

How to secure commitment from clients

1 Negotiating the level of client involvement

It is vitally important before a project starts to set realistic expectations of the amount of time the client should devote to the project and of the role or roles the client will play.

About the single most difficult aspect of industrial project work is the fitting and squeezing of the client's timetable into the straightjacket of the university calendar.

For our second year and conversion Masters team projects, we ask our clients to be available on our premises, for a minimum of one hour per week, at the same time each week, for the first four or five weeks of the project. Every week, the client will spend approximately fifteen minutes with representatives of each student team that is competing to build the required system. This is quite a commitment and it is quite exhausting work.

Indeed, in a semester-long project, during which there are probably twelve weeks when student teams are working seriously, it can be helpful for the client to attend for an hour on each of the twelve weeks. In practice, at the half-way stage, personal client-student meetings may not be so necessary, if the objective is to pass on test data, or to assess the latest version of the students' prototype. Some of this can be done remotely, using e-mail, file transfer or the Internet.

2 Negotiating potential project outcomes

It is vitally important before a project starts to set realistic expectations of project outcomes. Never be tempted to guarantee that your students will build a working system, even if the vast majority of previous projects have delivered this.

We negotiate on the basis that our students will do their best, that they are very well motivated towards building a real system and that we will manage them to the best of our ability. Where our projects involve a number of teams competing for the same client, we can reassure the client that it is very likely that two or three teams will build a useful product, even if one or more teams fails to get to grips with the project brief.

Where our projects involve fourth year students in the student company, we can reassure the client that these students are our very best students, who already have experience of project work in each of the previous three years at our institution.

Always leave open the possibility that the client may not get a finished software product, but discuss this possibility in a positive light. If the product is nearly finished, it may be possible to employ students over the vacation, to add those finishing touches. If the product is no more than a prototype,

Requirements creep

[To Do]

Maintenance issues

[To Do]

3. Negotiating contractual and copyright issues

At a number of academic events, - conferences and workshops – we have attended or organized over the past three years, some participants have expressed the view that attempts to involve industrial clients in projects at their institutions had foundered over legal and contractual issues. Either the university or the client had insisted on a contract that the other party was unwilling to enter into. Although there may be

instances in which both project partners' interests are best protected by a formal contract, our view is that client-led projects should be negotiated on the basis of trust, with the benefits to the students' education being a central shared commitment and motivating factor. If the management culture in a university is heavily reliant on formal contractual arrangements, it may not be possible to organize successful projects using our model.

Refer again to low cost development of a possible commercial product. The danger here is that students will feel that they are being exploited. At some point during the project, the students will probably glean enough information to make an informed guess at the amount of money that the client hopes to make if their software is sold. When they compare this potential profit to the amount of labour they are donating free or supplying at a nominal charge, they will understandably feel aggrieved. On one occasion, we had to terminate a project after only a few weeks' activity, when the client's real motive, to maximize profit, became apparent.

This is probably the strongest argument we can make in favour of negotiating copyright issues at the outset of a project, if there is a realistic chance that the client will seek to sell the students' work to a third party.

4 Negotiating prizes and fees

4.1 Prizes

Educational industrial software development projects are little different from software development projects conducted entirely in a commercial arena. All participants are stakeholders and, from time to time, they may need some encouragement to remain committed to the project.

A modest prize offered to the winning student team provides some incentive to the students, to "go that extra mile" or put an extra bit of polish on their work. For our second year team projects, each client puts up a prize of £250, - £50 for each member of the winning team. With the possible exception of small charitable bodies, who may have absolutely no budget for software, you should be very cautious about proceeding with a client who questions whether this level of prize is really necessary.

The prize is also valuable as a symbol of the client's commitment to the project. It can bolster the prestige of a client company, if that company's sponsorship of the project is publicized in the university's newsletters and in the local press. At Durham University, a number of prizes are awarded by more than one of the major international retailing companies for the best software engineering project work. These companies do not necessarily supply project briefs for students to work on, but they do seek to endorse students' software engineering achievement, partly to ensure that the company's name remains in the students' minds when it comes to their graduation and their search for a new graduate job.

A prize is one way in which clients and companies can demonstrate the value they place on students' work. Payment of a fee is another, but this financial mechanism may not suit all computing departments contemplating an industrial client's involvement in their teaching.

4.2 Fees

Asking a client to pay a fee is something that is only done by the fourth year members of the student software company.

They typically negotiate a notional fee, dependent on the client's business circumstances. This fee has ranged from a payment of £50 or £100 by a local charity up to payments of £3000 by commercial organizations. The student company states in its charging policy that it may cost a job at a rate of £10 per hour, but in practice, this fee level has virtually never been applied.