Thinking like an Engineer

This resource has been provided courtesy of Medway UTC, Chatham, Kent and was prepared while the school was involved in the 'Thinking like an Engineer' project 2014-2016. Please acknowledge the school if you use this material.

Website: http://www.medwayutc.co.uk/

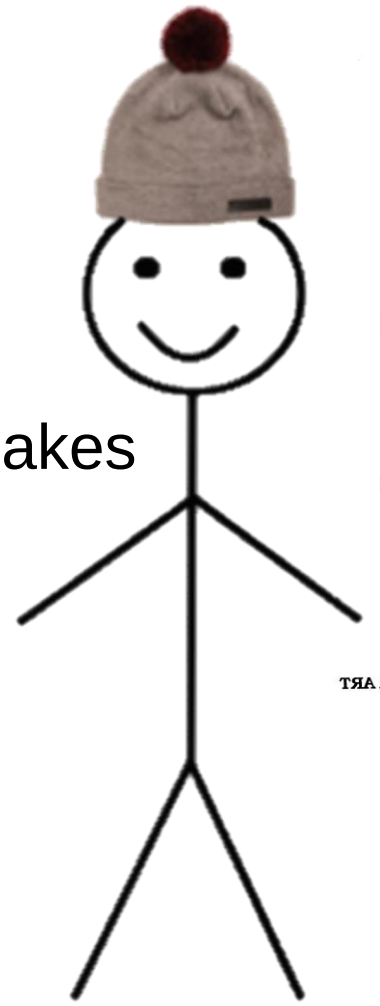
This is Bill.

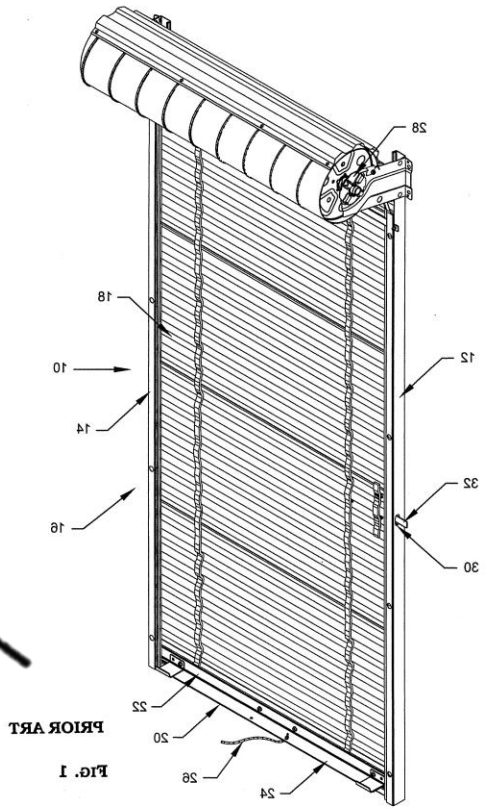
Bill is an Engineer.

Bill makes things that work, and makes things work better.

