



Deliverable D6.7.1

QTLaunchPad Workshop: Research Innovation Application Scenarios (RIAS)

Author(s): Stephen Doherty, Federico Gaspari, Josef van Genabith, Declan Groves, Ankit Srivastava (DCU)

Dissemination Level: Public (Internal Version)

Date: 24.04.2013

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

Grant agreement no.	296347
Project acronym	QTLaunchPad
Project full title	Preparation and Launch of a Large-scale Action for Quality
Funding scheme	Coordination and Support Action
Coordinator	Prof. Hans Uszkoreit (DFKI)
Start date, duration	1 July 2012, 24 months
Distribution	Internal
Contractual date of	March 2013 (Extended)
Actual date of	April 2013
Deliverable number	D6.7.1
Deliverable title	QTLaunchPad Workshop on RIAS
Type	Report
Status and version	Draft for Internal Review
Number of pages	28
Contributing partners	DCU, DFKI, USFD
WP leader	DCU
Task leader	DCU
Authors	Stephen Doherty, Federico Gaspari, Josef van Genabith, Declan
EC project officer	Kimmo Rossi
The partners in	Deutsches Forschungszentrum für Künstliche Intelligenz (DFKI),
	Dublin City University (DCU), Ireland
	Institute for Language and Speech Processing, R.C. "Athena"
	The University of Sheffield (USFD), United Kingdom

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

For copies of reports, updates on project activities and other QTLaunchPad-related information, contact:

DFKI GmbH

QTLaunchPad

Dr. Aljoscha Burchardt

aljoscha.burchardt@dfki.de

Alt-Moabit 91c

Phone: +49 (30) 23895-1838

10559 Berlin, Germany

Fax: +49 (30) 23895-1810

Copies of reports and other material can also be accessed via <http://www.qt21.eu/launchpad>

© 2013 - The Individual Authors

No part of this document may be reproduced or transmitted in any form, or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission from the copyright owner.

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

Contents

1	Introduction	5
1.1	RIAS	5
1.2	RIAS Workshop and Related Events	6
2	Workshop Feedback	8
2.1	Verticals.....	8
2.1.1	Medical	8
2.1.2	Automotive.....	9
2.2	Media	10
2.3	Public.....	10
2.4	Common Themes	11
3	Conclusion	11
3.1	Summary	11
3.2	Future Directions	12
	Appendices.....	13
	Appendix A - Rome Workshop Agenda.....	14
	Appendix B - Workshop A5 Flyers.....	16
	Appendix C - Mailing List Material	19

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

1 Introduction

The aim of this report is to capture the discussions and feedback from the public workshop on the QTLaunchPad RIAS - research innovation application scenarios. Following an introduction to the RIAS and a description of the workshop format, this report:

1. provides specific feedback and discussion points for each RIAS (Sections 2.1 to 2.3);
2. highlights key commonalities (Section 2.4);
3. recommends future steps informed by the above (Section 3).

1.1 RIAS

As a core aspect of the QTLaunchPad initiative, the research innovation application scenarios, or RIAS, are areas that have been identified and explored as candidates for future collaborative research ventures in the areas of language and translation technologies. These areas have been identified in the background to the project and developed in the project's Planning Panel to establish profiles for each RIAS. These profiles consist of:

1. the components of the RIAS - tasks, domains, data, users, industrial actors, demonstrators and innovation mechanisms;
2. a SWOT analysis exploring strengths, weaknesses, opportunities and threats;
3. a breakdown of open issues with a view to establishing a roadmap for each RIAS within the context of the project aims.

Following a consultation period within the project and with external advisors and stakeholders, the following areas have been identified (see Deliverable D6.1.1/6.1.2 for more details):

- **Verticals:**
 - **Automotive** - technical documentation, internal communications for multilingual environments, support documentation, marketing materials, user-generated content;
 - **Medical** - high-quality medical information for the general public, emergency information warnings, multilingual communications, fast and accurate dissemination, usability and accessibility;
- **Public** - public consultations and dissemination of relevant information, public services and national, European, and international communications, e-Government, collaborative European initiatives;

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

- **Media** - multicultural and multimodal content, audio visual subtitling, audio descriptors, e-learning, digital content, standards.

