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How to make a time machine

Tony Grout
Business Value Leader
IBM Software Group

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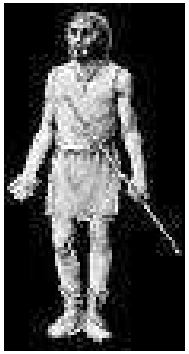
'You must follow me carefully. I shall have to controvert one or two ideas that are almost universally accepted. The geometry, for instance, they taught you at school is founded on a misconception.'

'Is not that rather a large thing to expect us to begin upon?' said Filby, an argumentative person with red hair.

The Time Machine
H. G. Wells

If you could travel in time what would you do?



What could you do with a time machine

- Predict the future
- Stop the bad stuff in the past from happening
- Experience the good stuff again
- Learn from the past
- Have fun

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So what do you need to make time?

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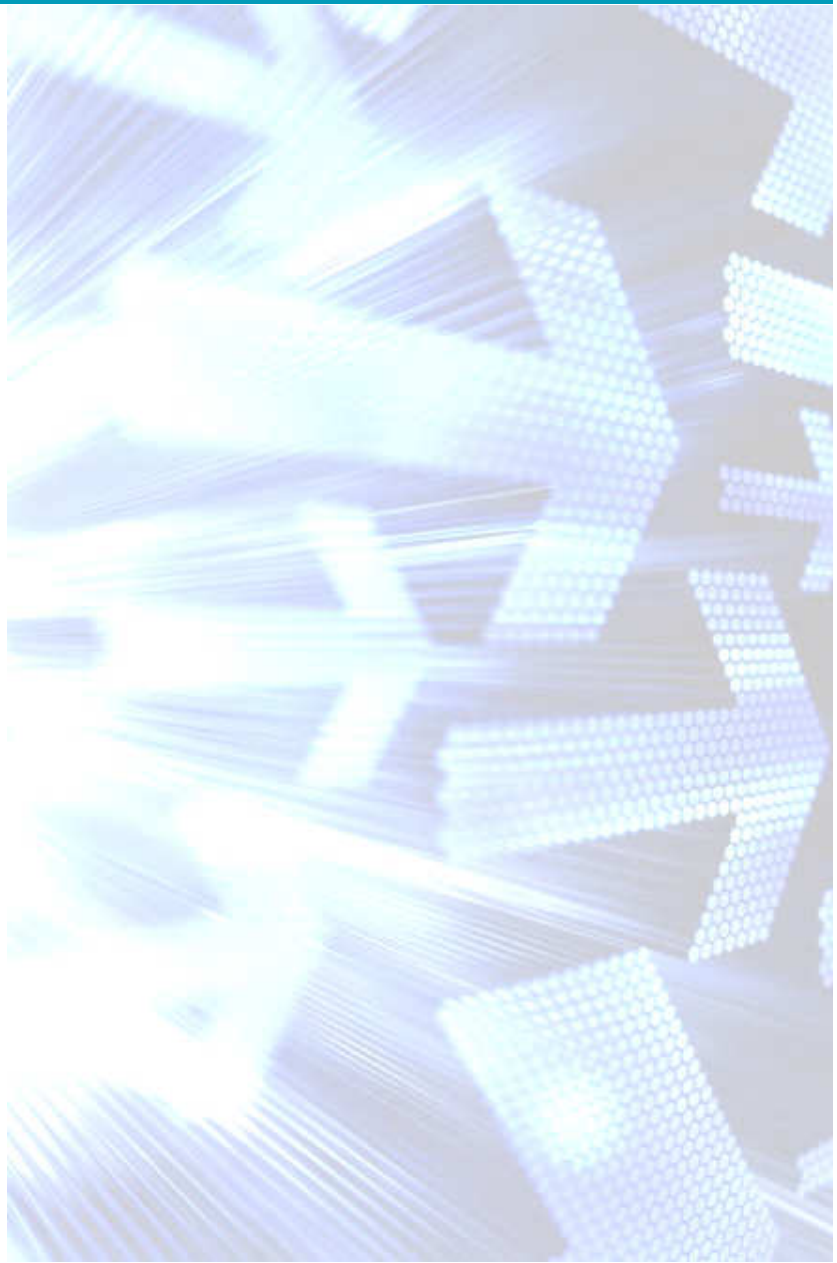
A proven architecture