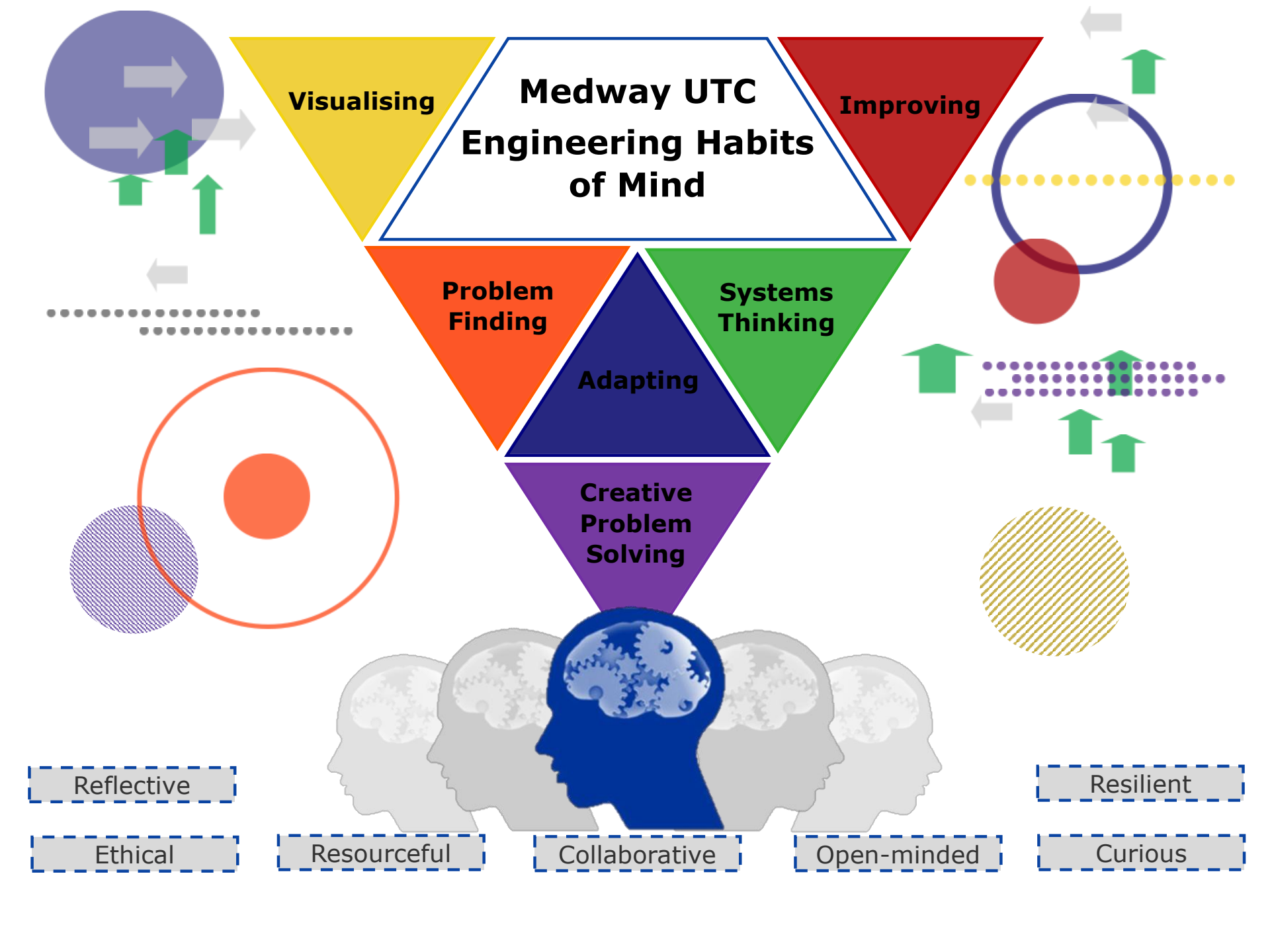
Bill is a problem finder.

Be like Bill.