1.2 RIAS Workshop and Related Events

As a means of information gathering from relevant stakeholder groups, a survey was conducted in late 2013 (whose results are documented in project deliverable D6.5.1: Report on Requirements Gathering from Relevant Stakeholder Groups). Of 438 respondents across approximately 40 countries, the survey examined a cross-section of the main stakeholder groups targeted by the QTLaunchPad project: translators and LSPs, large-scale public users of language technology (LT), providers of LT, and corporate users.

The findings of the survey highlighted current trends and best practices, and were particularly insightful regarding the utilisation of language and translation technologies in the context of quality assessment and MT post-editing. [As the survey drew upon a large number of participants from academic, a second survey is currently being disseminated amongst GALA's translation and localisation client list to ensure industry needs are well represented.](#)

The project consortium identified co-location with the MultilingualWeb workshop in Rome to be an ideal candidate for the QTLaunchPad project due to its location, resource cost, and audience (attendance of 150). The W3C MultilingualWeb¹ workshops are free and open to the public and concern standardisation and best practice for multilingual and multicultural web-based information, e.g. localisation, code standards. In sponsorship of the event, QTLaunchPad received e-mail access via the organiser to the attendees, a full-page promotional piece for the project, and space for exhibition in the main room of the event (pull-up poster and flyers). Promotional material for the event can be found on the QTLaunchPad website², the MultilingualWeb website³, the workshop flyer⁴, e-mail and social media announcements⁵, and on the GALA website⁶. In addition to these channels, the workshop was advertised via e-mail lists from project partners, including CNGL, MT-List, and social media (e.g. Twitter⁷ and LinkedIn⁸).

¹ <http://www.multilingualweb.eu/>

² <http://www.qt21.eu/launchpad/content/workshop-research-innovation-application-scenarios-%E2%80%93-rome-march-14th-2013>

³ <http://www.multilingualweb.eu/documents/rome-workshop/rome-program>

⁴ See Appendix B

⁵ See Appendix C

⁶ <http://www.gala-global.org/conference/qtlaunchpad-showcase>

⁷ <http://twitter.com/qtlaunchpad>

⁸ <http://www.linkedin.com/groups?gid=4807518>

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

The final agenda for the workshop can be found in Appendix A. The RIAS workshop took place in the afternoon of the full-day session, where the morning was assigned to the multidimensional quality metrics workshop detailed in D6.6.1. The structure of the RIAS workshop is outlined below and corresponds to the structure of feedback in Section 2 of this report:

1. Introduction to RIAS
2. Medical
3. Automotive
4. Public
5. Media
6. Closing Discussion

Each of the aforementioned stakeholder groups were well represented at the workshop: 7 LSPs, 2 LT providers, 2 corporate users, and 4 large-scale public users. In addition to this co-location with the MultilingualWeb event, QTLaunchPad had a strong presence at the Globalization and Localization Association conference in Miami⁹ supported by the project's sub-contractor GALA (attendance approximately 250; QTLaunchPad materials in each bag in addition to exhibition and workshop). GALA is the world's largest association for the language industry, including translation and localization. It is a non-profit in nature and provides resources to thousands of its members. Throughout the event, QTLaunchPad had an exhibition space with similar materials to the Rome event. This allowed project representatives many opportunities to present QTLaunchPad, the RIAS, and metrics to this audience, which resulted in feedback and contact points for many aspects of the project work, including feedback on RIAS as outlined in this report, the multidimensional quality metrics (D6.6.1), and future directions (D6.8.1 and D6.8.2).

⁹ See <http://www.gala-global.org/conference/>

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

2 Workshop Feedback

This section summarizes the feedback we got at the discussions in the workshop. A shared and open document was distributed to all participants at the workshop so they had an option to add comments online in addition to the live discussion¹⁰. This was especially useful for participants wishing to be kept informed of the project's updates and to continue the discussions afterwards. Each subsection relates to each RIAS (2.1 to 2.3), and common themes that were evident across the scenarios are detailed in 2.4.

