

Evidence-Based Development: A Viable Approach?

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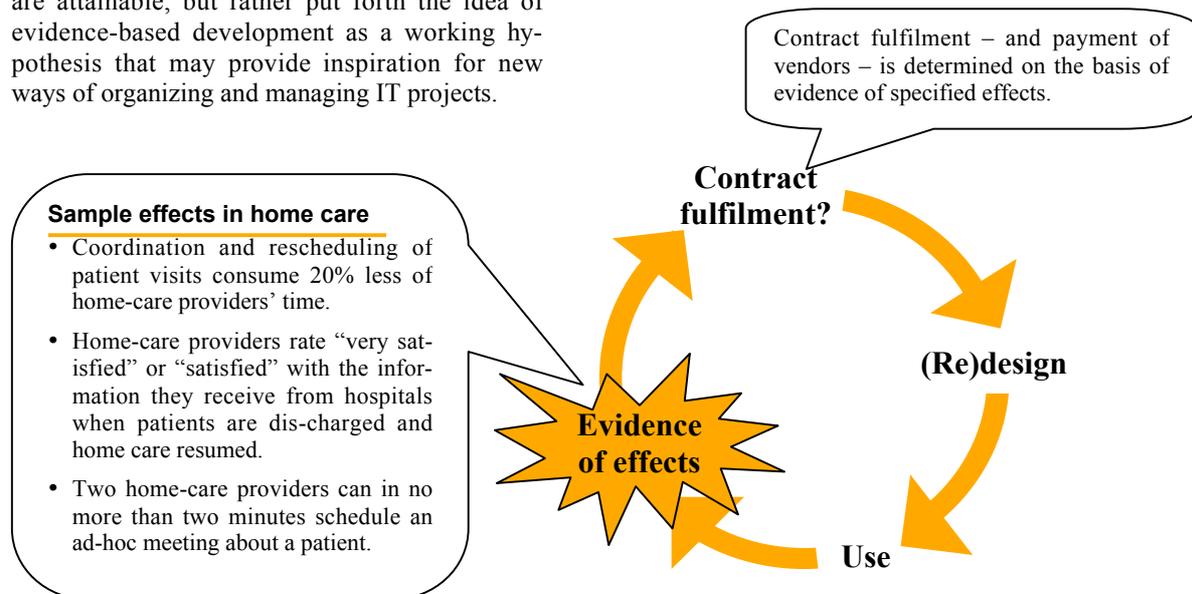
Systems development is replete with projects that represent substantial resource investments but result in systems that fail to meet users' needs. Evidence-based development is an emerging idea intended to provide means for managing customer-vendor relationships and working systematically toward meeting customer needs. We are suggesting that the effects of the use of a system should play a prominent role in the contractual definition of IT projects and that contract fulfilment should be determined on the basis of evidence of these effects. However, we do not have proof that the envisaged advantages are attainable, but rather put forth the idea of evidence-based development as a working hypothesis that may provide inspiration for new ways of organizing and managing IT projects.

Preferences

Evidence-based development is rooted in three preferences:

- *Effects* over products and processes.
- *Measurement* over expectations and estimates.
- *Evidence-based contracts* over functionality contracts.

That is, while there is value in the items on the right, we value the items on the left more.



Prospects

- *Customers* can focus on conceptual proposals (not detailed technological specifications) defining the problem and on desired outcomes in terms of specified effects. Projects are easier to fund as (part of) payments are postponed until the effects have been attained.
- *Vendors* are motivated to develop IT solutions that quickly and feasibly deliver effects. A broader range of the vendor's expertise (than delivering IT) is appreciated. Payment may be relative to the value of obtained effects and may potentially yield a much higher profit than from IT systems alone.

Pitfalls

- It is not always possible to define and measure effects within a reasonable period of time.
- Vendors must be granted influence on organizational implementation, but customers may be unable or unwilling to work intensively with all vendors.
- Postponed payments may exclude small vendors (or force them into strategic partnerships).
- If measurable effects are fixed prematurely, the result may be that projects are confined to known solutions for known needs.