



Pursuing Only Profitable Work Measuring Project Success in Advance by Thomas C Schleifer, Ph.D.

Project failures don't just happen—they are deliberately pursued and captured. In a survey a building contractor was asked why he did not pursue highway jobs. He responded; *"Because I have no experience in bridges I don't get opportunities to bid on that type of work"*. He was then asked if a customer wanted him to build a road would he oblige them and the answer was *"Certainly"*. When a successful road builder was asked why he had attempted a bridge project over a river that put him out of business he said he wanted to expand into that type of work. When a residential contractor was asked why he did not pursue commercial construction he replied; *"I have no opportunities in that type of work because I have never done it"*. When asked if he was invited to propose on such a project would he go after it? *"Yes, of course. It would give me a chance get some experience in that kind of work."*

Many construction professionals, myself included, feel strongly that we can build or design anything. I happen to agree, however, the pertinent question is can we build or design it at a profit? **Construction isn't that hard. Construction at a profit is.** The research is conclusive that projects within a firm's experience tend to be successful while projects even modestly outside a firm's experience have serious risks associated with them. The immediate argument arises: *"How can I expand my business if experience is critical to success, and how do I get the initial experience?"* This is a paradox of industrial proportion. There are undoubtedly more detailed answers, but my favorite is *"Carefully"*. The potential for risk in this case is not perchance, but very real and must be a driving factor in decisions of this nature. One guiding factor would be to take only risk that the company can afford. Another would be to solicit input internally and externally and then tread cautiously.

There is much to be said about managing or controlling losses, however, the end result of this research is that it is much easier to prevent losses than to manage them. The primary cause of hundreds of contractor failures were losses on projects the firm should never had undertaken because they had little or no successful prior experience with similar work. Many were on projects they were not remotely experienced with, but some were involved in disasters that were just slightly different than their prior experience. The bad news is that those firms are no longer in business, however, their struggles on thousands of projects provided us with a solution. It gave us a measure of the importance of experience broken down by categories which has allowed the development of an easy-to-use **Project Selection Program**.

The potential success of a project for a particular firm is exclusively dependent on the quality and quantity of the organization's experience with similar work. The experience factors have been classified and statistically weighted based on the historic frequency and severity of their occurrence. The aspects that impact anticipated performances (risk) are primarily: size; type; location; performance team; owner; and also include unusual features, shape, and availability of room to work. These aspects have been measured and weighted to produce a numeric scale of potential risk. The issues considered include labor, skill levels, subcontractor quality/availability, estimating, owner expectations and others that impact the work. Because experience is accumulated institutionally, but captured individually, the number of members on a performance team with direct experience with previous projects impacts the likelihood of achieving estimated or improved performance. Unusual design elements such as circular, curved or angled walls, bridges, roofs, etc., outside the experience of an organization are risk triggers.

This new tool provides an accurate measurement of project selection risk based upon what is known or not known about a potential project at a given point in time and how well the project matches the firm's experience. An excellent tool for contractors, subcontractors, owners and designers/engineers the **Project Selection Program** is free and can be downloaded at: www.SimplarInstitute.com/ProjectSelectionProgram