2.1 Verticals

2.1.1 Medical

- Liability
 - Pervasive question about the liability for the accuracy and content of translation and language processing - this is critical in medical application of LT, especially in the context of MT.
- Usability
 - The usability of interfaces is critical and must be suitable for each use case, e.g. for medical doctors, patients, those with impairments, e.g. multimodal translations.
 - Interfaces can “make or break” the system, particularly with MT and lack of adaptivity to user groups.
 - There is a need to challenge user expectations that online free systems are the best MT can do. This can only be achieved through working and usable systems that demonstrate, in this case, in-domain high-quality and user-sensitive MT systems/plugin-ins.
- Stakeholder Buy In
 - For widespread adoption of new technologies, especially in contexts of trailing, there must be strong buy in from stakeholders for all use cases.
 - Practical demonstrations of the quantifiable value and potential to elicit buy in.

¹⁰

<http://docs.google.com/document/d/1zHik46IsRW82JDOIMkHXs7H9J0xAEA1k9fL0xQfrPB8/edit?usp=sharing>

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

- Accessible admission to project (low-level knowledge and experience required), especially in time sparse situations, e.g. accessing medical doctors for training for software.
- Resources
 - Existing ontologies mostly in English, e.g. little available in German. It is therefore necessary to work with practitioners to develop ontologies beyond basic frameworks where coverage is very limited.
 - Little or no LT resources in this domain outside of English. Additional incompatibilities of systems (both computer, medical, organisation, administrative) and available of data (e.g. legal aspects, ethics).
 - However, there are existing successes, e.g. studies in Australian clinics on automatic diagnosis for patients using ontologies, where machine-drive approaches are more reliable than humans.

2.1.2 Automotive

- Unique Nature of Industry
 - The automotive industry is well established and unique to Europe, projects such as QTLaunchPad should make use of this valuable positioning as a priority.
 - Adoption of English as a lingua franca by the industry.
 - External legalities and standards should be considered.
- Complexity of Processes
 - Variety of areas of application for LT and MT, e.g. technical documentation both in-house and external; outbound translations; internal communications.
 - Need to address established processes and cater for developing contexts of user-generated content (e.g. online support fora).
 - High-quality not always necessary for internal usage - raw output, no post-editing.
 - Need to use controlled language/authoring, etc., in some form as adopted by most corporations in this industry.

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

2.2 Media

- Communications
 - Pressing, yet long-standing, need to overcome the language borders in Europe. This ties in with many EU/EC initiatives under this theme.
 - This domain carries a wide range of applications, e.g. TV subtitles and dubbing, e-learning (lectures), audio description, web content, etc.
 - The nature of this domain is extremely multimodal, and far from just text, i.e. audio-visual with additional legislative and sociocultural requirements.
 - Consultation with a wide range of stakeholders is essential in this domain, especially as there are unwritten standards and practices and established networks.

- Standards
 - Already difficult to capture existing variety of cultural requirements and expectations, e.g. subtitling, dubbing.
 - Lack of empirical studies in this context; issues of proprietary data.
 - Essential to have a usable platform for industry to adopt at early stage, and be able to feed into its development to address all user needs and scenarios.
 - The availability of data can be restrictive, e.g. copyright.
 - Standards exist for formats and audio-visual coding, e.g. MPEG, and this is currently an area of growth and development, i.e. is not static or predictable.

2.3 Public

- Communications
 - Necessity to enable multilingual communication as part of broader European drive.
 - Envisaged increase in the accessibility of services and content, e.g. mobility of citizens.

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

- Current language silos greatly inhibit and segregate discussion of political topics, e.g. energy, economics, agriculture.
- Governance
 - Need to increase leverage of existing projects and linking in with topics of European identity and e-Government.
 - Urgent need to provide emergency content to multilingual communities, e.g. disaster alerts.
 - Focus should not only be on larger countries/languages, there is still an urgent need for smaller languages (links with EC-funded projects such as META-Net and Panacea).

