



The European Coordination Hub for Open Robotics Development

5th Review Meeting – Work Package 4 RIFs (Robotics Innovation Facilities)

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WP 4 - Executive Summary

Accomplishments over the lifetime of the RIFs:

RIFs have engaged with 1225 unique clients

RIFs have collaborated with 128 clients, surpassing their initial target by 25%

WP 4 - Executive Summary

Accomplishments for the last reporting period:

- All RIFs have consolidated their position in their parent organisations.
- All RIFs have secured external funding to continue their operations beyond the E++ funded period.
- All RIFs are registered as operational Digital Innovation Hubs

WP 4 - Main objectives

The main objectives of this final period:

**Exploring and securing funding for RIFs
beyond E++**

This has been achieved.

WP 4 - Main achievements

Global RIFs Key Performance: Period Five

- **16 collaborations** commenced
- **53 RIF clients** engaged with RIF offerings
- **40%** of all activity conducted with **SMEs**

Task 4.6: Result extraction, and follow-up

Global RIFs Key Performance: Life time (October 2013 to 30 Sept 2018)

128 collaborations

1225 RIF clients engaged with RIF offerings

52% of all activity conducted with **SMEs**

Task 4.6: Result extraction, and follow-up

Global RIF Group

RIF User Type: Breakdown by Activity (RUNNING TOTAL)

Unique clients: 1225

Digital Media	Twitter Followers	LinkedIn Contacts	Facebook Fans	YouTube Views	Email - Organisations	Email - Individuals	TOTAL
Connections	2767	0	0	15659	1963	4058	24447

Interactions	Researcher	Entrepreneur	Start-Up	SME	Large Business	Public Body	Research Centre	HEI	Network	TOTAL	% of Interactions
InfoDays	47	0	0	33	1	3	0	9	0	93	7%
RIFLaunches	51	0	6	101	20	8	5	5	6	202	15%
External Events	0	0	10	217	43	12	23	13	80	298	30%
Collaborations	7	0	19	66	33	0	1	2	0	128	10%
Workshops	42	3	8	213	32	3	4	30	11	372	28%
Market Assessment	0	0	6	2	0	0	0	0	0	8	1%
Internships	33	-	-	-	-	-	-	-	-	33	3%
E++ Experimenters	0	0	0	8	1	0	1	0	0	10	1%
Pipeline	0	0	5	51	15	0	0	1	0	72	5%
	180	3	54	691	165	32	34	60	97	1316	

	Researcher	Entrepreneur	Start-Up	SME	Large Business	Public Body	Research Centre	HEI	Network	TOTAL
Unique Clients	148	4	46	667	174	26	34	50	76	1225
% of Total Clients	12%	0%	4%	54%	14%	2%	3%	4%	6%	

Highlights of WP4 during the project

- **Setting up of three facilities that have proved very effective in providing early stage assistance to those who are exploring robotics and automation**
- **Securing the brand RIF and a reputation for unbiased advice**

Lessons learned

Effective and frequent communication between RIFs is the key for a successful collaboration.

An early stage common WEB Platform for the three RIFs would have enhanced the interaction between the RIFs even more.

Lessons learned

- The partnership of the three RIFs would have advanced much more if a dedicated liaison person, appropriately funded, had been available.
- One or two shared projects between the RIFs would have strengthened the inter-RIF collaboration.

Lessons learned

A common electronic communication strategy (Skype, WebEx etc.) would be very useful but it can not replace physical meetings.

Identifying a communication strategy from the start is critical.

Lessons learned

The success of RIFs would have been even greater with a concerted marketing effort.

Bristol Focused activities

Success Stories from RIF@Bristol

Numatic International-New Process

Reach Robotics-New Product

Architectural Association School-New Process and Product

Walk to Beat-New Product

Socks On-New Product

Rolls Royce-New Process

Folium-New Product

Jaguar Land Rover-New Process

Leap Technology-New Product

Magna-Parva-New Process

Phineas-New Process

Success Stories from RIF@Bristol

Accomplishments over the lifetime of RIFs:

RIFs have been instrumental in helping start-ups achieve market presence.

For example; Reach Robotics, has raised over \$10m, employs over 70 people and sells its product in Apple shops.

Also in Numatic, RIF collaboration resulted in units produced per hour to go from 40 to 60 with a 12% increase in productivity. Two additional lines will be added to benefit further from these gains.

Developments at RIF@Bristol

RIF@BRISTOL has secured two new funding sources:

- **TERRINet to run for four years with the aim of creating a Europe wide research and training infrastructure**

Developments at RIF@Bristol

RIF@BRISTOL has also secured:

- **SABRE, (Smart Automation for Business, Research and Entrepreneurs) a three years long £1m funded project to help SMEs with automation and training.**

Developments at RIF@Bristol

RIF@BRISTOL has expanded its collaboration with banks.

Currently **NatWest**, but **Barclays** and **Lloyds** have also secured fee paying workshop sessions with RIF@Bristol.

A large firm of consultants has also requested training workshops for its clients.

Developments at RIF@Bristol

RIF@Bristol has signed an MoU with Engineering Employers Federation and will be delivering a number of fee paying workshops for their clients.

Other commercial and government funded agencies have approached RIF@Bristol for robotic and automation training courses.

Developments at RIF@Bristol

RIF@Bristol has been instrumental in the creation of the West of England Robotics Network, currently with over 200 members.

A feature of RIF@Bristol has been the focus on creating new start ups particularly in the Healthcare industry. Examples include Walk to Beat, Fluoretiq etc.

Developments at RIF@Bristol

Somerset Energy Innovation Centre is sending six delegates on a fee paying two day robotics course to RIF@Bristol. It has indicated that a pool of delegates need this training.

