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Professional Practice Program

Module 1 – Managing a Business

WORKSHOP 2: BUSINESS MANAGEMENT – CALCULATING COSTS AND FEES

Introduction

We all operate in a highly competitive environment. I want to look at useful strategies directly pertinent to our profession, and the fundamental aspect of ensuring that once the works has been secured, that it pays..

COST OF SALES

I hope this phrase makes you as uncomfortable as it does me. I am an artist, and I cannot reduce my precious creations to rand and cent value. It can't be distilled to an irreducible such as cost of production. Well, it turns out that it can, and it must be.

Step 1: Time Sheets

- The purpose of the time sheet has nothing to do with staff performance, and when we introduced them, I promised that they would never be used against the staff in that manner.
- The time sheet is a simple document that forms the cornerstone of your entire business model.
- It is essential to get reliable data from the time sheets, so it is essential that the staff fill them out in a completely candid manner.
- The time sheet collates data on who worked on the project (for their cost to company rates for that particular individual to be applied).
- Collate time spent on each workstage so that fee proposals can be weighted accordingly.

An interesting quirk of this exercise is 'director time'. Most business owners do not necessarily work their own time cost into their cost of sale, this will normally be included as part of the administrative 'Cost Multiplier' that will be discussed later. As Architects however, our own time is never only 'general administrative' time, we are directly involved with client meetings, design and specifications, and as principal agent. Even as the owners of our companies, time spent directly involved in a project, including travel time and even preparing your account for that project, should be allocated to the project cost.

This information is gathered in a master spreadsheet that is grouped into each individual project or cost center. On the control page of this document, the monthly salary of each employee is reduced to an hourly rate, and then multiplied by a factor of 2.4.

Step 2: The Cost Multiplier

The 2.4 factor is a simple multiplier that makes the assumption that our salaries (and sub-contractors) make up half the cost of any architectural practice, with overhead costs such as premises, vehicles, equipment, software, stationery and insurances being examples of what make up the other half. Added to that is an optimistic 20 % profit, this makes up the additional 0.4.

At a glance, we can see what any project has actually cost to produce. We can also extract more subtle information such as how much time each workstage cost as part of the total, the allocation of staff skills and the deployment of the big guns, and when compared back to the original fee proposal, the financial success of the project. A simple comparison of the Cost to Company totals against the management statements (income vs expenses) prepared by my accountant revealed that the 2.4 factor was satisfyingly accurate and reliable.

Drawing Conclusions

Once a significant amount of this data has been collated, it can be broken into spreadsheets to be put to use.

- From analysis, one can clearly identify the projects where money is lost (predictably) and those where money is made (often surprisingly).
- One can identify how much cost was incurred at each workstage, and can refine fee proposals to reflect that.
- One can see the allocation and weighting of staff skills, and use that to price more accurately and to extract an hourly rate that can be applied to all this kind of work.

STEP 3: The Fee Calculator

The purpose of my fee calculator, unlike those published elsewhere, is not to simply work out the fee based on the tariff. Using the accurate and wide ranging data on production costs, one can use this information in conjunction with an Excel spreadsheet to work out a comparative discounted costing and competitive fee proposal alongside the tariff.

Single Projects

At the top of the spreadsheet is effectively a brief for the project that is used to total areas and anticipated square meter rates. The advantage of this table is that it gives your client the heads-up on building costs very early in the process.

The tariff is automatically applied, and the full service fee calculated. Additional fees can be added (normally calculated on square meter rates) that account for HOA approvals and Rational EEU studies.

An alternate fee proposal is then presented that illustrates your offer to undertake this work. The actual calculations for this are off page.

The second page of my fee calculator is not presented to the client, and it is here that I apply the facts and figures drawn from several years of collating data. I make an hourly rate allocation based on expected involvement of principals and technical staff. I then make hourly allocations to each workstage based in previous experience of similar projects. I divide the allocated time based cost back into a square meter rate for each workstage. I can then make adjustments to produce a profit on the project that will be acceptable.

Repeat Fee Formula

The SAIA Client Architect agreement has simplified the old formula for calculating fees for repeated buildings or designs. I still use the original formula as it works well with my calculator.

Typically some preparatory design work and feasibility will have been undertaken prior to actually signing fee agreements. I normally have some basis upon which to break the project down into its components, and can tabulate them as previously. The repeat fee formula searches out the repeated structures and the unique structures, and assigns value to that work accordingly.

As in the single fee model, I make allowance for additional service such as Sales Diagrams, Section 25 Diagrams, and EEU studies. These are all services that are outlined in the covering Fee Proposal, and so it is important to make sure that the documents are conversant.

The fee is worked out in the same manner as in the single project fee. Errors in a fee calculation of this magnitude can be ruinous, and it is under these circumstances that the effort involved in creating these tools becomes invaluable.

Workstage 5 & 6 Fee Calculations

It is necessary to discuss this service in its own section. It is abundantly clear when using timesheets and processing the data from them that an allowance of 27% and 3% for these two workstages is dangerously inadequate.