2.4 Common Themes

In addition to the above points pertaining to each RIAS, the following commonalities were made explicit throughout the workshop and added to in the closing discussion:

- There is a need for increased contact with users and stakeholders, especially in extending language and translation technologies into previously unexplored areas of application.
- Furthermore, stakeholders need to be incorporated from an early state to formulate together with funding project partners a plan for meaningful and impactful research and development. Such an approach aligns perfectly with funding trends and allows for a range of applied and pure research initiatives.
- Finally, there also appears to be a trend of redoing and overlapping in European projects. Therefore, we should make more use of past and existing funding projects and their outcomes, e.g. deliverables, resources, lessons learned. This extends into promoting such projects to stakeholders and the wider public forum, especially in the area of language technology which needs to be highlighted as a topic of importance in Europe.

3 Conclusion

3.1 Summary

Overall, the focus of the stakeholder and user is apparent throughout the workshop discussion and feedback. Stakeholder/user inclusion and buy-in are pivotal in the uptake of

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

new technologies such as MT, where the value of such adoption must be clear and quantifiable for it to be successful. In addition, such demonstrations are not possible or ill-prepared if domain-specific expertise is not part of the process, especially in contexts of standardisation and legal requirements (e.g. medical). The importance of the usability of technologies cannot be overstated, where sensitivity is required for domain-specific user groups in each of the RIAS domains. Further to this, future research projects should make more effective use of existing resources and networks, and align themselves with national, European, and international initiatives where specified areas such as the RIAS can be more fine-grained in nature, yet lend themselves readily to identified areas of need, e.g. in funding calls.

Further to the acquisition of this valuable discussion and feedback outlined in the previous section, the workshops resulted in quantifiable gains in terms of QTLaunchPad's public exposure (traffic to the project homepage, www.gt21.eu, increased from 302 unique visits in the month of February to 524 in March, and 168 in April¹¹), awareness raising of RIAS topics, and membership to the project in terms of social media (e.g. increase to 71 members on LinkedIn¹²), mailing list (increase to 343 new opt-in members), and individual contacts with stakeholders.

3.2 Future Directions

In addition to the above feedback, future directions for the project were invited where the following points were collated:

- The project and the RIAS represent sufficient numbers and use cases for large-scale research and development in language and translation technologies.
- There is a need to move out of small projects and ramp up to a larger European landscape.
- External stakeholders can, and have been, in contact with the project consortium, this needs to be an on-going collaborative process where quantifiable value is evident.
- In pursuit of research funding, such a journey can be just as valuable as the end goal in terms of the outputs and connections forged through the lifespan of projects, especially in the context of coordination and support action projects such as QTLaunchPad.

¹¹ As of April 15th - to be updated at month end.

¹² For comparison, the META LinkedIn group has 356 members.

Appendices

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

Appendix A - Rome Workshop Agenda

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios



QTLaunchPad MQM & RIAS Workshops

Mexico Room D211, March 14th, 2013

Headquarters of the United Nations' Food and Agriculture Organisation,

Rome, Italy

WS 1	Multidimensional Quality Metrics	
09:00-09:30	Welcome and Introductions	• Hans Uszkoreit
09:30-10:30	Overview of Metrics <ul style="list-style-type: none"> • Principles • Issue types • Dimensions 	• Arle Lommel
10:30-10:45	Coffee (Outside Mexico Room)	
10:45-11:15	Using Dimensions to Build Task-Relevant Metrics	• Arle Lommel
11:15-11:45	Demonstration of Implementation in Open-Source Quality Tool	• Arle Lommel
11:45-12:00	Questions and Closing Discussion	
12:00-13:00	Lunch (FAO Cafeteria)	
WS 2	Research Innovation Application Scenarios	
13:00-13:15	RIAS Background & Stakeholder Report	• Stephen Doherty
13:15-14:45	Discussion of RIASes: <ul style="list-style-type: none"> • Medical • Automotive • Public 	• Jan Hajic • Hans Uszkoreit • Aljoscha Burchardt
14:45-15:00	Coffee (Outside Mexico Room)	
15:00-15:30	Discussion of RIASes: <ul style="list-style-type: none"> • Media 	• Volker Steinbiss
15:30-16:00	Questions and Closing Discussion	

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

Appendix B - Workshop A5 Flyers

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios



Multidimensional Quality Metrics

Translation Quality Assessment today is hampered by subjectivity, poor usability, and the inability of current models to effectively deal with MT in translation workflows. To move forward we need flexible, modern, and open metrics. The QTLaunchPad project is building next-generation metrics based on the following principles:

- **Adaptability and flexibility** for different project types, users, and workflows
- **Fairness** to all stakeholders
- **Applicability to source and target** to promote integration of the document-production lifecycle
- **Suitability** for both human and machine translation workflows
- **Comparability** across domains, projects, and language pairs
- **Standardization** upon existing ISO specifications and popular models
- **Usability** to ensure ease of use and uptake
- **Inclusivity** through a community-based effort including translators, companies, researchers, and tech-doc creators



What can the new quality assessment model offer you?