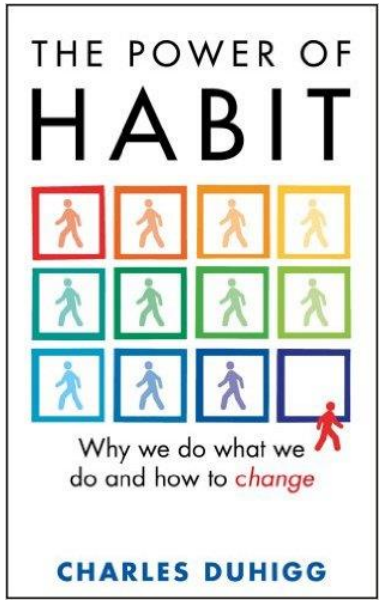


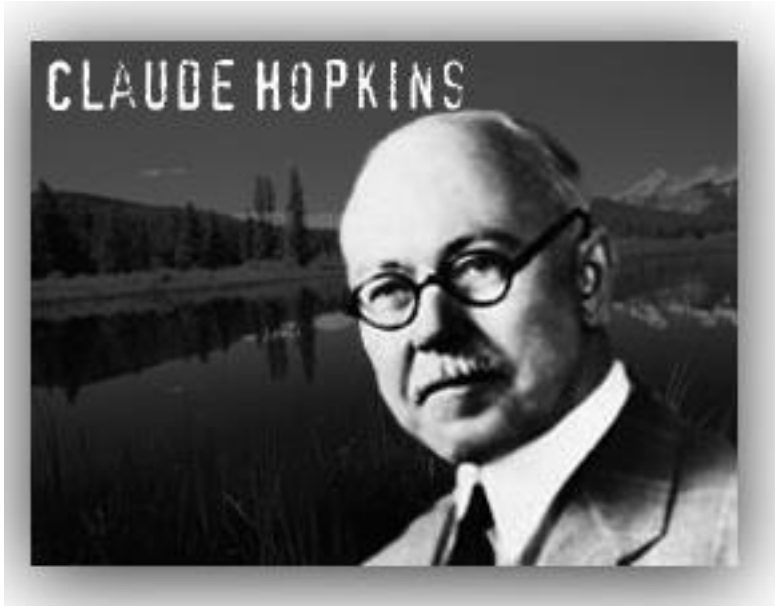


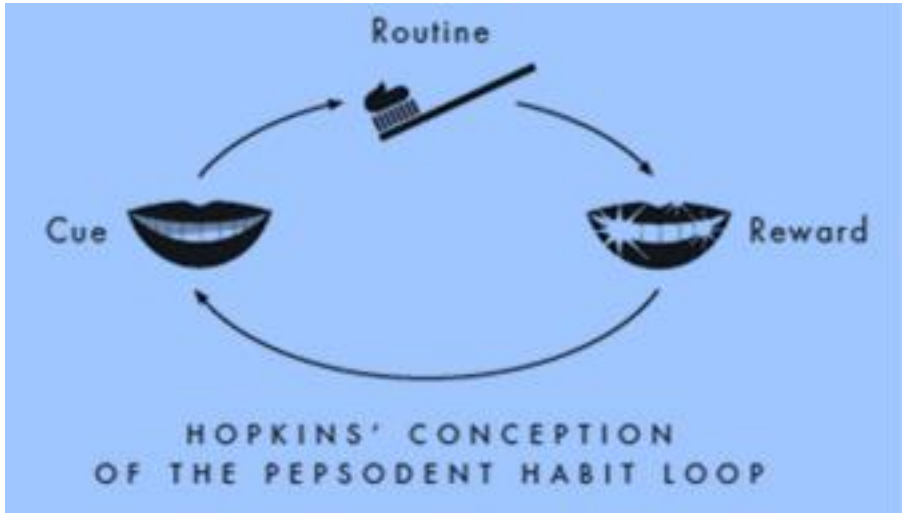
Medway UTC Engineering Habits of Mind



How do habits work?







