

# Legacy and Heritage Software Systems: Support and Migration

## Semi-Structured Interview Guide

### Background Notes

I want to ask you about your experience of legacy and heritage software systems and potential strategies for support or modernising such systems. The research involves interviews with people doing a range of different roles and from different companies and large organisations which may have contrasting strategies.

The purpose here is to try to understand how legacy systems are supported and updated, so that we can try to learn for the future. In part, this research may help the University of Salford (and potentially partner organisations) identify opportunities to develop technologies, techniques or tools to help large organisations support their existing software systems.

I want to ask you the following questions and tape record your answers.

I do plan to publish interview transcripts and extracts but I will make names, projects, companies and clients anonymous.

Can I switch on the recorder?

### First-hand Project Experience

Please describe your current role?

What is your experience with existing legacy/heritage system?

Have you been engaged on a project to re-engineer a legacy software application?

What was your role?

What project management approach/process was used on the project?

### Probing Questions

How big was the project (budget? Number of people? Duration?)

What did the project achieve?

What challenges did the project face?

What were the main lessons you learn from that experience?

### Supporting Existing Legacy/Heritage Systems

What scope/scale of dependence does your organisation have on legacy/heritage software systems?

What challenges do you face in supporting legacy/heritage software systems?

How do you currently address those support challenges?

### Migration Strategies

How do you decide when to support, port, re-engineer or retire applications?

What factors influence the decision to migrate or re-engineer a large enterprise-scale legacy software application?

What factors impede the decision to re-engineer a large enterprise-scale legacy software application?

#### Probing Questions

- What organisational factors (such as staff skills and budget availability) affect re-engineering decisions?
- What infrastructure issues (such as hardware, operating systems and development/test platform availability) affect re-engineering decisions?
- What financial issues
- What policy issues

If you could fix one thing about migration, what would it be?

### Techniques for Re-engineering (Technical)

When you decide to migrate; what do you change?

When you decide to migrate: what do you keep?

What are the benefits of wrapping legacy software systems to integrate with modern architectures such as cloud or web services?

What are the challenges of wrapping legacy software systems to integrate with modern architectures such as cloud or web services?

What are the benefits of using automated software tools in re-engineering legacy software systems?

What are the challenges of using automated software tools in re-engineering legacy software systems?

What kind of automated tools do you currently use?

What kind of tools would you like to have that are not currently used?

#### Open-Ended Question

Is there anything else you think is relevant we have missed?

Is there anything else you think we should have asked?

### Personal Details

Reminder: This information will be kept confidential and not used in any publications. The information is required for our research records.

What is your name?

What is your job title?

How long have you been working at your current organisation?

How long have you been working in the industry?

### Notes

1. The interview guide will need to be tailored to specific respondents. For example, we might have an opportunity to interview an HR specialist from DWP. We do not need to ask someone from HR about their experience of migration projects or migration technologies and strategies. Instead we might want to ask about recruitment processes, costs, opportunities and challenges. Our approach should be to develop a somewhat bespoke interview guide, depending upon the role of the interviewee.

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