
Dissertation Conference Call For

REQUIREMENTS DETERMINATION OF
INFORMATION SYSTEMS: USER AND DEVELOPER
PERCEPTIONS OF FACTORS CONTRIBUTING TO
MISUNDERSTANDINGS

Chad McAllister

August 28, 2006

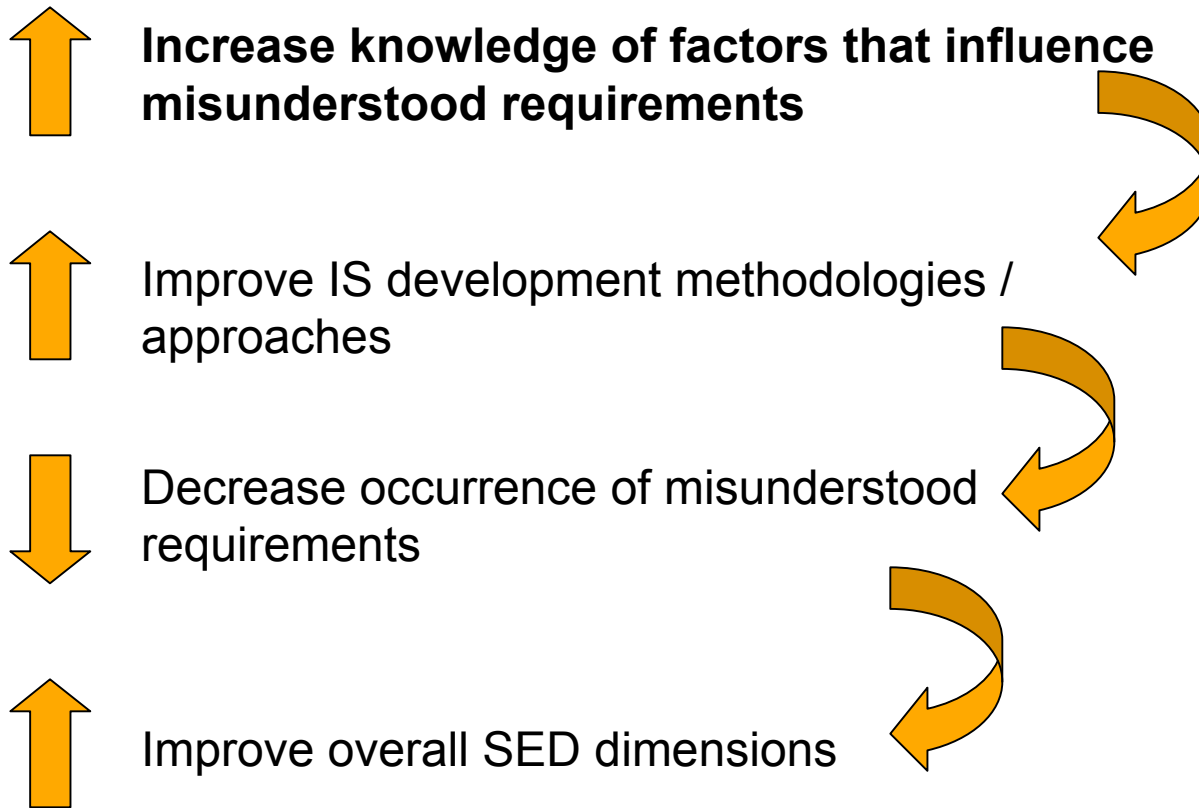
GENESIS OF THE RESEARCH

- Every year we have more software development processes
- Every year our success rate with software projects remains constant
- Why are we not getting better?
- Where are the biggest problems—with requirements

