CFC.
- SA techniques used, including the capabilities and constraints of the techniques to model real-world business processes; and
- Design considerations concerning scalability, security and privacy management, maintainability and support roadmap (where applicable)
- How the services leverage industry-specific Templates to generate insights that are relevant to selected sector
- Service provisioning, including results generated, output formats, sample reports and how businesses can make use of the results.

7.5 Industry-specific Templates

7.5.1. The Industry-specific Templates complement the Common Services to make the insights generated from the services relevant to Users and the industry they are in.

7.5.2. The Industry-specific Templates should include the following:

- Industry KPIs and dashboard templates: a list of keywords that signify industry-relevant metrics. The keywords are used to search relevant social media posts. These posts are then analyzed to allow industry benchmarking. The industry dashboard templates provide intuitive visualization for Users to know how they fare against their industry peers.
- Industry-relevant social media sites: a list of social networking, forum and review sites relevant to specific industry. Filtering social media data based on this list gives a more relevant input to analytics. Service Providers need to ensure a mechanism is in place to update this list frequently so that Common Services can give reasonably updated insights.
- Industry-specific taxonomy: a hierarchy of topics that are representative of organization of concepts in a particular industry. Primarily, it is used to categorize unstructured text in social

media into topics. Additionally, it can also be used to allow entity recognition in text analytics, so that phrases representing a particular industry concept are treated differently from generic phrases. Optionally, the taxonomy can be complemented with pre-classified training data, which help improve accuracies of topic categorization.

- Industry best practices: a set of rules of thumb garnered from deep industry understanding and consultancy work. They complement data-driven analysis, and can be channelled in the forms of encoded business rules, strategy templates and documentation.

7.5.3. Figure 7 summarizes the Industry-specific Templates.

Types	Descriptions/illustrations	Functions
Industry KPIs & dashboard templates		<ul style="list-style-type: none"> • Benchmarking performance with sectoral competitors
Industry-relevant Social Media Sites		<ul style="list-style-type: none"> • Minimizing irrelevant and overly generic signals from social media
Industry-specific taxonomy	<p>Concept taxonomy – a retail example</p>	<ul style="list-style-type: none"> • Mapping social media posts into industry topics • Reference to identify new topics • As a concept hierarchy for localized & industry-specific text lexicon
Industry-level topic categorization		<ul style="list-style-type: none"> • Improving classification of social media posts into topics & sentiment analysis
Industry best practices		<ul style="list-style-type: none"> • Rules of thumb for analysis that are not derived strictly from data (e.g. ~1000 impressions equivalent to 1 marketing dollar in a certain sector)

Figure 7. Industry-specific Templates Summary

7.5.4. Service Providers, Early Adopters and IDA are to collaborate to develop and validate Industry-specific Templates during the programme duration. The collaboration needs to establish what constitute industry-specific templates as opposed to enterprise-specific.

- 7.5.5. While Early Adopters and/or Service Providers shall retain ownership of enterprise-specific templates, the established industry-specific Templates will be owned by IDA to be used for the benefit of specific sectors.
- 7.5.6. Service Providers and Early Adopters shall agree to present Industry best practices at selected forums and outreach platforms, at the request of IDA, not exceeding 3 times a year.
- 7.5.7. Participants shall provide the following information about the Industry-specific Templates in their proposals:
- Description of templates and their functions
 - Explanations on how the templates are used to complement the Common Services
 - Methods to validate the effectiveness of the templates
 - Ways to justify why the templates should be considered industry specific (not generic nor enterprise specific)

7.6 Professional Services

- 7.6.1. Service providers are to provide a set of professional services to bridge the value gap between Users' use of the SA Common Services and their specific enterprise needs.
- 7.6.2. Preferably, the professional services are to include the following:
- Customization of dashboard and reporting for Social Listening
 - Customization of data integration for Cross-Channel Analytics
 - Enterprise-level content creation and strategic consultancy for Social Engagement
 - Enterprise-level taxonomy development
- 7.6.3. Participants shall provide the following information about the professional services in their proposals:
- Description of the services and their functions
 - Explanation on how the services are related to SA Common Services adoption

8. KEY DELIVERABLES

8.1 This section describes the key deliverables that the consortia of Service Providers and Early Adopters shall deliver after grant award, along with the timelines for delivery. 'T' shall refer to the date of CFC award.

