

Importance of Ignorance

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A Long Time Ago, I Observed

In 1994, as a result of what happened during some requirements analysis consulting engagements, I concluded that ...

Conclusion of Observation

Every requirements analysis team for the development of a computer-based system in some domain must have

- **at least one computing-and-language-smart domain-ignoramus among the requirements analysts *and***
- **at least one domain expert supplied by the clients.**

The Domain Ignoramus

- **knows computing cold and**
- **is familiar enough with language that E can detect inconsistencies in statements even if E does not understand all the details in the statements**

The Domain Ignoramus

is believed to find it easier

- **to avoid falling into the tacit-assumption tarpit,**
- **to ask questions when something is the slightest bit unclear, and**
- **to think out of the domain box.**

Previous Sighting of Idea

P. Burkinshaw at Second NATO Conference on Software Engineering, 1969:

Get some intelligent ignoramus to read through your documentation and try the system; he will find many “holes” where essential information has been omitted. Unfortunately intelligent people don’t stay ignorant too long, so ignorance becomes a rather precious resource.

Other Sightings of Idea

Others in other fields (e.g., psychology) have reported similar observations.

Domain ignoramuses more easily avoid channeling than do domain experts.

Empirical Tests of Idea

Recently, we have been testing this observation empirically.

Importance of Ignorance in Immigration to Projects

We have shown with a survey and mining of another's empirical data that there is a small but significant correlation between ...

- **success in immigrating into a new software development project and**
- **having been initially assigned project tasks for which domain ignorance is at least helpful.**

Immigration to Projects, Cont'd

At the very least, an immigrant, who is initially assigned project tasks for which domain ignorance is at least helpful, is

- **immediately useful to the project**
- **without requiring many mentoring resources**
- **and can learn domain in a more leisurely fashion.**

Importance of Ignorance in Requirements Elicitation

We have shown by controlled experiments and case studies that there is slight but significant support for the hypothesis that ...

Hypothesis:

A requirements elicitation team consisting of a mix of domain ignoramuses and domain awares

generates more and better requirements ideas than

does a requirements elicitation team consisting of only domain ignoramuses or only domain awares.