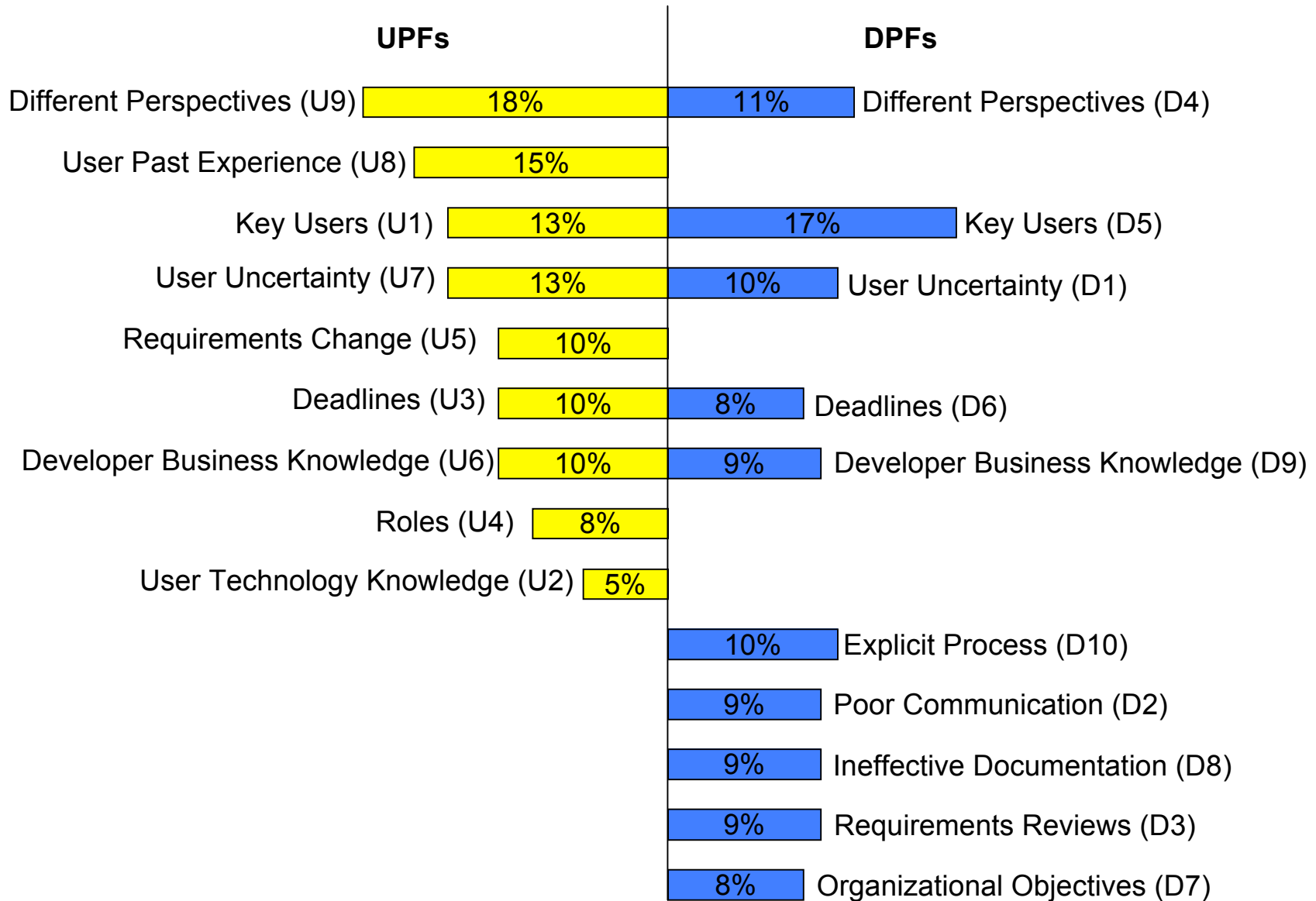
PROBLEM STATEMENT

- Users and developers misunderstand requirements for IS, which leads to requirement errors.
- This is important because errors impact project success, expense, and duration (SED):
 - Decrease success / increase risk of canceling project / decrease delivered functions
 - Increase expense
 - Lengthen duration