8.2 Implementation Deliverables

8.2.1. Deliverables to be completed by T+3 months:

- Completed the common infrastructure setup to support Common Services delivery

8.2.2. Deliverables to be completed by T+6 months:

- Completed basic Social Listening requirement specification, development, testing and roll-out

8.2.3. Deliverables to be completed by T+9 months:

- Completed basic Cross-Channel Analytics requirement specification, development, testing and roll-out
- Completed basic Social Engagement requirement specification, development, testing and roll-out

8.2.4. Deliverables to be completed by T+12 months:

- Completed deployment of advanced modules, fine-tuning of services and development of Industry-specific Templates

8.2.5. Deliverables to be completed by T+18 months:

- Demonstrated business values from SA Common Services adoption, and submitted Business Value Impact report
- SA Common Services signed up by additional Users.

8.2.6. Table 4 summarizes the deliverables timeline for a project that aims to deliver Social Listening, Cross-Channel Analytics and Social Engagement services. For other project categories as discussed in section 7.1, participants are required to propose their timelines, which include explanations on individual milestones, and are aligned with the delivery of the final milestone by T+18 months.

Table 4. Deliverables Timeline

Milestones	Year 1				Year 2			
Common infrastructure setup	▼							
Social Listening basic, including: <ul style="list-style-type: none"> Requirement Development Testing Roll out 		▼						
Cross-channel Analytics basic, including: <ul style="list-style-type: none"> Requirement Development Testing Roll out 			▼					
Social Engagement basic, including: <ul style="list-style-type: none"> Requirement Development Testing Roll out 			▼					
Advanced modules, fine-tuning and Industry-specific Templates				▼				
Demonstrate business values, including: <ul style="list-style-type: none"> Submission of Business Impact Evaluation Report 						▼		
Additional Users signed up						▼		

8.3 Adoption Targets

8.3.1. The adoption target seeks to demonstrate the scalability of the SA Services in supporting multiple enterprises in addition to the Early Adopters.

8.3.2. Service Providers shall minimally achieve the following adoption targets according to the milestones stipulated in Table 5.

Table 5. Adoption Targets

T+9: Subscription by Early Adopters after implementation	T+18: No. of additional Users adopting SA Common Services
At least 3 Early Adopters per selected sector	At least 4 more enterprises

- 8.3.3. Participants are encouraged to engage user companies to participate as Early Adopters for their proposed SA for Business Enterprises project(s). Participants shall list their proposed Early Adopters in their Proposals. Proposals with secured commitments from Early Adopters with relevant SA potential are preferred.
- 8.3.4. Upon the launch of the SA Services, Service Providers shall also market their services and sign up other users to achieve adoption targets stipulated in Table 5. Service Providers are encouraged to enrich the user base and extend the Common Services to other sectors.

8.4 Obligation of Early Adopters

- 8.4.1. Early Adopters shall provide detailed analytical requirements to enable the development of the SA models and reports that are provided by the underlying the SA Services
- 8.4.2. Early Adopters shall subscribe to the SA Services for a minimum period of 2 years.
- 8.4.3. Early Adopters shall demonstrate the value of adopting Social Analytics and deliver the Business Impact Targets.
- 8.4.4. Early Adopters shall share learnings and experiences and contribute to the development of Social Analytics' industry best practices.

8.5 Business Impact Targets

- 8.5.1. To demonstrate the business value in adoption of Social Analytics, quantitative measures are used to assess the business impact of the SA Services. Service Providers shall perform business impact evaluation during the implementation of the SA Services, as stipulated in the deliverables timeline Table 4. Demonstrated business impact of SA by Early Adopters will catalyse further adoption by more enterprises.
- 8.5.2. Depending on the business functions supported by the use of SA Services in the Early Adopters' environment, the business impact measurements might include some or all of the metrics listed in Table 6.

Table 6. Business Impact Targets

Marketing	Corporate Communication	Product Development	Customer Service
<ul style="list-style-type: none"> • Increase in frequency, yield and reach due to targeted marketing driven by social data • Decrease in marketing cost by tapping into word-of-mouth as an efficient marketing channel 	<ul style="list-style-type: none"> • Improvement in brand reputation, with better understanding of how to make Social Engagement and marketing campaigns successful • Reduction in brand negative mentions, with faster and more effective detection, and response to brand crises 	<ul style="list-style-type: none"> • Increase in overall product review ratings, by identifying product features that correlate well with positive feedback 	<ul style="list-style-type: none"> • Reduction in delay in social media response, as insights from Social Listening allow proper planning of resources to support engagement demand • Decrease in overall customer service cost, by engaging and collaborating with social super fans

8.5.3. Participants are encouraged to propose additional quantitative business impact measures, which are not limited to the business functions included in Table 6.

