

# Lecture 13: Project discussion

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Talk about how Intel Research goes about research projects.

Not really about *how it does research*, more about how it represents *projects* (and helps formulate a project out of an idea).

Intel as a corporation is very keen on process - there is a process for initiating a change to an existing process, and there is a process for what to do if there isn't a process for your particular circumstance. Part of this is the hardware tradition of the company.

Intel Research Labs (where I work), are (by design) rather more loose about this kind of thing, nevertheless, we do follow certain conventions.

A lot of what we do is classified as "rock-turning": discussing ideas, performing experiments, fairly free-form research. This includes papers, but doesn't include anything that we might want the corporation at large to actually track, or that we might want extra budget for.

For this kind of thing, we have something called the LRP process.

You propose the project to a committee with a powerpoint presentation. Intel like to communicate via powerpoint. The proposal follows a template, which David Tennenhouse brought from the old-style DARPA. I won't bore you with the details, but it's designed to force one to think through a bunch of issues that one should worry about when talking about a research project.

People feel very mixed about this, but it's interesting to look at what it does. The idea is that the template can be applied to any research question (big or small).

What are you trying to enable? What are the hard problems / challenges? What are the new ideas that will address them? How will you go about it? What is the main body of the project? How will you know and show it works? What is the exit strategy?

Good and bad:

Bad: can be used to criticize any project, no matter how good. Good: really good

**Review: the old UNIX file system**