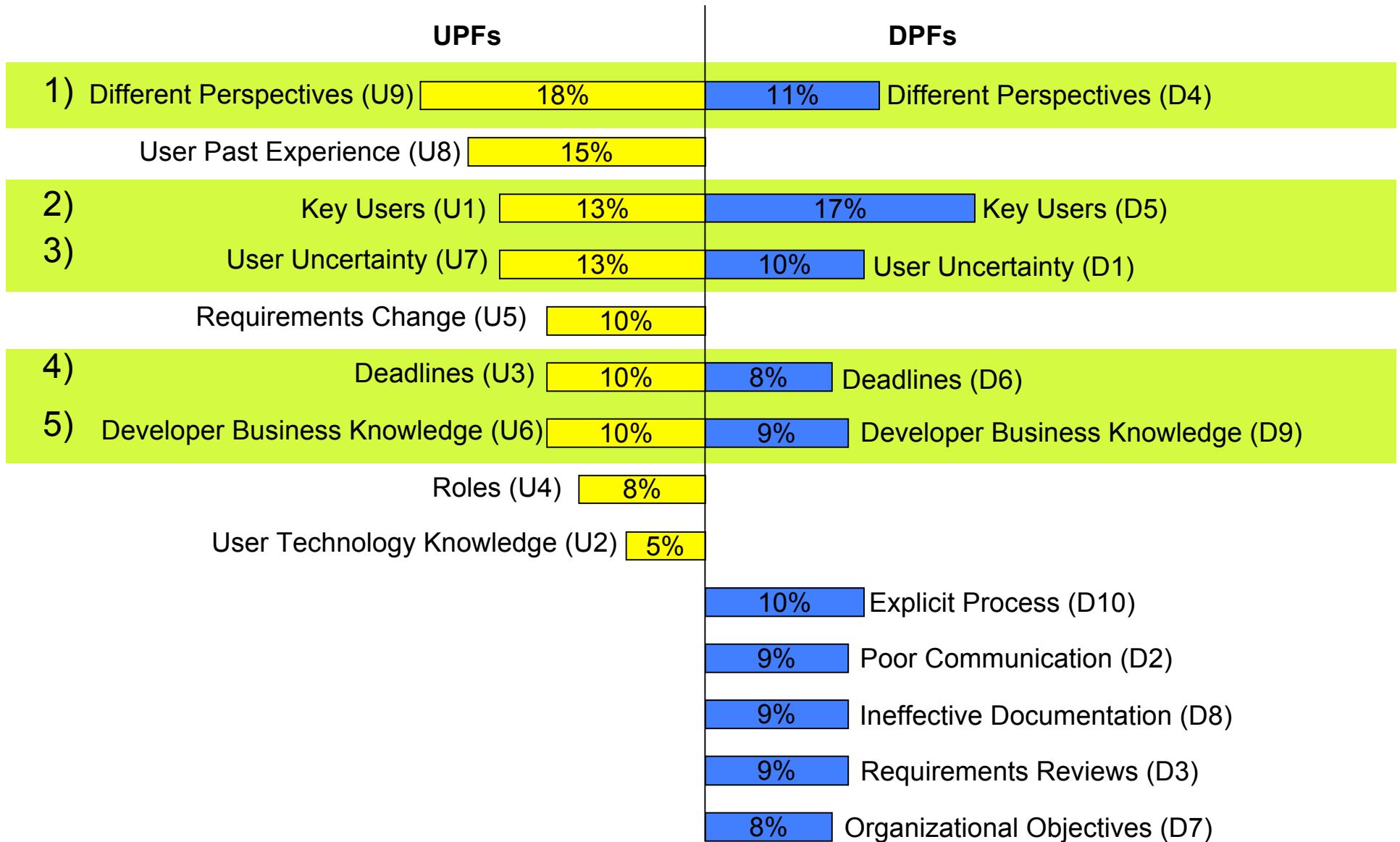
THE “SO WHAT”