8.5.4. Service Providers and Early Adopters shall commit to achieving specific Business Impact Targets in phases, as stipulated in the deliverables timeline Table 4. The targets shall be based on the measurements in Table 6 above, or as proposed by the Selected Participants, or other measurements as stipulated by IDA.

8.5.5. In measuring the business impact of SA, Service Provider shall take necessary measures (e.g. test and control data samples) to control for external factors that may affect the results of the evaluation.

8.5.6. While Service Providers may test the SA Services on historical data to validate the accuracy of the analytics models, the Business Impact Evaluation shall be performed on at least 6 months of “live” data collected during the implementation for Early Adopters. This is to measure the performance of the social analytics models in real-world settings, and to ascertain the robustness of the models.

8.5.7. Participants shall describe in detail the proposed methodology for monitoring and evaluating the performance of the SA Services, including the following information:

- Timeline for key implementation and measurement milestones;
- Scope of input data to be used (e.g. no. of data samples);
- Extent of deployment (e.g. no. of Users or no. of business processes);
- Quantitative and qualitative measurements;
- Measurement methods; and
- Control measures

8.5.8. Upon completion of the Business Impact Evaluation, Service Providers shall produce a Business Impact Evaluation Report, which shall minimally cover the following areas:

- Abstract;
- Actual scope of data input used;
- Actual scope of deployment;
- Quantitative and qualitative measurements;
- Measurement methods used;
- Control measures used;
- Analysis of findings;
- Recommendations (e.g. improvements to SA Services); and
- Summary.

9. DATA SECURITY AND PRIVACY

- 9.1 In order to protect the security and privacy of the Users' data on the Common Infrastructure and Services, participants complying with industry best practices and standards, codes of practices, security standards or guidelines shall be preferred.
- 9.2 Participants shall describe in their Proposals, in detail, the proposed security controls that will be implemented in the SA Services to ensure the security, confidentiality and privacy of Users' data. Participants shall also describe the proposed controls to ensure that Users subscribing to the SA Services will not be able to access the data of other Users without authorisation.
- 9.3 Participants shall state in their Proposals any security certifications or accreditations (eg ISO2700/27002, COBIT, Cloud Security Alliance, SAS70 or equivalent) that the Participant or its members have attained, or intend to attain for the purposes of this CFC.
- 9.4 Where the SA Services include the analysis of personal information (ie information that may lead to the identification of individuals), Service Provider and Users shall put in place the necessary processes and controls to comply with Singapore's Personal Data Protection Act.

10. BUSINESS PLAN

10.1 Service Providers shall deliver, without prejudice and discrimination, the SA Services to any prospective User who desires to enter into commercial agreement with the Service Provider and is able to fulfil its commercial obligations to the Service Provider.

10.2 Business Viability

10.2.1. Participants shall clearly articulate and substantiate the commercial viability and sustainability of the proposed SA Services during and beyond the project period. Proposals with a clear strategy for achieving and delivering a sustainable long-term business model will be considered favourably.

10.2.2. Participants shall submit a projected 3-year business case excluding a 1.5-year project period, detailing the capital investment and financing plan, as well as the projected revenue streams from the initial and future services, operational costs and profit from on-going operations. Participants shall also illustrate the contributions from the respective Consortium Members to the Service Provider's initial and future revenue streams. All assumptions used in the business case projections shall be stated clearly in the Proposal.

10.3 Marketing Plans and Adoption Strategies

10.3.1. Participants shall provide a detailed marketing and adoption plan to create the awareness of the SA Services, generate sustained usage and achieve the adoption targets stipulated in the CFC.

10.3.2. Participants shall be evaluated based on the feasibility of the proposed plans to achieve the projected adoption figures.

10.4 Pricing Strategies

10.4.1. Participants shall provide a clear pricing schedule for all proposed Service Offerings including Subscription (including optional) and Professional Services.

10.4.2. Preference will be given to Participants that offer the best value proposition to Users.

10.4.3. Service Provider shall commit to the price schedules during the project period.

10.4.4. Service Provider shall commit to sign-on Early Adopters for an additional period of at least 2 years after project period.

11. OWNERSHIP OF INTELLECTUAL PROPERTY

11.1 The Background Intellectual Property (IP) of any infrastructure or SA service and its underlying models developed pursuant to this CFC shall vest in the respective Service Provider. This will enable the SA Service Provider to enhance their SA capabilities and extend their services to other sectors and to enterprises in the region.