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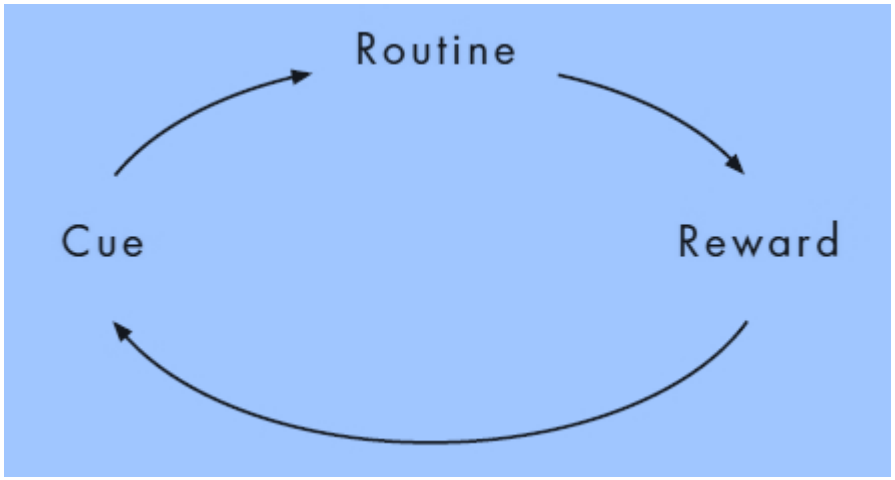
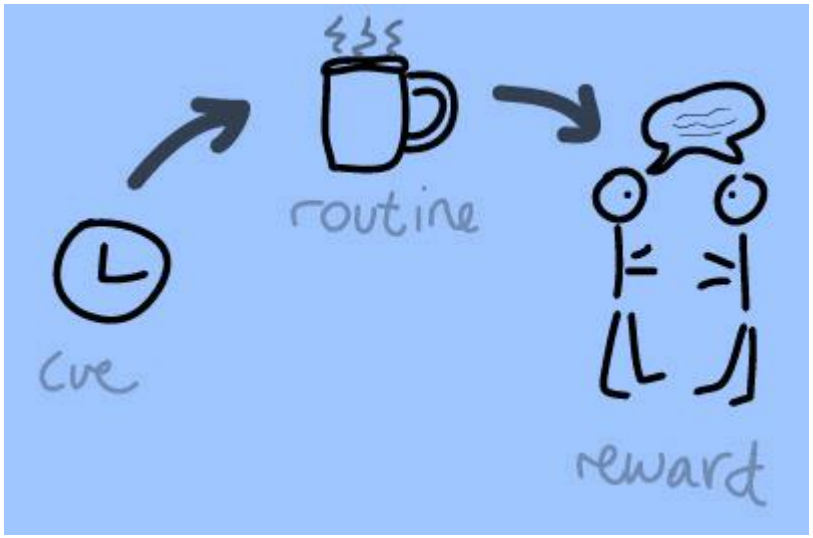