- A free, open, and flexible platform that supports requirements specification, bidding, translation quality assessment/assurance, and other business processes in one uniform model
- In-line markup supports issue resolution and auditing
- Comparability of results across jobs, domains, vendors, etc.
- Support for multiple levels of sophistication, from simple assessment to complex audit and analysis
- Standards-based approach using ISO/TS-11669
- Inclusion of end-user requirements
- User-extensible list of issues types
- Openness and compatibility with existing models (including full compatibility with legacy systems, e.g., LISA QA, SAE J2450) allows you to keep existing workflows while taking advantage of new features



Find out about upcoming workshops and events demonstrating the MQM @ qt21.eu/launchpad/events



QTLaunchPad is an EC-Funded Project under the Seventh Framework Programme (FP7) Grant Number: 296347

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

Appendix C - Mailing List Material

Message Begins

QTLaunchPad Workshops at MultilingualWeb, Rome

Dear Colleagues,

I wish to invite you to a workshop hosted by the EC-funded QTLaunchPad project on multidimensional quality metrics (MQM), and on use-cases for a large-scale future MT research initiative (RIAS), co-located with [MultilingualWeb W3C](#) in Rome, Italy.

Workshop Dates: March 14th, 2013

Time: MQM 09:00 - 12:00 (lunch included for both workshops); RIAS 13:00–16:00

Venue: Headquarters of the United Nations Food and Agriculture Organisation, Rome, Italy

Cost: Free

1. Workshop on Multidimensional Quality Metrics (MQM)

Translation Quality Assessment (TQA) has recently emerged as an important business topic where formal metrics such as the LISA QA Model and SAE J2450 for human translation have helped, but automatic metrics for machine translation are currently suitable only for research projects, not for production environments. QTLaunchPad has developed a [unified multidimensional framework](#) for TQA that is built around quality metrics that move beyond the limitations of existing models and focus on richness and compatibility with usability as a core feature.

This workshop focuses on the measurement of translation quality. It introduces attendees to the metrics introduced above. It will demonstrate tools for creating project type-specific metrics and ensuring their validity for actual production tasks. Participants will further be invited to provide feedback and to discuss their own quality requirements and needs to help improve and further develop the model in a discussion-oriented exploration of key issues related to TQA.

- Click [here](#) to attend and find out more about this workshop

2. Workshop on Research Innovation Application Scenarios (RIAS)

A central aim of QTLaunchPad is the preparation for a large-scale research and innovation action (QT21) in the application of research into of several core areas which have been identified in close consultation with stakeholders in research and industry. These research innovation application scenarios or RIAS represent promising combinations of tasks, domains, users, industrial actors, demonstrators, innovation mechanisms, data, etc. Current suggestions under discussion include:

- **Automotive:** technical documentation with the end user in mind, and internal communication for multilingual environments;
- **Medical:** high-quality medical information for the general public, and emergency warnings (e.g. earthquakes) when multilingual data (e.g. SMS) need to be disseminated quickly and accurately;

D6.7.1: QTLaunchPad Workshop: Research Innovation Application Scenarios

- **Public:** public consultations and information;
- **Media:** subtitling/audio descriptors, e.g. for lectures and person-to-person communication;
- **Language Learning:** multi-modal communications a foreign language that is mastered only partially.

This workshop presents the progress of the exploration of these areas to participants and invites interactive discussions where attendees can add their own needs and requirements and provide welcomed feedback to the work carried out so far.

- Click [here](#) to attend and find out more about this workshop

Thanks and best wishes on behalf of the QTLaunchPad team,

Stephen

Message Ends