- Architectural options are always a good thing
- Follow the classics - form follows function
- Make it firm but easily pliable
- Build something better than a DMC-12

A clear an unambiguous vision

- The vision must be simple but not simplistic
- The vision must be compelling
- The vision must be well communicated
- The vision must be emotive

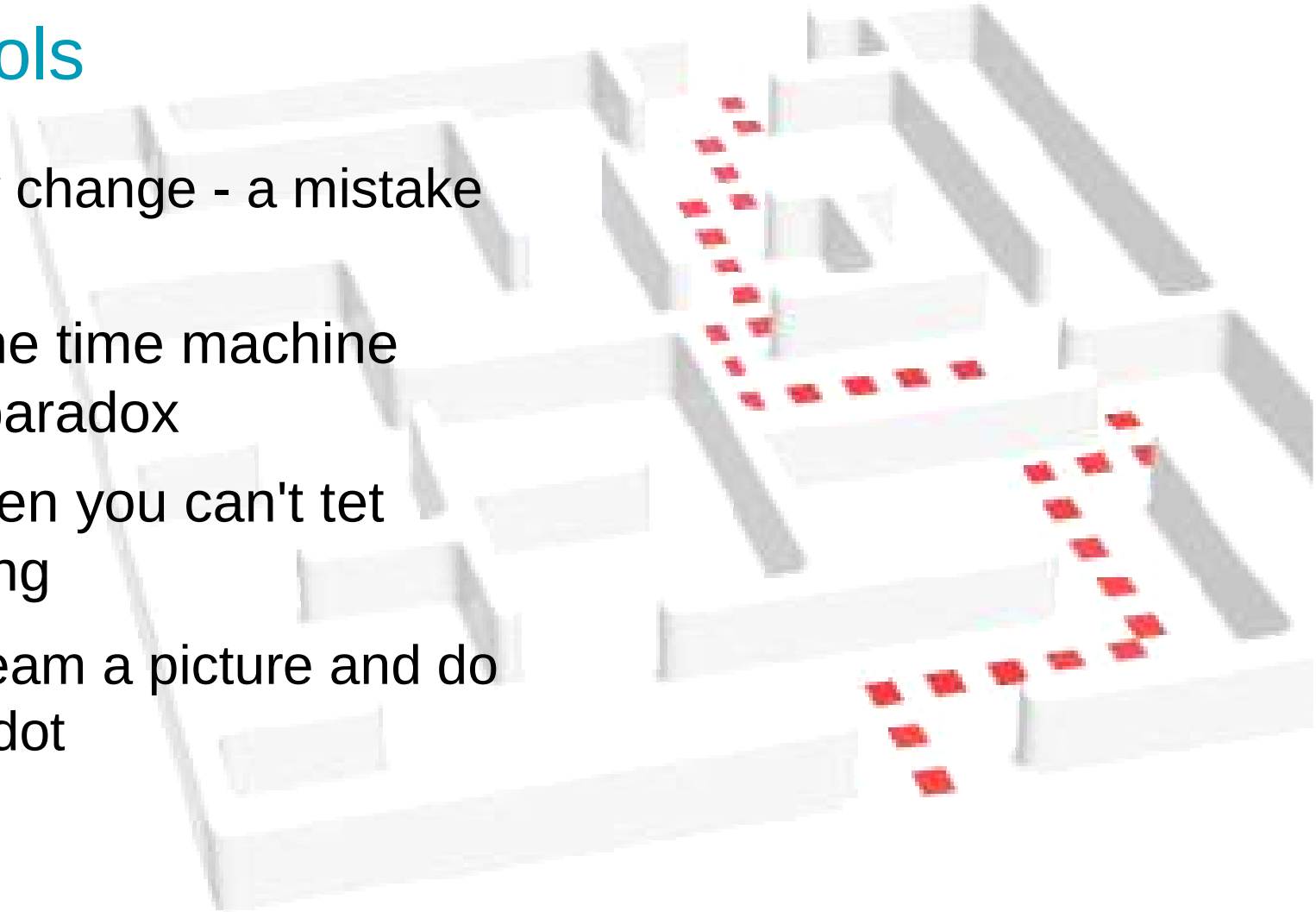


Great Tools

- Integration saves time
  - Enter it once, see it anywhere
  - Removes defects before they're introduced
- Find before you need to fix
- Address security before you go live
  - A denial of service attack on a time machine – not good!

