



Views on Balancing Agility and Discipline

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See his full bio at:
www.sei.cmu.edu/go/agile-research-forum/



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Balance



Change is accelerating.

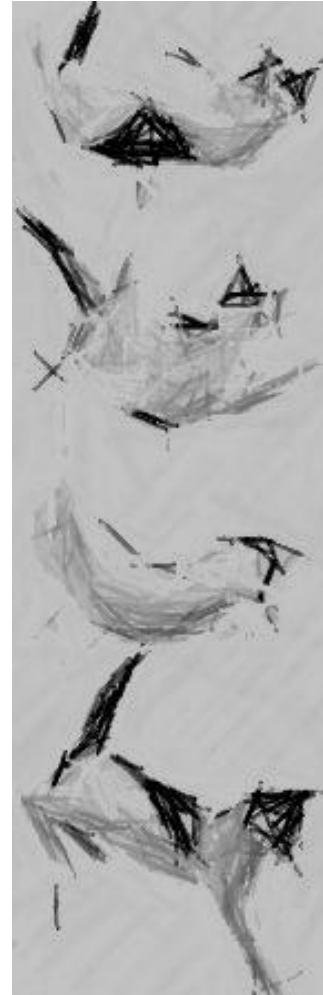
To keep your balance,

you need agility and discipline.



Agility

Respond rapidly,
respond efficiently,
to change,
with consistency.



Measuring Agility

Response time

Efficiency

Consistency



Impediments to Agility in Software



Lack of ready backlog

Lack of “done” at the end of a sprint

Lack of teamwork

Lack of good design

Tolerating defects



Avoiding the Impediments

Build high-performance teams.

Plan every project.

Use a measured process.

Design before you build.

Make quality the top priority.



High-Performance Teams

Software is knowledge work.

Build self-managed teams that
make their own plans,
negotiate their commitments,
know the project status, precisely.



Plan Every Project

Never make a commitment without a plan.

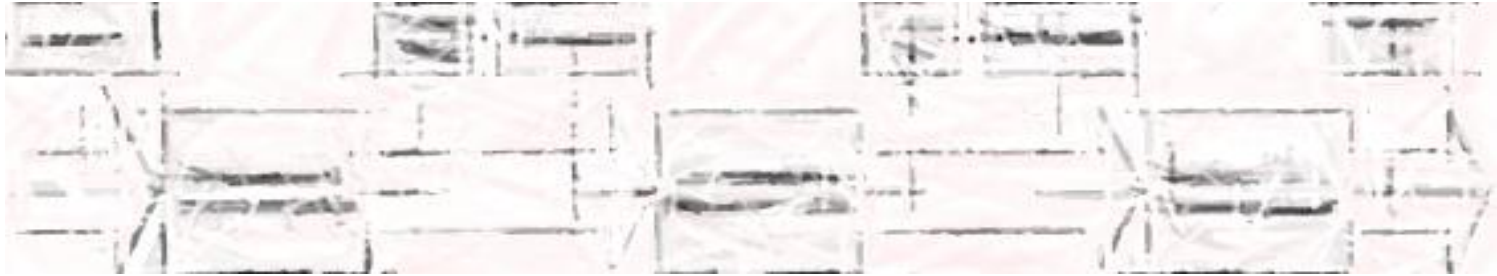
Use historical data.

If the plan doesn't fit the work, fix the plan.

Change is not free.



Use a Measured Process



To measure the work, define its measures.

To measure the process, define its steps.

If the process doesn't fit the work, fix the process.



Design Before You Build

Design informs the implementation.

Good designs produce less code.

Design what you know and explore the rest.

When you know enough, finish the design, then build.



Make Quality the Top Priority

Defects are inevitable.

Poor quality wastes resources.

The sooner you fix it, the better.

Quality without numbers is just talk.



Competitive Advantage

Twenty projects in 13 organizations

- had an average schedule error of only 6% in a range of -24% to +25%
- delivered more functionality than originally planned or finished ahead of schedule
- cost 5% more than planned in a range of -20% to +27%
- had test costs of less than 7% of total cost with an average cost of quality of only 17%
- delivered software with an average of only six defects in 100,000 lines of new and modified code



Discipline is the Key to Agility

Agility isn't achieved by *trying* to be agile.

It isn't achieved by adopting slogans, reciting metaphors, or through imitation.



It can only be achieved when everyone in the organization acts professionally, and uses a disciplined, measured approach to their work.



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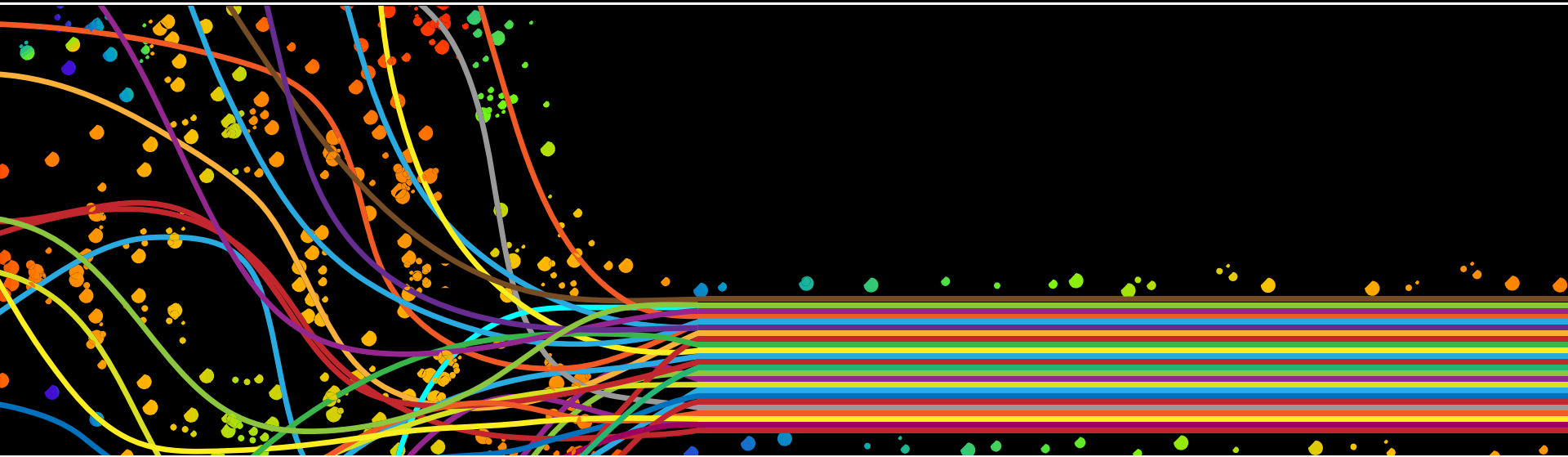
Q&A

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