Implementing an End-to-End Research Management System

EARMA 2017
Prof Jessie Kennedy (Edinburgh Napier)
Dr Lindsay Ramage (Edinburgh Napier)
Jon Hackney (Worktribe)
WHY DO IT?

• Edinburgh Napier wanted an integrated system to manage all research data
• Existing data captured in disparate tools and formats, or not at all…
  – ePrints repository for outputs - limited engagement
  – Excel spreadsheets for costing
  – Ad-hoc web pages for researcher profiles
• Inconsistent processes for costing research applications and recording research outputs.
• No way to monitor, report on or share our R&I activity internally or externally
PROCUREMENT PROCESS

• Business case developed and Project Board established
  – Dean of R&I was sponsor (and back seat project manager!)
• Wide Project team was established consisting of representatives across the University to specify the requirements of the system.
  – Core team making final decisions
• Emphasis in tender was for one “system” to cover all aspects: costing, outputs, profiles, web
• WT were only bidders to offer single solution
  – Although they only had a prototype repository/researcher profile tool
RISKS

• Could/Would WT deliver on the new functionality required?
  –Our background in in-house development of a similar system and our discussions with WT management team gave us confidence we could do it.

• Would the development be timely enough?
  –Really needed new system to improve processes and performance
  –IT systems well known for late/poor delivery

• Adoption/pushback by academics and administrators
  –Something we would just have to deal with!
BENEFITS

• Improved support for the Academic Community, Administrators and Managers
• One system for recording all research related data
  – Single data entry
  – Shared data between academics, administrators and managers
  – No lost forms!
• Consistent easy to use User Interface
  – reduced training, quicker take-up, reduced pushback
• Consistent, controlled and accurate research processes
• Reporting on R&I activity available to all who required it based on common information.
• Knowing what’s going on in the University.
HOW?

• Worktribe saw that ENU had clear vision

• Clear, concise, realistic requirements and specification

• Pragmatic, knowledgeable, authoritative team
  — ‘Coal-face’ experience
  — Ability to communicate quickly across the institution
  — Awareness of implications of decisions
  — Authority to make those decisions

which all sped up the process!
HOW? (cont.)

• Phased approach to implementation:

• Phase 1: Costing system
  — Already deployed in several Universities - had to be tailored for ENU
  — ENU responsible for integration with in-house Finance, HR and Authentication systems
  — Started in September 2016 rolled out April 2017
HOW? (cont.)

• Phase 2: Output Repository and Researcher Profiles
  – Collaborative development between WT (lead) and ENU
    • Rapid prototypes created by WT and reviewed by Edinburgh Napier
    • ENU team gave concise and precise feedback (including potential areas of improvement, and how to achieve!)
    • ENU were very clear on the things they didn’t like
  – Edinburgh Napier kept academics informed but didn’t over-promise (e-mailed newsletters to all-staff and/or just academics)
    • Invited academic staff to user testing sessions. They had the opportunity to get involved!
  – Went LIVE with untested system(!), which demonstrated the faith that ENU had in WT
  – Development commenced Jan 2017 rolled out July 2017
HOW? (cont.)

• Phase 3:
  – Integration with ENU Website (Sitecore)
  – Led by ENU but required development by WT
  – Went live October 2017

• Phase 4: Additional functionality post main roll out
e.g. REF module
  – Prototype REF2014 module in place
  – Awaiting detailed specification of requirements for REF2021...
ROLL-OUT - Phase 1

Research Office

- No BIG BANG, "come and speak to us" when you want to apply for funding
- Training - intuitive UI so advised but not compulsory
  - Caroline (from WT) sat in (in clandestine manner) on user acceptance/orientation/training sessions
- Projects:
  - manage pipeline workload in order to ensure quality at busy times
  - forced usage for applications for internal funding as part of ‘researcher development’
ROLL-OUT - Phase 2

• Profiles:
  – Understanding **who** our researchers are
  – Reporting on wider research activity
  – Understanding **what** our researchers do

• Pre-loaded info regarding academics
  – Transferred outputs from ePrints into WT
  – Legacy project data from variety of sources
  – CV information provided by academics
Engaging staff prior to roll out

- Comms "what's in it for me?"
  - Single portal that they could access/update a great amount of research data/information
- Take-up was encouraged (enforced !) in a number of ways: -
  - Pre-loaded info
  - Emailed academics informing that data would be used for: uni web population, CV generation, KPIs for promotion interviews(!) i.e. get your data up-to-date!
- Academics challenged the data - great that it was corrected, but quite a job to correct!
POST ROLL-OUT – Phase 2

• LOADS of positive feedback from the academic staff (plus problems, as you would expect)

• PI's have to create the project and put in basic info. It's been noted that:
  – Majority are able to do what's needed
  – Some are still "scared"
  – Some are worried that not all the info is ready - esp publications
  – Sometimes there's a unusual scheme that requires additional help

• Continuous improvement ongoing
• Feedback sessions and register
CHALLENGES

• Push back against **change**
• Streamlining and unifying University processes
• Some academic staff do **not** like have exposure of their research activity (potential IP theft!)
  – Q. "Who can see my data?"
  – A. "They will see what they could see before"
  – Q. "What are they using it for?"
  – A. "Many different things. You can too!"

• HUGE data cleansing issue, BUT that led to HUGE benefits ultimately

• Users understanding that this is not bespoke system and there are limitations on functionality
INTEGRATION TO WEBSITE

We wanted our Worktribe data to appear on University webpage to highlight our research and researchers.

• Difficulties with University Webpage functionality
• Compromise on formatting and display
• Not all data was suitable for public dissemination
• Pre-worktribe data not as complete/accurate
• Personal preference on display, photographs, where they appear on lists etc

http://www.napier.ac.uk/research-and-innovation/research-search
The system is very easy and straightforward – well done to you for designing it so brilliantly!
New staff member

The interface is clean - no unnecessary information
Academic, Anon

Very positive - user friendly, straightforward, comprehensive
Academic, Anon

Horrible. The focus on rejected proposals - I was faced with 3 rejected proposals when I logged in for the first time
Academic, Anon

Very useful system which has quickly became imbedded in my day to day role supporting the research community.
Very useful system which has quickly became imbedded in my day to day role supporting the research community.

Enables a transparent costing of research applications and gives a full insight into all the different stages of projects within the school portfolio
RIO pre-award staff

Is it possible to change the order in which outputs appear? It would be good if major publications could appear at the top, and smaller ones lower down the list.
Lecturer

A straightforward means by which to keep my information up-to-date, easily accessible to me, and also that keeps my public face up-to-date.
Academic, Anon

Worktribe as a system "is very good!"
Professor, not IT savvy
LESSONS LEARNED

• Make decisions at executive level
• Require strong leader/champion
• Jessie is an academic as well as the Dean of Research and Innovation (find someone like that, or two people who can combine to provide knowledge/authority)
• Communicate with future users as often as possible to engage them in the process
• You can’t please everyone all the time!!
• Work as closely (and honestly) as you can with provider to ensure you get most out of the system and relationship
DEMO and Q&A