11.2 The ownership of the Foreground IP pursuant to this CFC for the Users shall be vested according to the conditions stipulated below:

11.2.1. IP of Users' enterprise data shall vest with respective Users.

11.2.2. IP of analytics insights, reports and enterprise-level templates arising from the use of SA Common Services or engagement of Professional Services shall vest with respective Users

11.2.3. IP in relation to the specifications of custom services orchestrated and models designed by power users (as explained in paragraph 7.4.2.4) pursuant to this CFC shall vest with respective Users

This is to ensure that Users' data, analytics reports and insights continue to reside with the Users and Users are able to migrate out of the Common Services platform and continue with their operations if necessary. Service Provider is obligated to support the transition by the Users to an alternate platform.

11.3 Service Provider shall agree to assign ownership of all IP in relation to the developed Industry-specific Templates (see section 7.5), pursuant to this CFC, to IDA at no cost. IDA reserves the right to reproduce, distribute and publish the Industry-specific Templates. This will allow IDA to share the industry-specific taxonomies, SA implementation framework and best practices with the industry and catalyse greater adoption of SA. IDA shall be free to seek inputs from qualified industry players and such inputs shall be taken into consideration in the development of the Industry-specific Templates.

11.4 The summary of IP ownership is as summarised in Table 7.

Table 7. IP Ownership

Owners	Intellectual Properties
Users	<ul style="list-style-type: none"> • Analytics results (e.g. insights, dashboards, reports) • Enterprise data • Specifications of custom services orchestrated and models designed by power users • Enterprise-level templates (enterprise taxonomies, custom KPIs and benchmarks and social media strategies)
Service Providers	<ul style="list-style-type: none"> • Social Analytics Common Services: Social Listening, Cross-Channel Analytics and Social Engagement Services), and their underlying analytics models • Hardware infrastructure (hosting, servers, storage and network)
IDA	<ul style="list-style-type: none"> • Industry-specific templates (industry taxonomies, KPIs, benchmarks, best practices)

12. CONSORTIA AND PARTICIPANTS

12.1 Participants can be one of the following:

- 12.1.1. Information & Communication Technology (ICT) solutions providers intending to develop and offer SA Services in the aforementioned areas;
- 12.1.2. SA services and solutions providers intending to develop and offer SA Services in the aforementioned areas; or
- 12.1.3. Companies intending to participate as Early Adopters or Users of the SA Services.

12.2 Pre-Requisites for Participants

- 12.2.1 The minimum pre-requisites for Participants in this CFC are as follows:
 - a) Participants that are individual companies shall be registered in Singapore with the Accounting & Corporate Regulatory Authority (ACRA);

- b) For Participants that are Consortia, at least the Consortium Leader shall be registered in Singapore with ACRA.
- c) Participants shall provide references to similar projects that they have previously undertaken.

12.3 Consortium Composition

- 12.3.1. Companies are encouraged to form consortia (“Consortia”) with relevant business partners (“Members”) with the necessary expertise, experience and domain knowledge to participate in the CFC.
- 12.3.2. Each company can be a Member of one or more Consortia offering the same or different Services;
- 12.3.3. Each Consortium shall clearly identify a Consortium Leader for the purpose of managing and coordinating the activities of the Consortium. The Consortium Leader shall be responsible for submitting a Proposal on behalf of its Members. The roles and responsibilities of every Participant must be clearly articulated in the Proposal. Consortia shall also list down any current or prospective alliance or partnership with companies or organisations that will participate as Users or Early Adopters.

13. PROJECT FUNDING

- 13.1 The funding for selected project(s) will be determined upon assessment of the impact and scope of the project. All terms and conditions of any such approved funding shall be agreed between selected Participants and IDA.
- 13.2 Potential areas for co-funding include:
 - 13.2.1. Infrastructure, software, development, manpower, professional services and training for Service Providers; and
 - 13.2.2. Subscription to SA Services, manpower, consulting services and training for users.
- 13.3 Any funding support will be performance-based to encourage the completion of the development of the SA Services and achievement of the committed targets.

14. SELECTION PROCESS

14.1 Evaluation Process

- 14.1.1 All Proposals will be evaluated by an Evaluation Committee nominated by IDA for consideration for award of a grant.
- 14.1.2 In assessing the shortlisted proposals, the evaluation criteria shall include, but not limited to, the following:
- a. **Competency of Participant/Consortium**, including the breadth of services offered, analytics capabilities, technical expertise and financial strength to complete the project; and
 - b. **Comprehensiveness and effectiveness of the Proposal**, including the ability of the SA Services to comply with all stated requirements; and
 - c. **Sustainability of the business model**, including the overall fee schedule, projected revenues, plans to generate revenue growth, and marketing plans to ensure sustained usage and growth of the SA Services; and
 - d. **Business value impact**, the potential business value generated to the sector based on the number of Users adopting the SA Services; and
 - e. **Adoption**, including the number of Users committed with agreements or documentary evidence from such businesses to show their commitment to participate as Early Adopters of the SA Services. Preference will be given to proposals with committed participation from Businesses.