CENTRE EVENT



INTRODUCTION TO ROBOTICS WORKSHOP

Date: 26th - 27th March 2019

Time: Two days

Venue: Bristol Robotics Laboratory

BOOKING ESSENTIAL



Providing a practical introduction to the topic of industrial robotics, the Somerset Energy Innovation Centre has teamed up with engineers at the Bristol Robotics Laboratory RIFBristol facility to deliver this two-day interactive workshop.

Developments and legacy at RIF@Bristol

Examples of Current engagements in RIF@Bristol include:

Fluoretiq- A medical diagnostic start-up requires automated handling of samples. This TDP program has also led to application for an Innovate UK funded work .

Farm Studios- This TDP has demonstrated the use of robot mounted camera for creating natural history type footage for broadcast. The client is in the process of purchasing a £15k-£17k robot as a result of this work.

Real Wrap- A sandwich maker has engaged with RIF via the SABRE program to examine robotic packaging of sandwiches.

Developments at RIF@Bristol

Examples of current RIF@Bristol discussions for consultancy projects:

- Aerospace company examining a consultancy project for robotics on their production line. Their first RIF project led to the purchase of a robot and automation of their production.
- National Composite Centre and Institute for Manufacturing and RIF@Bristol are applying for Innovate UK funded project in the area of robotics in composite manufacture in SMEs.

Developments at RIF@Bristol

Examples of current RIF@Bristol discussions for consultancy projects:

- Discussions have started with a large pharmaceutical company for studies in robotics automation that fall outside of fixed automation.
- Discussions have reached an advanced stage with a manufacturer of sealing rings who wish to use RIF@Bristol as consultants and also seek funding from Innovate UK. The first contact with the company was via a NatWest workshop around three years ago!

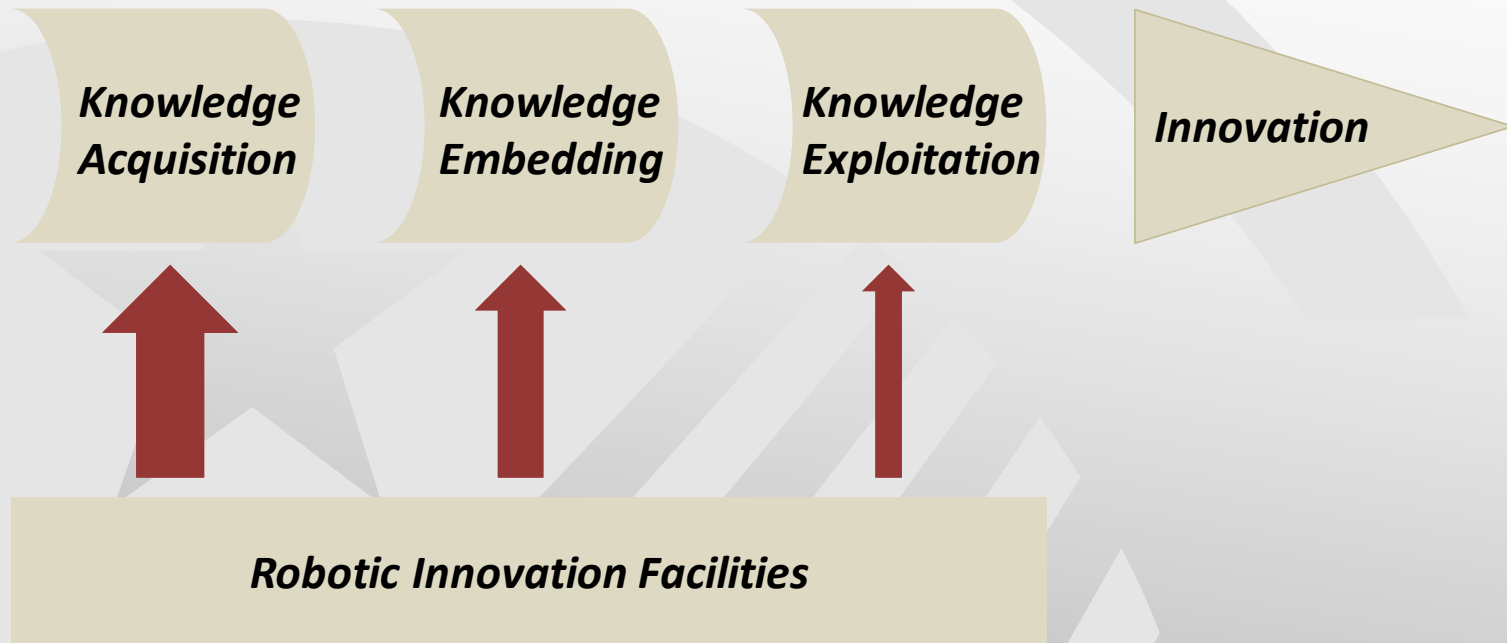
Developments at RIF@Bristol

- A number of workshops in robotics and mechatronics will be delivered over the next year.
- RIF@Bristol is engaged with supervision of three PhD and three MSc projects.
- For 2019 the agreement with the UWE directorate as stated in the RIF business plan was the generation of £30k from training and £60k from consultancy, current negotiations indicate these targets are achievable.

Use of expertise gained for future application

- **Developing strategies for collaboration with SMEs**
- **Managing expectations, there is a perception that robotics is easy, it is not!**
- **Developing a shared objective with the client**
- **Ability to identify the key challenges in an automation project at an early stage**

Use of expertise gained for future application



RIF's Contribution to Innovation

Thank you for your attention!

With **appropriate RIF funding**, opportunities for participating and leading the uptake of robotics and automation in both products and processes is only limited by our imagination!

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