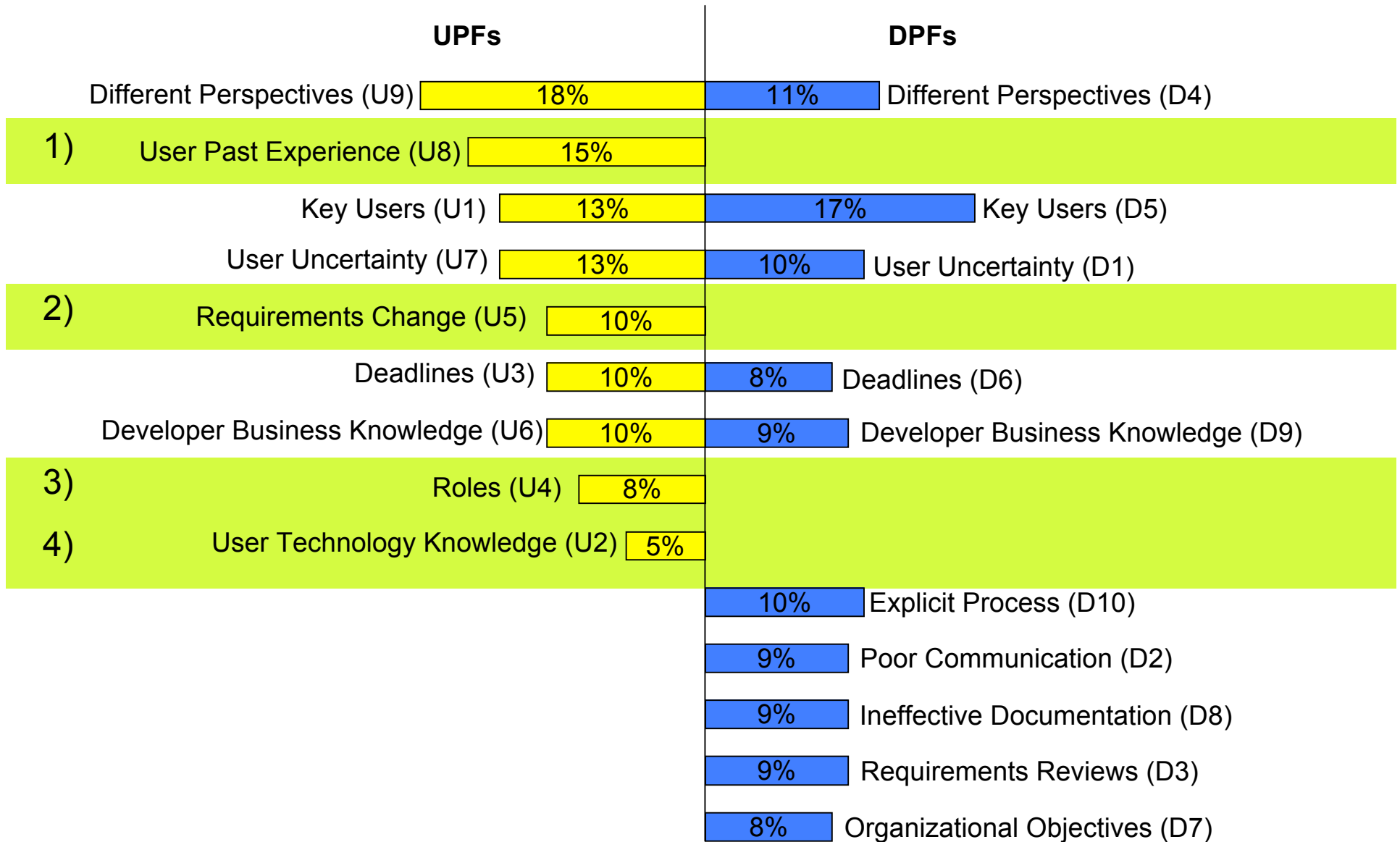
All UPFs and DPFs – 14 Total



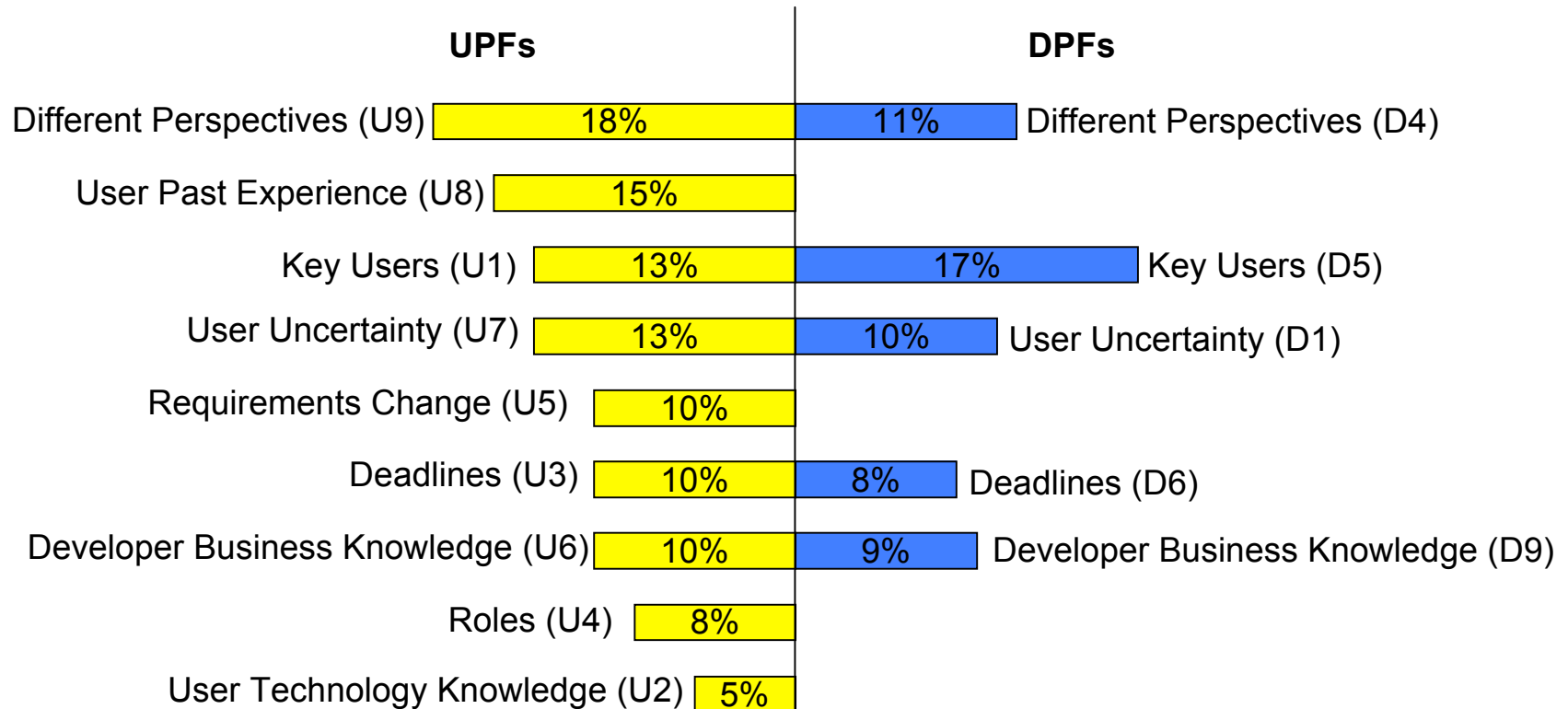
Five Shared UPFs and DPFs



Four UPFs Not Identified as DPFs



Five DPFs Not Identified as UPFs



- 1) 10% Explicit Process (D10)
- 2) 9% Poor Communication (D2)
- 3) 9% Ineffective Documentation (D8)
- 4) 9% Requirements Reviews (D3)
- 5) 8% Organizational Objectives (D7)

Reflections on the Results

- Little finger pointing—more ownership than expected
- Surprising amount of similarity across organizations from different sectors
- Surprising similarity between user and developer generated factors
- Users and developers want someone else to be responsible for requirements
- “Non-factors” need further exploration, e.g., negotiation, arrogance, motivation

Reflections on the Methodology

- NGT worked well, applicable to many situations
- AHP was simple to implement yet powerful, but exhibited inconsistent results—Other applications suggest that if AHP had been interactive then these issues might have been mitigated

Reflections on the Journey

- Skeptical at first, much better than expected
- Effort is proportional to value
- Great people made it rewarding
- It was worth the school loans

Next Steps

- So what—what action to take today to improve information system quality?
- Rich data in the “other” factors – the synthesized themes
- Broader collection of weights
- Alternative study to remove self-reporting bias

Q & A