Projects are the vehicles of organizational strategy, thus they, together (Artto et al 2008, Laslo & Goldberg 2008), transport the organization from its present position to the desired state (Shenhar & Dvir, 2007). As such, projects and organizational success go hand in hand. Scholarly literature abounds with attempts to propose project success criteria (See for example: Belassi & Tukel 1996, Pinto & Slevin, 1988 inter alia). However, most of these criteria seem to be CSF (Critical Success Factors) based and few organizations and project managers use them for improving their project performance (Sauser, Reilly & Shenhar, 2009). Several hard and soft project performance tools have been used by practitioners such as earned value management (Abba, 2000), project management knowledge areas (PMI, 2013) and other standards such as PRINCE2 and the vital dozen (Pinto & Kharbanda, 1995) to varying success – to name a few.

For the purpose of this study, a survey of 62 project managers was undertaken, basically to gather a quick insight into their knowledge and practice of project performance tools. To keep the investigation simple, a single questionnaire was used to investigate different tools. Instead of asking specific questions about proprietary tools such as PMI knowledge areas or similar areas in PRINCE2, proxy questions were used to infer the answers, since most project managers seemed to relate use of such proprietary tools with related certifications. Specialist tools were investigated separately though some frameworks offer their integration (such as Earned Value Management in PMI’s Cost Management knowledge area). On average, these project managers reported more than 70% success rate of the projects they had either undertaken or were close to completion. Following figures show the results and brief commentary on each.

**Frequency Distribution:** A large percentage (37%) of the respondents came from the Software/IT industry, while other represented industries were Construction (18%), Technical (18%), Consulting (16%) and Social sector (11%) projects.
Knowledge and Use of Tools: The results here are pretty much as expected. The three areas where project managers thought they had enough knowledge and also claimed to use them were tools related to Scope, Cost and Time management.

These areas are the good old ‘triple constraints’, perhaps as old as the area of project management itself and represent fundamental knowledge for project managers, irrespective of what framework they may or may not follow. Similarly, relatively low knowledge and usage of specialist areas such as Risk Management is fairly expected. The average frequency of knowledge of tools is 58 while the average frequency of usage of these tools is 49. What factors can explain the drop of 9 points? Is it lack of knowledge management in project organizations? What inhibits project managers from using the knowledge they have?

Stopping here may be a very simplistic approach to understanding what project manager do and what they find useful. Another area investigated was whether project managers use these use tools through formal documentation. This is where, perhaps, a deeper understanding of the entire phenomenon can be launched off.
The average frequency of project manager who can back up their claims of knowledge and usage of different project performance tools is a staggering 17.6: only 30% of the average knowledge frequency and 36% of the average of usage frequency. Now this is getting interesting. Why would project managers not keep record of what they are doing? Is it the lack of time since project management has long been known as a time-intensive profession? Or is it the lack of using technology?

Yet again, it may be a simplification if we ignore the industry specific details. Let’s have a look.

Figures 4 and 5 show a fairly pervasive trend of not documenting project performance in different areas. The variance in knowledge is highest for social sector project managers (SD=7.01) and lowest for consulting project managers (SD=2.92). Variance in usage is highest for software/IT sector project managers (SD=15) and lowest for consulting project managers (SD=12.2). Finally, variance in documenting is highest for technical project managers (SD=15) and lowest for software/IT project managers (SD=4.17). All confidence intervals are 95% and both Chi Square and Bonnet values for variance are used to cater for any data abnormality but so significant difference was found. Following figure is a simplification of the industry variance figure.

Figure 3: Tools knowledge & usage vs. formal documentation.
Figure 4: Industry variance.

Figure 5: Industry variance – II
It can be seen that the trend lines show a fairly similarly behavior across industries. There is about 16% and 64% from knowledge to usage and from usage to documenting. Now the big question, why would a project manager not use what she knows? Why would she not record what she does? Here comes our last question and the expected utility theory (Bernoulli, 1954) which relates payouts or moral expectations to choices. Project managers may have ‘learned’ not to use what they know and not to document what they use, since the available tools may not be offering the expected payouts. This hypothesis seems to be vindicated by our last question: 25% into the project, do you find using and documenting these tools still valuable?

None of the project performance tools seem to remain more than 30% useful for project managers after they are more than 25% into the project. The only three areas showing some degree of usefulness are Communication, Stakeholder Management and Integration; interestingly, all rather qualitative and behavioral aspects.

This brings us to contingency theory (Morgan, 1997), which advocates that there is no single right method of doing things and it’s the context which decides the best approach. Since projects are novel by definition, they require a different, contingent approach on each instance, simply because most variables have changed to some extent. Straitjacket approaches to project management do not seem to attract project manager is any of the five industries investigated. They would start with formal tools, but leave them alone once the projects are underway, finding them of little use.

This shows an inherent linkage between projects (that are unique thus unpredictable by definition) and contingency theory (which advocates novel approach to situations).
REFERENCES