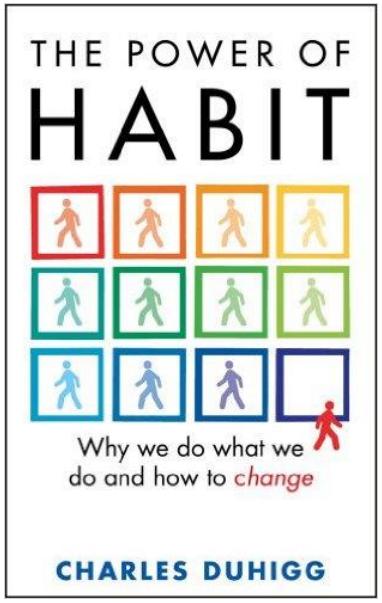
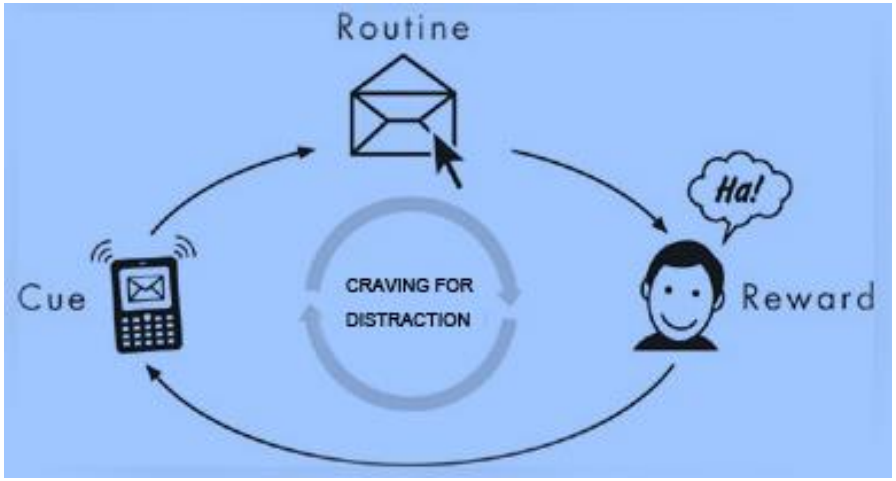
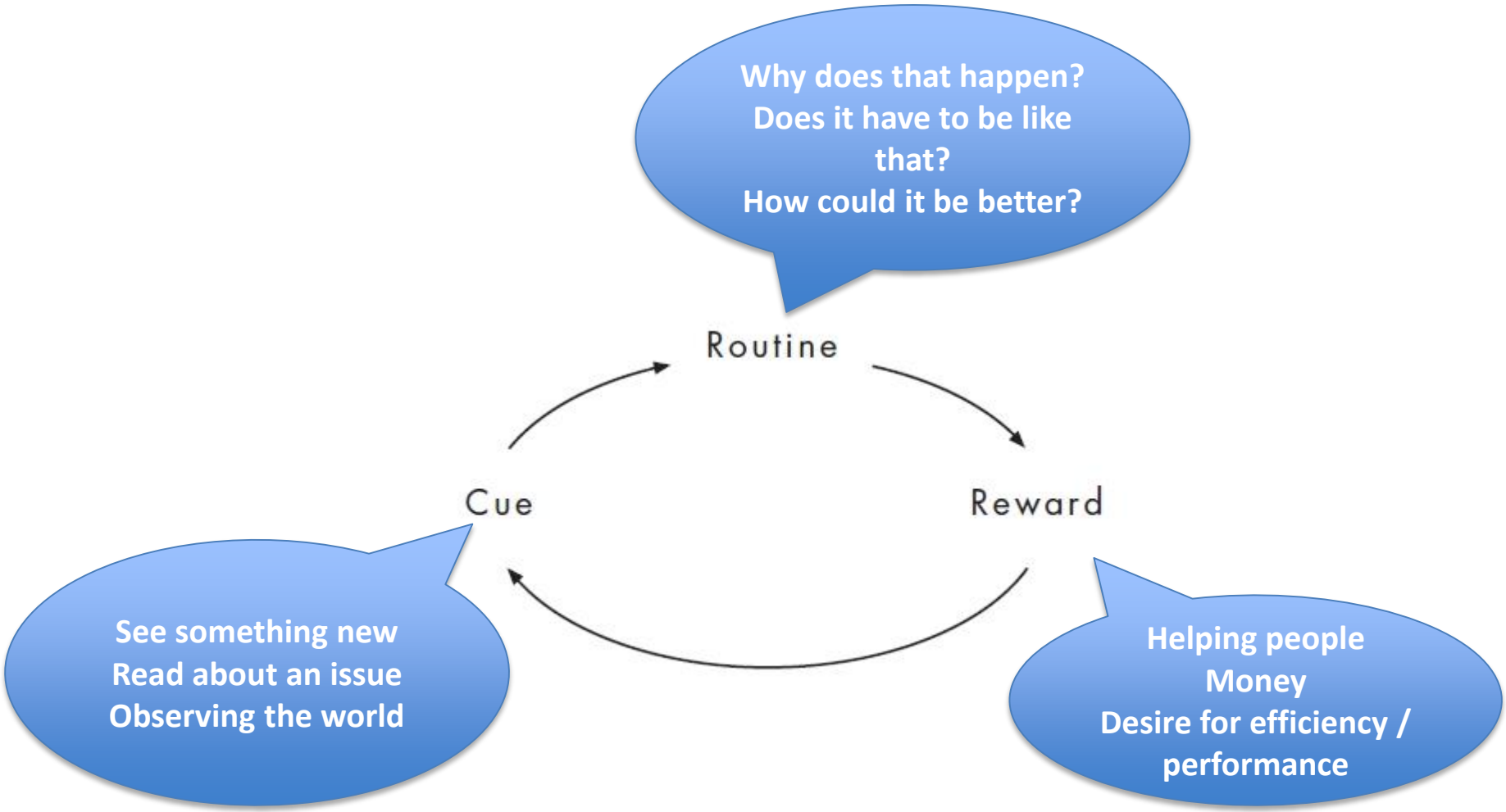








