Stuck!

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Outline

- Why we get stuck:
  - An introduction to the dynamics of overload & the dangers of firefighting
- Why we stay stuck:
  - The obvious solutions often make things worse
- What can be done
Is This **Your** Project Pipeline?
## Overload at PreQuip

<table>
<thead>
<tr>
<th>Active Projects</th>
<th>Resources Required for Completion (months)</th>
<th>Months to Completion (desired)</th>
<th>Implied Development Resource Allocation (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>This year</td>
</tr>
<tr>
<td>1</td>
<td>54</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>123</td>
<td>24</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>86</td>
<td>12</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>286</td>
<td>20</td>
<td>92</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>4</td>
<td>24</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>352</td>
<td>36</td>
<td>48</td>
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<td>27</td>
<td>75</td>
<td>9</td>
<td>62</td>
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<td>28</td>
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<td>30</td>
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</tr>
<tr>
<td>29</td>
<td>153</td>
<td>18</td>
<td>60</td>
</tr>
<tr>
<td>30</td>
<td>29</td>
<td>3</td>
<td>29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All Other Support Activity</th>
<th>—</th>
<th>—</th>
<th>430</th>
<th>430</th>
<th>430</th>
</tr>
</thead>
<tbody>
<tr>
<td>(customer support, troubleshooting)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Development Requirements | — | — | 2783 | 2956 | 2178 |

| Available Resources (months) | — | — | 960 | 960 | 960 |

| Utilization (percent) | — | — | 289.9 | 307.9 | 226.9 |

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Over commitment destroys productivity

Average Value-Added Time on Engineering Tasks

Number of Projects per Engineer

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And shifts attention away from early stage work
Productivity falls

Overload

Early stage work is neglected

No time for maintenance/training

Performance degrades
Why does overload persist?
Work smarter or work harder?
When performance is low, what do managers do?

- The Fundamental Attribution Error (dispositional bias)
  - Much research suggests that in the situations we study, people are predisposed towards blaming problems on other people rather than on the systems in which they live and work.

- And, if managers make the FAE how do they respond?
  - More production pressure
  - More oversight
    - “I knew my project was in trouble when I had to give hourly updates”
Overload

Performance degrades

The people who work for me are lazy.

We need more accountability, controls.

The Fundamental Attribution Error

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What happens next?

- When senior managers get caught in the capability trap and the self-confirming attribution error they:
  - Spend a lot of time on fighting fires, providing “oversight”, and “fixing” specific problems
  - And very little time on developing strategy, setting priorities, and thinking about the system
Why is it so hard to kill project #26?

- It’s a “good” project!
- Good managers can meet stretch goals (and I’m a good manager)
- Making difficult decisions would imply that we:
  - Had a strategy that we could use
  - Could talk to each other in productive ways

- It’s very hard to do either when you’re overloaded
Overload

Declining performance

We can’t make decisions

We don’t have time to reflect

The “what on earth do they think they’re doing” loop
Productivity falls

Early stage work neglected

No time for Training/Maintenance

Declining performance

My people are lazy

Overload

No time for strategy
Working smarter instead of harder requires dealing with “worse before better”
What can be done?
The Tiger Woods Theory of Change
Getting Unstuck: 4 Elements

- Manage capacity
  - Complement “bottom up” with “top down”
- Manage worse-before-better
  - Focus on eliminating defects with the best cost/benefit ratio
- Change your habits around problems
  - Respond to a screw-up as though it were a capability problem
- Have a clear strategy and live by it
Manage capacity

- It is hard to avoid getting stuck if you take on more work than you have the capacity to do
  - Capability development and defect elimination inevitably suffer (“just do it” doesn’t)
- Most organizations try to do this (if at all) with a “bottom up” approach
  - Start with all the work you want to do
  - Estimate resources requirements
  - Add it up and cut everything that falls “below the water line”
- While necessary, this rarely work on its own
  - Individual task estimates are notoriously unreliable
  - We have a strong psychological tendency to assume that everything will proceed according to the “best case”
  - It is very easy to say “we can make space for one more”
The Top Down Approach

- Keep good records of what you accomplished last year (or quarter)
- Compare what you did last time with what you are planning on doing this time
- If you are planning on doing more this year than last you better have a good story for why this is feasible
  - It's not unusual for these to be off by more than a factor of two
  - Harley-Davidson made huge progress just by recognizing that they could not do more than one big project a year
Manage Worse Before Better

- Pick the projects that have the biggest bang for the buck
- Start small and do lots of little projects
- Make sure you reinvest some portion of each success in another project
Change your habits around problems

- We all make the Fundamental Attribution Error and suffer from its consequences. The trick is to change your habits around how you respond to problems.

- From a manager in the most successful initiative Nelson ever studied:
  
  There are two theories. One says “there’s a problem, let’s fix it.” The other says “we have a problem, someone is screwing up, let’s go beat them up.” To make improvement we could no longer embrace the second theory, we had to use the first.
Have a clear strategy and values and live by them

- For the people that you lead:
  - Spend time on clearly articulating your priorities in concrete ways; operational examples are key!
  - Make it very clear what is supposed to “fall off the table” when people are in a resource crunch; they are just as prone to over-committing as you are
  - Praise them like crazy when they make the difficult decisions

- For the people that lead you:
  - Ask for clear priorities and don’t continue the conversation without them
  - Don’t sign up for more than you can do (even if you are pushed)
  - Escalate when you are being pushed off your agreed upon values and strategies with concrete examples and data (pay now or pay later)
Develop the ability to have real conversations

- “This would only work if we told each the truth, wouldn’t it?”
In Summary:

- Manage capacity
  - Complement “bottom up” with “top down”
- Manage worse-before-better
  - Focus on eliminating defects with the best cost/benefit ratio
- Change your habits around problems
  - Respond to a problem as though it were a capability problem
- Have a clear strategy and live by it
  - Learn to kill project #26
Table Exercise

- Pick a place in the organization represented by someone at your table that feels “stuck”

- Develop a straw plan for getting unstuck:
  - What projects/activities are you going to cut or postpone to make space for improvement?
  - What defects or capabilities offer the biggest bang for your limited improvement resources?
  - Are your strategy and values in good shape? Do your actions match your statements?
Good Luck!