It is extremely difficult to estimate the cost to company implications to provide on-site service. Fixing the service to a fixed fee, be it a sum or a percentage, makes no allowance for the broad range of factors that can affect the length of time and the labour requirements to provide this service. The standard client / architect agreements do make provision for an hourly-based charge for over-runs, but they are notoriously difficult to enforce.

Typically, this service is normally undertaken by a senior member of staff or the Architect themselves. It is the most expensive cost-to-company time and places a tremendous burden on the resources of the practice.

Furthermore, your workstage 5 & 6 fee agreement needs to cover all sorts of other costs – the travelling time of the relevant staff member to and from site. Disbursements such as printing and vehicle mileage. The time cost of printing large volumes of drawings. Visiting suppliers and investigating products.

And as mentioned previously – the client may well make significant design or structural changes, no matter how well the process has been managed up to this point. Often, when a client sees the building forming on site, its potential suddenly generates a rush of late-formed ideas. It is unavoidable and should be treated as such.

Fee Strategies for On-Site Service

My personal point of departure when presenting a fee proposal for new work is to expressly exclude Workstage 5 & 6 service – I use a clause in my primary fee proposal that states that should on-site service be required, it shall be discussed and negotiated at a later date. This gives me the opportunity to negotiate on-site service as a stand-alone expense and not bundled in with the total fee agreement that is put in place before any design work or even a proper brief has been finalized.

However, in some instances, especially commissioned work and private residences, one is to be expected from the outset to provide a full service inclusive of workstages 5 & 6. In my experience young architects and small practices tend to relish the prospect of guiding the project through construction and realization, and may voluntarily wish to be engaged in on-site service.

Calculating Workstage 5 & 6 Service – Complete Fee Agreement

Take the following into consideration:

- At best, your client will be prepared to pay you full tariff, irrespective of the cost-to-company burden that may be imposed by providing on-site service.
- In the event on providing full service on a discounted fee, you face financial losses once your project moves onto site.
- Notwithstanding whether you are on a full tariff or an agreed discount there-of, it is advisable to rebalance the recommended 70 / 30 % split in the standard agreement to a 50 / 50 % allocation. It will not bring you more fees, but at least your cash flow will resemble a closer picture to the reality of the situation.
- It is dangerous to manipulate the '2.4 cost factor' to try to make your fees cover your costs.
- A 40 / 60 % split may be revealed by the time sheets to be a truer reflection of time allocation.

Calculating Workstage 5 & 6 Service – Separately Negotiated Fee Agreement

As this point in the process, the following information is available to the Architect to take into consideration when negotiating a fee for his on-site service:

- All drawings, schedules and specification documentation is completed and finalized.
- Municipal approvals are probably secured, all relaxations etc. finalized.
- A Quantity Surveyors Estimate may be available.
- Negotiations may have proceeded with a likely contractor and possible sub-contractors and suppliers as well.
- The likely 'duration' of such a building contract.
- The propensity of the Employer to 'stick to the plan'.
- The quality, reliability and capability of the construction team.
- Whether the project is properly resourced and financed by the Employer.

All this information places the Architect in far clearer position when taking into consideration an appropriate fee methodology and billing regime to undertake the service. Use the following strategies when calculating your fee:

- Provide for an undetermined factor in negotiating on-site service, to my mind this is 'Duration'. In other words, base a fee proposal on an agreed monthly rate that will be required to be paid for the duration until an agreed and unambiguous completion point.
- Try to disassociate your fee from a percentage of contract sum. The cost of the project seldom bears on the amount and intensity of the Architectural service required.
- With the wealth of information available to you prior to preparing this agreement, try to anticipate 'extras' and 'supplementary' costs into the agreement from the get-go, itemize them if necessary.
- Do not permit disbursement costs to be bundled.

General Considerations:

Irrespective of whether you are contracted to perform Workstage 5 & 6 service at the beginning of your engagement or during the process, always take the following factors into consideration when calculating an appropriate fee:

- Establish clarity on whether your role will be as 'Principal Agent' or as an on-site agent in the role of 'Design Architect'.
- State clearly what your on-site service encompasses and state your duties as outlined in the relevant building contract. Your service will be significantly affected by the appointment of other professionals such as: a Project Manager, a Quantity Surveyor or an Interior Designer.
- Clearly state what your on-site service excludes; applying for and obtaining municipal connections, securing the Occupation Certificate.
- Clearly state the services and duties that are to be wholly undertaken by others; the Project Manager must be responsible for chairing site meetings, for taking minutes and for distributing all documentation, the Quantity Surveyor must be responsible for all valuations, certifications, ensuring payments and managing Variation Order costs, the Interior Designer must undertake all their own drawing work and layouts.
- Either include or exclude drawing and municipal resubmission work arising from changes required by the client on site. This is a risk-management process that will depend on the nature of the project and the track-record of the client.

There are many more considerations that are covered in great detail in a later workshop covering on-site service.

Conclusion

In a highly competitive market we are able to offer reduced fees secure in the knowledge that the work is still profitable. When being aggressively negotiated we are armed with reliable information as to cost backstops, and at which point negotiations can only continue should the scope of service be reduced, and in which way, and by how much, if necessary.