Services Committee Response to Proposal 2018-17

(an updated version of this response will be included in the Services Director's report to Congress 2018)

Whilst there is a seductive financial appeal for offshoring IS projects, this approach is not suitable for all projects and there are no guarantees of financial savings; indeed, in some circumstances the cost of offshoring is likely to be significantly higher.

Several factors must be considered very carefully before making this decision.

Westner (2009) interviewed 47 experts to identify the critical valuation criteria for selecting projects suitable for offshoring:

- Size,
- codification,
- language,
- business criticality,
- technology availability,
- business specificity,
- complexity,
- interaction,
- modularity,
- process formulation.

Size

Size refers to the scope and duration of the project. Cost savings from offshoring can only compensate for the additional overheads of communication, travel, etc. when the project is sufficiently large.

The ICCF webserver is a relatively small project and so is unlikely to be assigned to a large team of developers, significantly increasing the risk of vulnerability to the inevitable fluctuation of staffing of offshore companies.

Codification

Codification refers to the degree of documentation, or the degree to which the specification provided to the offshore staff completely and unambiguously describes the projects requirements. According to Westner, the best projects for offshoring are those which display a high degree of codification.

The specifications for the ICCF webserver are often rather complex and not at all obvious to developers with no domain specific knowledge. Furthermore, these specifications are usually written by volunteers who do not have a technical background (typically members of the Rules Commission or the Qualifications Commission). A major stage in new server development is often the translation of a non-technical specification to a specification which can be used by a developer with no understanding of the ICCF rules. Proposal 2018-027 suggests that this codification should be carried out by members of the Services Committee; unfortunately, however, none of the current volunteers has the time or the skill to carry out this work, so should development be outsourced, ICCF would still require the professional services of a knowledge engineer with a high level of domain specific expertise. This would undoubtedly offset any savings in outsourcing development.

Language

Language refers to communication between the client and the service provides; Westner suggests that applications or projects are more suitable for offshoring when the operating language is English. Communication between client and our service provider is currently English, so the ICCF webserver is a suitable project for offshoring under this criterion.

Business Criticality

Business criticality refers to the importance of an application for fulfilling daily business operations. Experts mentioned that applications with low business criticality were more suitable for offshoring, because high business criticality increases the consequences of non-delivery and therefore risk. Such consequences negatively impact business operations and stable delivery

The ICCF webserver is now 100% critical to the organisation, ICCF could not function without it. Outsourcing development presents an unacceptable risk and would threaten the future of the organisation.

Technology Availability

Projects using uncommon technologies are less suitable for offshoring as the necessary as the required skills are less generally available. The ICCF webserver is currently based on .NET Webforms, this is a mature technology and is likely to be well supported by offshore providers.

Business Specificity

Business specificity refers to the uniqueness of the knowledge inherent in the project. Applications with a more generic degree of business specificity are considered to be more suitable for offshoring. Projects requiring highly specific domain knowledge are generally considered to be unsuitable for offshoring because of the effort required to transfer this knowledge to contracting staff; this effort is compounded by the fact that staff turnover is generally very high for offshoring companies, so the effort of transferring knowledge is continuous. This will incur a significant cost beyond actual development costs, as well as creating a training requirement which doubtless the proposers will be expected to be met by volunteers from the Services Committee.

The ICCF server is far more complicated than the simple rules of chess; just playing a single game, as suggested by Proposal 2018-027, will be completely inadequate to enable the developers to understand the complexities of the withdrawal system, the title norm system, the rating system and the many other domain specific processes which run on the ICCF webserver.

Complexity

Westner found that experts judged projects with a low degree of complexity to be more suitable for outsourcing than complex projects. When compared with relatively large IS projects, the ICCF webserver is not hugely complex, however the advantage of simple projects for outsourcing is the transferability of specific knowledge, which we have already established is problematic.

Interaction

Experts identify projects which require a low degree of contact between the client and the developer as being more suitable for offshoring. Projects requiring a high level of interaction (for example email exchange, Skype discussions, or even site visits) are unsuitable for offshoring.

Currently members of the Services Committee, in particular the Services Director and project leads are in daily contact with the current developer when he is actively working for ICCF

Modularity

Modular projects can be subdivided into discrete multiple parts which have a low degree of interdependability on other parts. Projects with a high level of modularity are considered by experts to be more suitable for offshoring than more monolithic projects because each element of the project can be worked on independently and the risk is dispersed.

The ICCF webserver is monolithic, it is not currently possible to sub-divide the code into discrete parts. It could be argued that future development of the server should be towards modularisation, however this is not the current state of the project.

Process Formalisation

Process formalisation describes the degree of standardisation, specification, and structure of the project. Projects with a high degree of process formalisation are more suitable for offshoring because the working processes are already in place and well defined.

Unfortunately, ICCF suffers from a low level of process formalisation; this is mainly because the project leads are generally volunteers with little or no experience working in the field of enterprise software development. Without this experience it is very difficult, if not impossible, for members of the Services Committee and other volunteers to work in a structured manner or follow practices which would be standard in industry.

An offshore contractor would find it extremely difficult to work in such an environment.

Summary

In summary, the ICCF webserver is an unsuitable project for offshoring on eight out of the ten criteria identified by Westner. Offshoring development would present an unacceptable risk to ICCF for very little (possibly negative) financial benefit. The Services Committee strongly recommends that delegates vote **against** accepting Proposal 2018-027.

Furthermore, the cost estimates for the implementation of Congress proposals provided by the Services Committee will assume that the relationship with our current service provider continues through 2019. If delegates vote to accept Proposal 2018-17 these estimates will need to be revised by the proposers, quite probably upwards.

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References:

Westner, M. K. (2009). Offshore Suitability: Criteria for Selecting IS Applications or Projects for Offshoring **In:** *IS offshoring: Essays on Project Suitability and Success.* Wiesbaden: Gabler.