Engineering Habits of Mind



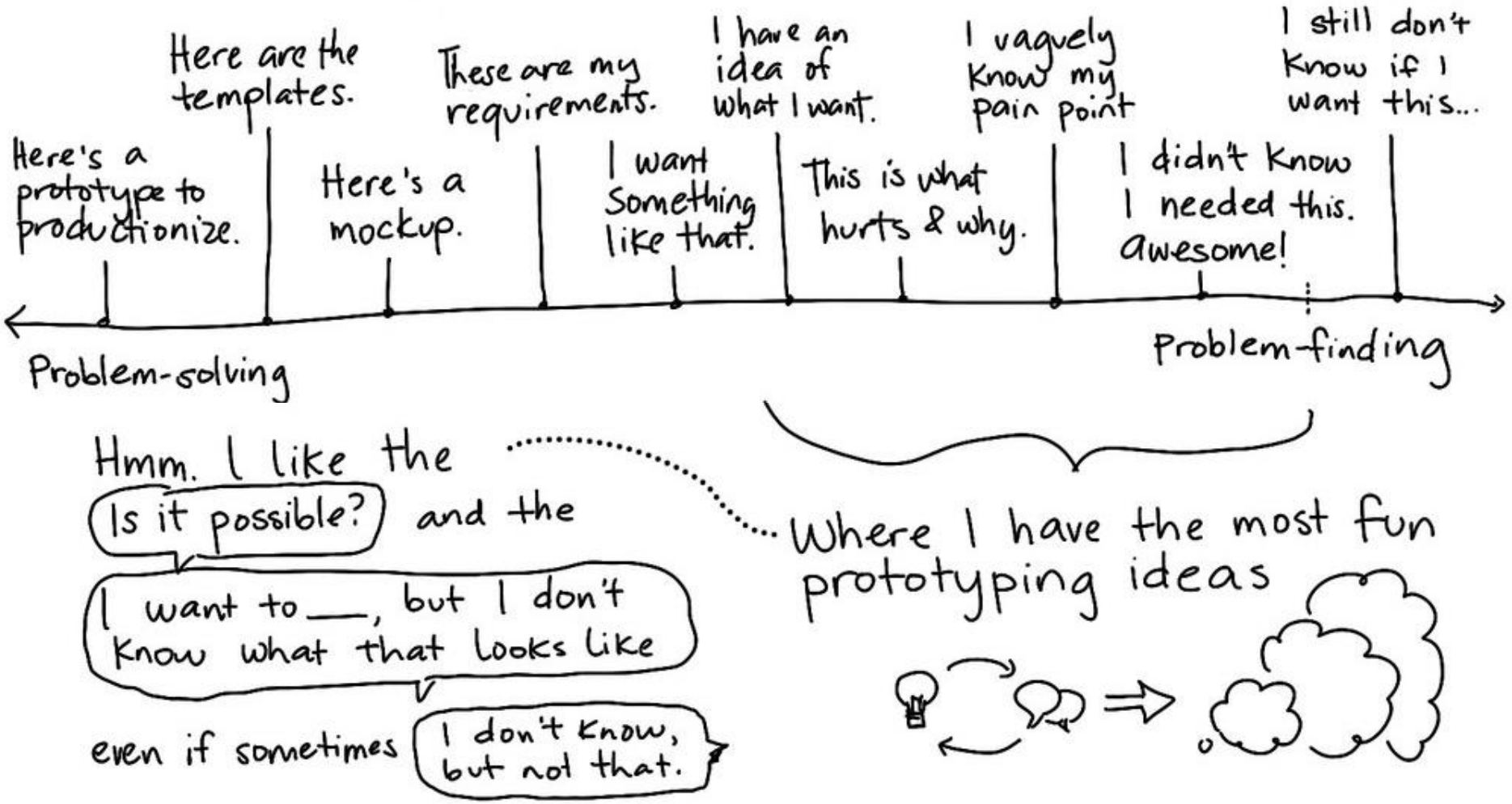
Problem Finding

"Problem-solving remains an important skill. No doubt about it. But problem- finding is becoming just as important, if not more so. If a customer knows exactly what its problem is, it can probably find the solution on its own. It doesn't need you.

But where you're enormously valuable is when the customer doesn't know what its problem is, or is wrong about its problem.