14.2 Selection of Proposal(s) for Consideration for Award of Grant

- 14.2.1 Only complete Proposals will be evaluated by IDA for consideration for the award of a grant. Short-listed applicants may be required to make a presentation of their Proposal(s) (at their own cost and expense) and answer questions on the project in response to IDA's Evaluation Committee.

14.2.2 Without prejudice to paragraph 8.3, IDA reserves the right to reject any or all Proposals submitted pursuant to this Public Document for the Social Analytics for Business Enterprises CFC. Where a Proposal is selected by IDA for consideration for the award of a grant, the relevant Participant will be notified by IDA. The terms of the project, project milestones, and co-funding terms will be separately negotiated and agreed to between the parties.

14.2.3 For the avoidance of doubt, the selection of any Proposal by IDA may not necessarily lead to the award of a grant.

14.3 Disclaimer

14.3.1 IDA shall have the absolute discretion to accept or reject any Proposal submitted to IDA without being liable to give any reason thereof. IDA reserves the right to retain the Proposals submitted by all Parties without liability for the costs of such documents.

15. SCHEDULE

15.1 The estimated timeline of events is as follows:

Scheduled Timeline	Event
30 April 2013	Opening of Call for Collaboration (CFC)
20 May 2013	CFC Public Briefing to industry
27 June 2013	Last date for enquiries
28 June 2013	Final proposal submission
July 2013	Presentation by shortlisted participants
Sept 2013	Award of CFC

15.2 Public Briefing

15.2.1 All interested parties are invited to attend the CFC Public Briefing on **20 May 2013**. This briefing will be conducted by IDA and will cover details of the CFC, including events leading to the final award of the CFC.

15.2.2 All parties interested to attend the briefing are to register by email to **Bernie_wong@ida.gov.sg** no later than **15 May 2013**.

15.2.3 Details of the CFC Public Briefing will be made known to registered parties via email.

16. SUBMISSIONS

16.1 Format of Submissions

16.1.1. Submissions should be made using the Proposal template that can be downloaded from the website www.ida.gov.sg. Participants shall furnish all necessary information and documents as required in the template.

16.1.2. All submissions shall, at the minimum, include the following information to illustrate compliance with the requirements in this CFC:

- SA Services, covering the analytics services to be delivered, the assessment of the business needs and impact of the solution for proposed sectors;
- Analytics solution, covering the techniques, methodologies, inputs and outputs of all analytics components to meet the analytics requirements specified in this CFC.
- Technical solution, covering the architecture, functionalities, data standards, security standards, process designs and standards compliances to meet the end-to-end implementation requirements for SA Services specified in this CFC.
- Project implementation plan, covering the plans to achieve the implementation milestones required by this CFC;
- Business plan, covering the business model, clear pricing schedules of the SA Services, 3-year business case and broad commercial arrangements to ensure commercial viability;
- Marketing and adoption strategies, covering the selection of Early Adopters, clear marketing and adoption plans to drive the adoption and sustained usage of SA Services, and plans to achieve the adoption targets specified in this CFC; and
- Project costs and justifications, including the costs to develop and deploy the required SA Services, justifications and expected funding if any.

16.1.3. All assumptions used shall be stated clearly in the Proposal.

16.2 Place and Time of Submission

- 16.2.1. One (1) hardcopy and one (1) softcopy (in a CD-ROM) of the Proposal shall reach IDA no later than **28 June 2013** at 1200 hours. All Proposals must be clearly marked as “Social Analytics for Business Enterprises CFC” and addressed to :

Infocomm Development Authority of Singapore
10 Pasir Panjang Road
#10-01 Mapletree Business City
Singapore 117438

- 16.2.2. IDA reserves the right not to accept late submissions.
- 16.2.3. Proposals may also be submitted in person at the IDA reception desk on the 10th floor of 10 Pasir Panjang Road (Mapletree Business City).

16.3 Contact Details

- 16.3.1. Enquiries regarding this CFC shall be addressed to:
- Edwin Liok (Mr)
Infocomm Development Authority of Singapore
DID: +65 6211 0300
Email: edwin_liok@ida.gov.sg

 - William Tjhi (Mr)
Infocomm Development Authority of Singapore
DID: +65 6211 1487
Email: william_chandra_tjhi@ida.gov.sg
- 16.3.2. No further enquiries regarding this CFC will be entertained after **27 June 2013**