1. Bibliographic Data

- **Title:** Towards New Requirements Engineering Competencies
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2. Theme of the Paper

Scientific Area: requirements engineering competencies

Specific Topics:

- the impact of complexity and changing environments on RE practices
- the need to go beyond traditional methods that are only interested in notations, tools and techniques
- the role of contextual intelligence in the context of RE practices with some more complex and more dynamic problems that emerge nowadays
- the difference between horizontal development, that are the technical skills, and vertical development which are the interpersonal and leadership skills

3. Synthesis of the Paper

Motivation and Relevance of the Study:

- the paper is driven by the reality that traditional RE methods are not really able to deal with the growing complexity, uncertainty and dynamism of modern design problems
- stresses that in order to effectively counter these unstable circumstances, RE must incorporate new capabilities that go beyond traditional practices

Important Points of the Background and State-of-the-Art

- design problem evolution: the paper addresses the evolution of design problems. From a time of steady and well delineated requirements to one where requirements are dynamic
- traditional method critique: it explains the weakness of traditional RE methods that attempt to eradicate uncertainty through formalized processes. They try to do this by identifying their inability to handle rapidly changing contexts
- interdisciplinary approaches: the authors stress the necessity of integrating social and technical perspectives, and drawing on interdisciplinary fields such as organizational studies, psychology and complexity science to make the RE practices greater

Main Findings, Results, and Their Novelty

- the authors hold that effective handling of complex design problems needs the development of new skills. Contextual intelligence would be one of the main things to develop, which is the ability to sense, understand and react to contextual conditions
- they propose that the future RE practitioners not only have to enhance their technical competencies but also develop personal competencies like sensemaking, dialogue, mindfulness and facilitative leadership
- this perspective is new in the way that it breaks from the traditional focus on fixed models and tools and demands a more dynamic, adaptive and interdisciplinary RE process

Key Findings and Discussion Points:

- paradigm shift required: the paper concludes that efficient management of complex and dynamic issues requires a paradigm shift in the management of RE. The shift needs to happen in order to change from rigid methodologies to the more adaptive and more flexible methodologies
- contextual intelligence focus: this is shown as one of the primary elements in the process of keeping up with RE practices because of the realities of an evolving work environment
- future directions: it demands focus on two different things while training the RE professionals. Building technical and personal competencies to deal with complexity more effectively

4. Questions and Reflection

Questions Raised by the Reading of the Paper:

- how can courses integrate the development of contextual intelligence into their RE study plan? What changes would be needed to the current study plans?
- how can the organizations balance investments between technical skills and developing personal skills in their RE teams?

Opinion regarding the Paper:

- the paper provides an updated and critical analysis of some of the RE paradigms that, in my opinion, still up to these days
- the focus on contextual intelligence and the need for the vertical skills development by the RE engineers is particularly relevant in today's uncertain work environment that we live in

My Takeaways for Future Professional Practice:

- competencies development: the paper shows the idea that technical and personal competencies development needs to have a balance in RE practice and training because if the engineers don’t develop one of these areas they wont reach their full potential

• interdisciplinary perspectives: looking to incorporate concepts from psychology, leadership and organizational theories to develop more resilient and responsive RE practices