Sidebox: Scenario planning

One of the most extreme versions of "planning as learning" is that of *Scenario Planning*. In creating a scenario the idea is not so much to forecast the future as it is think what challenges and opportunities you, your team or business may face as the world changes.

Scenario planning has its roots in military planning but has been popularised through its use by Shell and authors like Peter Schwartz. In his model we seek out information which may effect the future. Some of this is knowable right now, e.g. the worlds population is growing, X babies were born last year, so in 12 years time there slightly less than X teenagers. Other information is from "weak signals" and comes from talking to technologists, business people, academics, and other thinkers.

Finding people who have insights and ideas, so called *remarkable people*, may be a challenge but is not impossible. Once found their ideas should expose some implicit assumptions and help you imagine a different sort of world.

You shift through this information and look for the underlying forces and the events that are important for your scenario. Then you construct a story that explains the facts, highlights the forces and provides insights. Actually, you may want to construct several scenarios, say a best case and a worst case but each story must be internally consistent.

Once complete you name each of these scenarios. None of the scenarios you have produced forecast what will happen, they only show what could happen.

Stuart Brand suggests that scenario planning can be used in designing buildings. By thinking about how a building may develop in future we may consider what features are important, what is irrelevant and what obstacles we may be creating in a new construction.

Software development could benefit from these ideas too. Software designers aim for flexible products that can absorb change, can be reused and yet are easy to maintain. Each of these attributes comes at a cost, one answer to this raising cost has been XP's YAGNI - "you aren't going to need it" - approach. The problem is, deciding just what you do need and what you don't need is difficult.

Reality is going to be somewhere between these extremes but how do we know? Scenario planning offers one way of exploring the future of our software and flushing out real requirements.

Likewise, trying to uncover the risks entailed in your project, or where you can expect change requirements to come from can be analysed through a scenario plan.

Large framework scenarios used for company strategy and government policy can takes months of work to produce, but it is also possible to run smaller project scenarios to examine specific areas of interest. Even here though, you probably want to conduct some research then schedule several days to analyse what you have gathered, agree the forces and write your stories.

While a team is researching and writing scenarios, they are creating a shared understanding and even a shared language about problem they face. Communication and learning go hand-in-hand.