

Why should we consider outsourcing engineering services?

Over the years it has become good business practice to outsource traditional business practices such as accounting, software development and even certain aspects of human resources for the following key reasons:

- Cost
- Better quality through a supplier specifically focused and qualified in a certain area of expertise.

Until recently, many companies did not outsource their engineering activities because traditional perception dictates engineering is a primary technology that should remain in-house and have always been looked upon as the heart and soul of the business. Such approach by engineers and engineering management was the norm a decade or two ago and it seems to be the case in many companies even now.

But a change in this perception is in line with new trends as it seems to be taking place. The reason being evident and that pertains to the fact that certain portions of projects must contain work packages, maybe of a routine nature, that need not necessarily be done in-house. If that is so, then it must be lucrative to get it done elsewhere.

The engineering function is generally not seen as a commodity, but rather as an interactive process of design and review. In a specific project there are many phases: planning, design, manufacturing or construction, and then implementation and commissioning. Quality control is mutual to all these phases. Each phase requires the proficiency and know-how of an engineer in several ways. At the completion of some phases it may be required that an engineer sign and approve the design in his professional capacity. While the entire engineering process does not seem favourable to outsourcing, there are portions that can be outsourced.

Engineering is most likely to be the function that can gain considerably from outsourcing because it is certainly one of the most expensive divisions in an organization; it contains highly qualified and remunerated, innovative staff members whose skills in design, testing and development contribute to high quality products and services, and thus the success and future of the company.

Clearly outsourcing makes sense as the principal goal of a business unit is to make a profit. A company should consider at least getting work of a routine nature done elsewhere, but outsourcing should only be considered where both the customer and supplier benefit from the arrangement. It must be a win-win situation.

The remarkable development in communication (e-mail, faxes, video conferences) has made it possible that outsourcing could even be considered on an international basis. The time is here to exploit these resources worldwide.

South African companies and business has certainly realized that technical skills have become scarcer over the last few years. Many engineering professionals have emigrated or have retired from the work force. The numbers of the newly graduated engineers, technicians and qualified apprentices do not meet the national demand and these potential candidates do not have the necessary experience that the industry drastically requires. Outsourcing provides a flexible alternative.

In addition to this, engineering managers realize that it is costing their companies a lot more as they have to increase the remuneration packages to try and retain skilled individuals because they compete against a number of companies that faces similar dilemmas.

The work load in engineering offices often fluctuates and management has little control over these fluctuations as work load is normally determined by the volume of orders received.

Outsourcing can play a big role as companies have the benefit to call in additional resources if required, to cope with short to medium term peaks in the customer's demand. It is not advisable to overload resources for the medium to long term as this may demoralize personnel that will adversely influence the quality of the service or product.

Bad quality can lead to the down fall of a company. At times it is the result of employees who feel pressured to save time or they can simply just not cope with the additional work load. On the other hand, engineering-service providers are held to higher standards of quality and accountability. To maintain a high level of quality is vital to their existence.

So far we have provided a few reasons why companies will benefit from outsourcing most of their engineering functions. Also consider these benefits:

- Engineering service providers can ensure rapid deployment of fully trained workers to complete projects within budget and time constraints.
- Exposure to multiple engineering environments in a variety of industries helps engineering service providers to acquire the latest technologies which they can consecutively bring to the table and then introduce it to long-established companies or engineering departments.
- External professionals bring new blood together with best practices, industry standards and the sought after expertise of specialists with them.

- Engineering service providers in some foreign countries can provide many high quality, low-cost services. Joint ventures with local engineering companies are also a possibility.
- In certain cases companies are small and their business model does not make provision for a permanent engineering department. In other circumstances companies may focus on specific areas and they do not have the expertise to consider prospects in other engineering sectors. In order for these companies to grow their sales and to capitalize on specific opportunities they will benefit by outsourcing the required engineering functions.