There you can make a big difference — by identifying problems the customer doesn't realize that it has, and looking down the road to anticipate problems that haven't yet arrived."

Problem Finding



To reflect on…

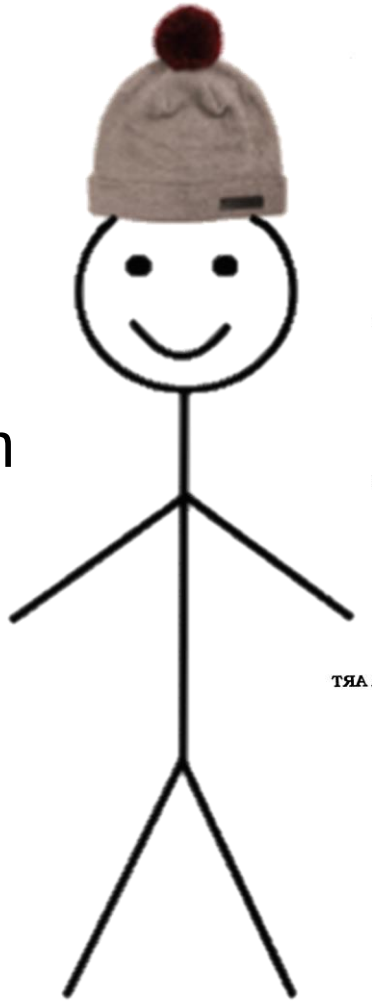
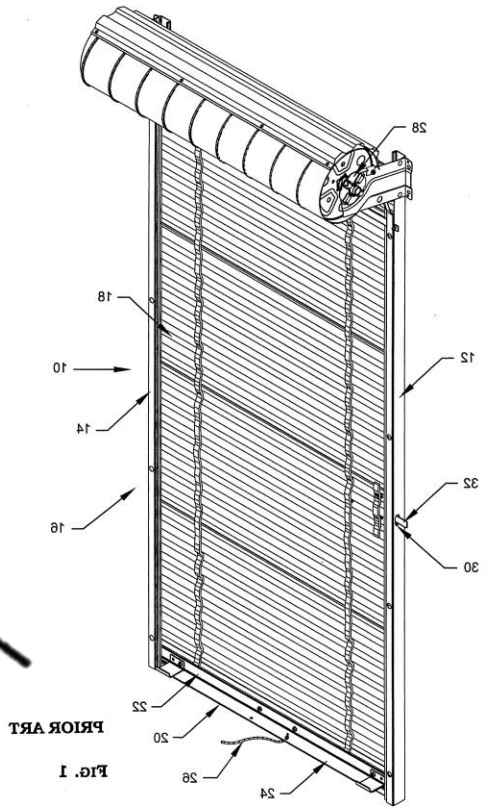
IT TAKES AS MUCH TIME TO SOLVE A BAD PROBLEM AS IT DOES A GOOD PROBLEM.

AND IF YOU'RE NOT WORKING ON GOOD PROBLEMS, YOU'RE REALLY WASTING YOUR TIME.

This is Bill.

Bill is an problem finder.

Bill questions the world around him and verifies what is know.

Bill is an Engineer.

Be like Bill.