

CMPE 349 E.F.C. LaBerge
This lecture is based on

https://www.entrepreneur.com/article/21834

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Week 1

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It all starts with a proposal

- To get work (and get paid) you need to propose something
- So the first piece of writing for engineers is a proposal
- Government organizations and large companies generally ask for goods or services by means of a Request for Proposal (RFP)
- Engineering organizations (and others) respond by means of a formal proposal
- We'll look at the seven characteristics of a good proposal

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Week 1

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1. Study the Requirements

- The RFP will tell you what the customer (thinks) they want
- You must read the RFP carefully!
- Ask yourself
 - What are the customer's goals?
 - How can we assist them in achieving their goals? (not ours)
 - Is this product or service within our expertise?
 - ...Or a reasonable growth for us?
- Don't bid things that are too far afield!
- How far is too far?
- ...That's the art!

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Week 1

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2. Understand the Client

- You need to do some research
- "If you don't understand the client's problem, you certainly can't propose [something] that will solve the problem." S. Freed Writing Winning Business Proposals.
- Talk to your customer
 - One-on-one (your company and the customer's representatives) is best...
 - ...but large RFPs may have a more formal process
 - This is generally the role of the Marketing group...
 - ...but engineers need to be involved.
- Who are their decision makers? What are their decision processes like?
- Turn over rocks!

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Week 1

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3. Develop an approach

- Once you know what customer really wants, develop your approach / solution
- This may be a time for brainstorming!
- A brainstorming session in 1994 is where the concept for AHPLS was born!
- Brutally evaluate your approach
 - Is it practical?
 - What are its benefits and drawbacks?
 - How much will it/should it/can it cost (may be a Fermi problem)?
 - How much will it cost to develop?
 - How long will it take to develop?
 - Caution: do not "drink your own bathwater"!

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Week 1

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4. Evaluate your solution

- Will you solution be acceptable to the customer?
- Based on your conversations with the customer?
- Do a dry run evaluation of your solution against the criteria of the RFP
- BE HONEST!
- Developing the proposal itself is time consuming and expensive
- ...is the business to be gained worth the investment?

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Week 1

5. Outshine your competitors

- Duh!
- A proposal is a sales document
- If you have done the previous steps thoroughly and honestly, you can be very positive in your writing!
- Make sure you emphasize you company's strengths
- Make sure you counteract any impression of your company's weaknesses
- Marketing/engineering should also know your competitors...
- ...and their strengths and weaknesses.

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Week 1

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6. Write the Proposal

- One step, but lots of time and effort
- Do your graphic artifacts first!
- Follow the customer outline / structure exactly
- ...even (especially) if you would do it otherwise!
- You will need a WBS / SOW to estimate the costs
- Show the customer that you understand their problem!
- Show your customer that you (and you alone) address their needs in a cost-effective manner.
- Proposals will require both technical and price submissions
- BOTH must be right!

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7. Review and Improve

- Review the proposal thoroughly, playing the role of a skeptical customer.
- Companies often assemble domain expert teams to review the proposal before submission
- Address all of the concerns listed in the RFP...
- ...and all of the concerns you discovered talking to the customer
- Proofread! Proofread! Proofread!
- Worry about nitpicky details of proposal preparation
- ...the better it looks, the better your chances.
- Make sure it is delivered on time (or early)!

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Week 1

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Facts about proposal work

- Proposal work is the most intense period of engineering activity
- There is a firm deadline always too short!
- There are fixed requirements
 - Generally a fixed outline for the proposal itself
 - Plus a set of requirements
 - Plus a desired schedule or list of task
- You can expect very long hours
 - Nights
 - Weekends
 - Holidays
 - Vacations?
- But it can also be the most satisfying.

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