

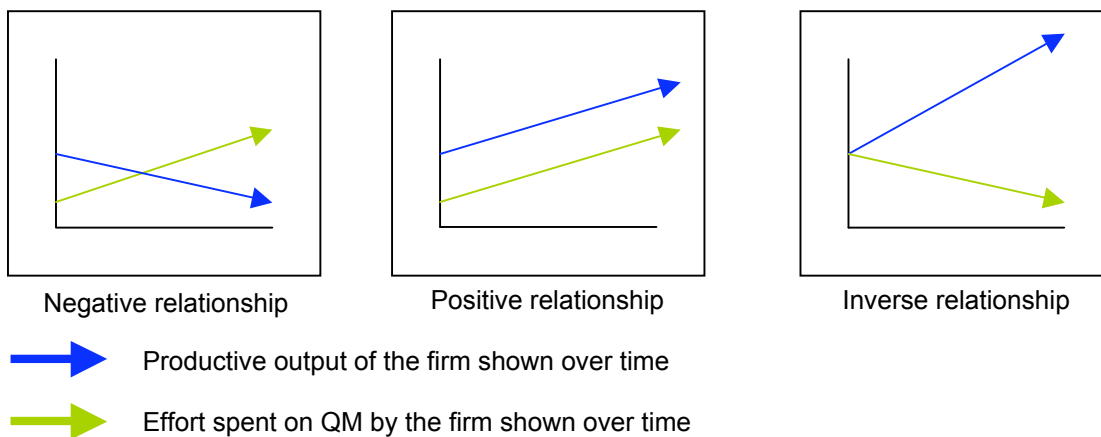
QM and Productivity

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Productivity relationships

This chapter looks at the relationship that exists between QM and the productivity of architectural firms. The question may readily be asked: is that relationship positive, negative or inverse? If you take the currently most popularly held view, you might quickly respond that it is a negative relationship.

Your argument might be that since you are spending more time on writing and referring to documentation, you have less time to do your ‘real work’, and therefore you are less productive. You may be a little less cynical and respond that it is at least a positive relationship, and that the effort you expend on QM is matched by an increase in the productive output of you and your firm. The desirable relationship is of course that of an inverse relationship between the two concepts. That is, over time the amount of effort that has to be expended on QM decreases while the productive output of your firm as a result of implementing QM increases.



I suspect that the real answer is dependent on a couple of things. First, what do we mean by productivity, and second, at what period of time during the QM implementation schedule are you taking the snapshot?

What is 'productivity'?

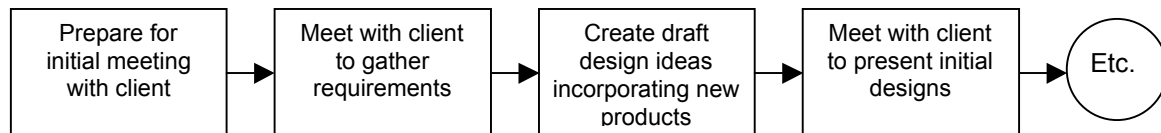
Let's take first things first and look at the definition of productivity. According to the Concise Oxford Dictionary, one meaning of productivity is “the effectiveness of productive effort”. Anytime the word “effectiveness” shows up in a definition, I think it is important to bring up the word “efficiency” as well since the two can work well in tandem. In this context, what do we mean by each? In leadership and management lingo, effectiveness is taken to mean “doing the right thing” while efficiency means “doing things right”.

What if we combine these two concepts and look at the phrase “doing the right things right”? Wouldn't this equate to organising our work to meet and exceed the expectations of our clients with no rework needed? This sounds very much like QM and a sound goal that would please clients and create opportunities for the firm, that is, opportunities for increased creativity and productivity.

Can we increase creativity and productivity at the same time?

The proposition has been set forth in earlier chapters of this Handbook that architects are either in part or in whole “artists at heart.” If this is the case, then the more time and opportunity for creativity, the better. But how does QM provide increased opportunity for creativity and productive output? To answer this, let's take a look at artists at work. Regardless of the medium in which they work, there are some aspects of their work that artists perform routinely once they have built up their experience and have had ample practice.

In other words, after a lot of experience, the approach they take to some aspects of their work becomes standardised. Experience has taught them that there are some basic phases that they will proceed through, regardless of the size or nature of the project they are launching. Some of these phases might include meeting with the client to gather specifications, searching information on new products for inclusion in new designs, and reviewing initial designs ideas with clients. These and other aspects of architects' work could be illustrated as a flow of work.



The architects' work effort and creativity need not be expended on determining what phase of work is next up nor how to conduct some of the work in many of the phases. Some of this work can and should be standardised, and as this work is standardised, it frees up architects to use their creative energy for the design.

For example, determining a set of questions to be used in the initial meeting with the client would reduce the amount of effort and time used in any future initial client meetings. Architects would likely be the more experienced party in the meeting as this would be a routine part of their work while it is possibly the first or second exposure to the experience for the clients.

What are the benefits of having this part of architects' work standardised? At a minimum, architects have the opportunity to bring additional value to the meeting, bringing up items that might well be overlooked by the more novice clients. The architects' reputation is enhanced as being 'easy to do work with'.

Often the benefits are more tangible than this. There are three specific benefits that are directly related to creativity and productivity. Lets examine these.

