The construction programme plays a significant role in project monitoring and control for any size of project. Moreover, contemporaneous programmes are an essential part of the project documents used in delay analysis in the event that such a study is later necessary.

Many people believe that a good programme should contain many thousands of activities capturing every minute aspect of the works. Detailed construction programme – does size matter?

Because of some of its benefits, some practitioners in the construction industry opt for a very detailed construction programme as their way of developing the Baseline Master Programme. Their reason is that more detail means better monitoring and control. It is often the case that, in a complex project such as the construction of a new airport, MRT project or industrial processing facility, the level of detail in the Baseline Programme could potentially be so large as to contain more than 10,000 activities. The logic dependencies of the programme may exceed two or three times the activity number; in this example, 20,000 to 30,000 activity links to create the networked programme.

On the other hand, some industry practitioners consider that an effective programme should be developed to incorporate only the key elements of work. They reject the concept of having large numbers of very detailed activities built into the programme simply for the perception of it looking “professional” or sophisticated. The supporters of the simple programme approach argue that a programme needs to be only large enough to preserve the primary function of predicting accurate forecast dates for use during the project life and at the same time being capable of efficient management.

In this article, we will examine the ‘pros’ and ‘cons’ of programme size contrasting the advocates of “the more activities the better” with those promoting concise and manageable programmes.

What a programme does

A construction programme is usually a mandatory element in modern construction management. A good and effective construction programme provides the construction team with the tools for project monitoring and control during the construction stage. The major benefit of a good construction programme is that it functions as a performance indicator to monitor performance of site field work against that originally planned (the baseline) so as to alert at the earliest opportunity any risk of the project being in delay. In addition, the programme provides a guide to the project team in respect to the future activities so that resources can be properly arranged sufficiently in advance.
procurement department will still be able to identify when they need to place an order and the required delivery of the relevant reinforcement for Level 40 slab by reading the construction activity in the simpler programme, i.e. “Construct Level 40 Slab” as opposed to those of the more detailed programme, e.g. “Construct Level 40 - Zone 2 –Structural slab – Rebar” and similar in other Zones.

The benefit of using a simpler construction programme for a complex project is that a higher level programme is easier to manage. This is especially true when the programme is updated and programme logic might be revised to ensure a correct reflection of the sequence of work at the time for projecting future event dates.

In many cases, an updated highly detailed programme of over 10,000 activities, despite its comprehensive and detailed coverage of the works, suffers inaccuracy as a result of wrong or lax input of accurate dates and progress percentages; the logic is unlikely to have been properly reviewed or, if necessary, revised due to the fact that there are quite simply too many activities to handle.

This situation would be further complicated with the incorporation of other additional sub-programmes into the Master Programme. For example, the interior design (ID) work detailed programme for a shopping arcade by a specialist sub-contractor. Such a detailed ID works programme could contribute yet another 3,000 to 5,000 detailed activities into the master programme.

With application of this programming approach, the final result could be the creation of an unwieldy “monster”.

**Conclusion**

A sophisticated and detailed construction programme as the Baseline Programme is a viable construction programming strategy only as long as it can be properly managed by experienced and a sufficient number of planning staff. In addition, it is equally important that the planning team has sufficient cooperation and support from the project team and are not left to operate in isolation; the planning team must be constantly made aware through feedback from the project team as to construction status and changes.

In reality, it appears difficult in Malaysia to have this ‘dream team’ as identified above. In many cases, due to the financial constraints of a project, the planning team is rarely given sufficient resources to manage very large and complex programmes.

There are cases where the planning team lacks the full support from the construction teams in order to update every single activity in a detailed programme. Therefore, due to misleading or incorrect data sources, a very detailed programme becomes of little practical use in achieving the original intention.

In such circumstances, a simple construction programme would make better sense; it is easier to manage (fewer activities) and it can still be practically used for accurately projecting future activity dates and completion of the project as a whole.

Any shortcomings of a simple construction programme (viz. to address the complaint it does not fully cover the scope of work) can be remedied by other means such as standalone mini-programmes.

To summarise, in the view of the author, size doesn’t matter; the simpler, the better.

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