Minimize Scope Creep by Learning Wants and Needs

By Stuart G. Walesh, Ph.D., P.E.

Scope creep is a constant plague on some if not every project. As typical projects proceed, the client (Owner, Architect, or Contractor) requests alternatives to the original design, more features, attendance at additional meetings, presentations to stakeholders, and other efforts beyond those defined in the Scope of Work contained in the contract. Too often, engineers react to these requests and forge ahead without considering the consequences. Perhaps performing the "freebies" is rationalized by claiming that each is innocuous or part of marketing the client for future work. Over time, performing freebies gradually diminishes project profitability and destroys budgets. Unfortunately, pushing back runs the risk of alienating the client and jeopardizing future work – both awkward predicaments every engineer should actively avoid.

Ways to Avoid Client-Driven Scope Creep

With sufficient individual and organizational will and discipline, engineers can proactively, mostly in a pre-contract mode, apply practical methods to prevent most client-driven scope creep. For example, earn the trust of those we serve early in the relationship, prepare a comprehensive project plan, define quality, "front end" participation by our organization's experts, conduct a risk analysis, identify "their" and "our" project responsibilities, carefully draft an agreement, and prepare and share some deliverables.

The preceding scope creep minimization list intentionally omits *striving to learn client wants and needs*. The wants-needs topic is singled out because it is the most important element in providing professional services in the private and public sectors. Engineering is ultimately a people-serving profession. Starbucks CEO Charles Schulz said, "We are in the people business serving coffee, not in the coffee business serving people." Let's paraphrase that for our profession: "We are in the people business serving engineering, not in the engineering business serving people."

This is an important paradigm shift, and the subtle distinction can profoundly affect how engineers go about their daily professional activities, including minimizing scope creep which arises when wants and needs are not adequately defined. Wants and needs missed or misunderstood before a project starts are likely to appear later – because they are important to the client. When they do, they often drive scope creep.

Ask – Ask – Ask

So how can engineers understand a potential client's wants and needs? Obviously, review past experiences with the client; study the RFP thoroughly; examine the client's/organization's website to discover their values, mission, and vision. Also, talk to colleagues who know and have worked with the client, and knew them well. Most importantly, ask the client many and varied questions.

An initial reaction may be that the need to ask questions is obvious, so why dwell on it? The author's experience indicates that many engineers are reluctant to go beyond superficial, innocuous, and obvious queries. Polls conducted during the author's webinars and workshops repeatedly reveal that the principal reason engineers give for their reluctance to ask questions is the fear that they will appear uninformed and poorly prepared. On the contrary, asking probing questions indicates that a person is well informed and prepared, and that the engineer knows the questions to ask. Consider the following three question-asking techniques.

Mix Closed-Ended and Open-Ended Questions

Use some closed-ended questions – questions that can be answered with a yes, no, or statements of fact. For example, how much is budgeted for the new bridge? Also ask open-ended questions, which often begin with "why," "how," or "what." An example: "Why are you considering a new bridge rather than upgrading and widening the existing bridge?" Mixing closed and open-ended questions are likely to stimulate a very enlightening conversation, one that reveals wants and needs.

Five Whys

This persistent tactic enables a "drill down" – to get to the bottom of things – to move past symptoms and get to causes. Diplomatically and persistently ask "why," or variations of "why" questions up to five times. There is nothing magic about five, but at least several "why" questions are needed to get to the cause of the problem and the reasons the client is seeking engineering services.

For each question asked, seek to determine and understand the client's wants and needs by listening to their answers and probing deeper by asking why. Why questions deepen and widen thinking, and sometimes lead to surprising results, brilliant insights, trustful life-long relationships, and a better understanding of the scope that can be agreed upon and included in the contract.

Kipling's Six

In saying "I had six honest serving men – they taught me all I knew. Their names were Where and What and When and Why and How and Who," English writer Rudyard Kipling offers another method for effective questioning. Hard to conceive a challenging potential project that does not connect with Kipling's six elements. During meetings, negotiations, and discussions with the client, use Kipling's Six to guide questions and learn more about the client's wants and needs.

Conclusion

Scope creep is typical on most projects and frequently costly for the engineer. However, scope creep can be minimized by the systematic application of appropriate methods. The prime scope creep control measure is learning the client's wants and needs before a project begins, which is accomplished by diplomatically and proactively asking probing questions, mixing closed- and open-ended questions, using the five "whys," and applying Kipling's Six. Once an engineer has asked the questions and understands the client's wants and needs, include them in the Scope of Services and prevent scope creep from draining profits.▪

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