Rework. By asking specific, pre-determined probe questions, architects will often uncover expectations earlier that otherwise might erupt later in the process either jeopardising the design completely or causing rework. Rework is a prime enemy to creativity and productivity. Doing the same work twice eats up design time, creative energy and profit for the architects and induces frustration for the clients. This can generally be avoided by clarifying requirements upfront.

Increased reliability. When architects are on their own to determine the intent of client meetings, the questions to ask in leading the meetings, and the means of documenting the inputs from the clients, you would expect significant variation in the results of the meetings. Some may go well and required information collected. In others, patchy information may be gathered, requiring follow-up calls, contacts and meetings. All of these add up to more time and expended energy. The pre-determined questions can help ensure with greater reliability the results of the client meetings.

Reduced preparation effort. Use of the pre-determined probe questions reduces the amount of effort that architects will need to spend in preparing for their initial meeting. Often the work required to prepare for meetings is seen as a distraction from the creative work of designing. If this is the case, then having some of the work required for the meetings prepared in standardised formats and fully adopted by the firm as 'how we routinely conduct our client meetings' frees architects to expend most of their energy on a creative design.

We can easily see from just looking at the example of standardising the approach to the initial client meeting that significant opportunities exist to increase the productivity within architectural firms. As many opportunities exist in the subsequent work undertaken by architects, with another prime opportunity for increased productivity being that of building in standardised client checkpoints aligned with key milestones of the project.

Benefits for new employees

We have been looking at ways that QM can benefit architects regardless of the length of time they have been involved in their practice. For the next few minutes, I'd like to consider the specific benefits that exist for new architects and the firms that employ these new entrants.

As we discussed earlier, experienced architects often have internalised the phases of their work, along with specific questions, techniques and templates to aid them in the various steps. The amount of time that it has taken these masters to accomplish their expert levels varies from one to the next, but at a minimum, it has taken numerous projects and accompanying errors, lessons learned and ‘do-differentlies.’ We all know this as the learning curve.

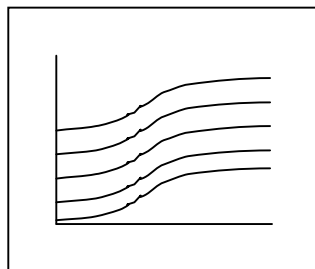
The shapes of individuals’ learning curves are established by their own unique learning pattern. For some, working their way through a project is just that, moving from one task on to the next with the end in mind, and all energy focused on achieving that target. When they finish the project, they have achieved that success and may have attained a little wisdom that they can apply to the next project. For others, each project provides an opportunity to learn. At each phase, they are exploring options, considering alternatives, weighing up potential decisions, noting outcomes and growing professionally.

How does a firm benefit from the learning curve of the latter person? Are they lessons learned only for the individual or can they be shared across the practice to the benefit of other architects and future clients? Specifically, how can new architects learn from others’ experiences and become more productive earlier in their careers?

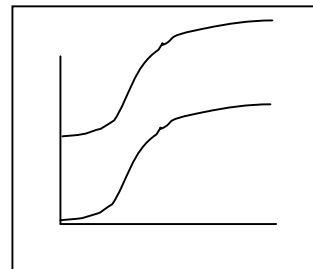
Some may answer that you simply team up the novice with a more experienced architect. While this helps, it does not ensure success. It exposes the new architect to the lessons of one master, only if that senior architect thinks out loud as he proceeds through the phases of the project.

A more assured answer for bringing new architects up their learning curves more rapidly is to implement QM in the firm. The underlying assumption of learning curves is that as we experience events we learn from these interactions at an *incidental level*, and that we unconsciously store these lessons away in our memory for retrieval and use in the future. With repeated exposure and involvement in events, we continually grow our repertoire of knowledge to aid us in the future.

By standardising and documenting some aspects of architects’ work, new architects can learn at an *intentional level*. The lessons to be learned are not left to chance but are channelled by the knowledge that has been systematically collected across the entire firm’s experiences and built into standardised processes. The new entrants will be able to manoeuvre their way through standard processes much more effectively and efficiently from the very first project to which they are assigned. This will give them the opportunity, along with the other architects, to spend their creative effort on the design itself.



Incidental learning curves



Intentional learning curves

As illustrated here, with the implementation of QM, new architects can potentially achieve much higher levels of productivity with involvement in fewer projects, than when they are dependent on their own incidental learning. Thus the firm is able to reap productivity and profitability in the early days of hiring new architects.

Introduction of QM to the practice

The question was raised earlier in this chapter as to the type of relationship that should exist between QM and productivity of the firm. I had indicated that the answer was dependent on what we mean by productivity and at what period of time you take the snapshot. I think we have explored the meaning of productivity sufficiently, so now we turn to the timing of when you have introduced QM and the effect that it is having.

As with the implementation of any new concept or system, it takes concerted effort in the early days to learn what is to be done differently and concerted effort to implement the new behaviours. Over time, the new behaviours become old hat and don't require effort, although they may still require some time to perform. For this reason, you would expect to see a sharp increase in the front end of a curve tracking effort being spent on implementing QM. Over time, the curve line would be expected to decrease significantly and level off to a minimum amount of effort.

Perhaps it would be helpful to keep in mind the Pareto Principle, that is, you want to get 80% of the result with 20% of the effort. No one would expect architects to spend more time on managing their work to meet their clients' requirements than working on their designs for their clients. While it might seem like they are doing just that in the early days of implementation, in short time, they should be able to get 80% of the benefit of QM with no more than 20% of their total effort going into QM.

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