Building a Dream Engineering Team

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Good people make the difference

Variation in output between people...

Typical office and manufacturing jobs

- 80%
- 120%

Engineering, especially software and the new digital technologies

- 0%
- 1000%
Building a team

- More than just recruitment…

- Recruiting
- Motivating
- Developing
- Retaining
- Releasing/redeploying the ones that don’t make it
Culture matters

Environment
- Policy of everything is open
- Involvement in decisions
- Caring and doing the best for staff
- ‘Hygiene factors’ (Maslow’s hierarchy)
- Good people attract good people

Team
- Shared ownership and gain
- No blame: you succeed, we fail
- Peer support and review
- Mentoring
- Manager is an enabler

Motivation
- Find out what motivates each person
  - money, power, fame, solving problems?
- Invest in people’s development
- Give people ownership and responsibility
- Challenge people – encourage them to exceed their expectations
- Encourage some rivalry / competition
Ability is more important than experience

- Definitely true for software
- Often, but not always true for hardware
- Doing something new often requires a fresh approach
  - Experience can be a barrier to innovation
- Ability is harder to measure
  - It's difficult to identify from a CV
- What do recruiters usually concentrate on?
Tips for recruiting

• You need to check a lot of CVs and interview a lot of people to find good people.
• Use your contacts before going to the general market.
• Allocate someone in the company to manage the recruitment.
• Reply quickly to incoming CVs.
• Look for a hobby interest.
  – People who choose engineering as a vacation not just to make money.
• Remember for good candidates, it's as much about you convincing them.
• Don't settle for almost good enough.
  – A small company cannot carry people.
• Psychometric tests are useful for management roles.
Tips for interviewing

• Plan the interview flow
• Always have two interviewers / interviews
  – Second opinion
• Try and use standard questions
  – ‘Calibrate’ your interviewers
• Use questions that test understanding of basic concepts rather than experience
• Test the questions on existing staff
• Use telephone for first interview for ‘possible’ CVs
Advisors

- Advisors bring ideas, credibility and contacts
- They can also act as a mentor and sounding board
- They can differentiate important vs non-important
- It's an essential role for a startup
- Contacts in particular can make a huge difference
- Look to the various supporters of entrepreneurship such as CfEL or Cambridge Enterprise to find you good advisors!