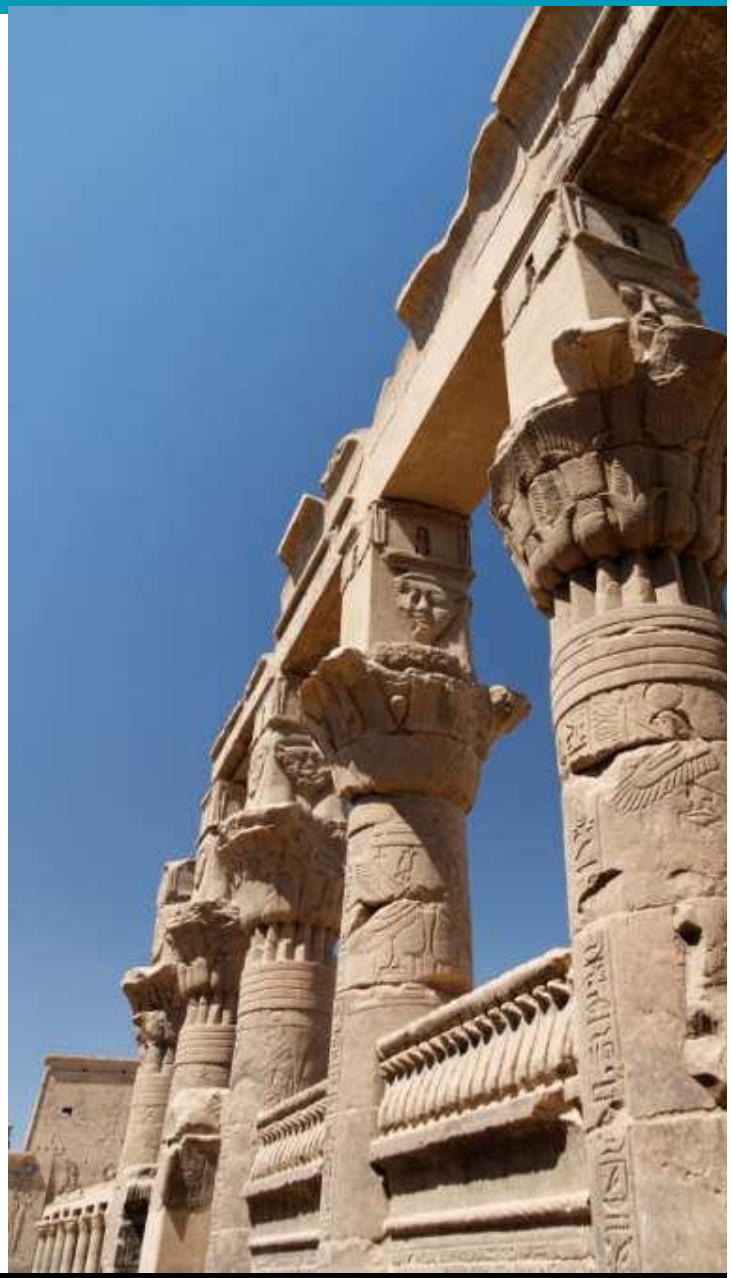
Great Tools

- Test every change - a mistake could hurt
  - Solve the time machine testing paradox
  - Even then you can't tet everything
- Give the team a picture and do the dot to dot



Time and energy to make the time

- 25% for innovation is not enough to build innovation
- Self-Configuration
- Self-Healing
- Self-Optimization
- Self-Protection



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Who's building it for who?

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Get the top10%ers to build it

- Give them an environment to build it in
- Don't expect them to pull the others along
- Don't rely on the mad professor
- Don't just expect it to happen

Involve the business and the customer

- Solve their problem not their solution
- Build more than they ask for
- Get them to look beyond the immediate future

Make the time machine generative

- Leverage
  - Make difficult jobs easy
- Adaptability
  - Breadth of uses with no or simple changes
- Ease of Mastery
  - Easy to adopt
- Accessibility
  - Easy to obtain

When should you make more time?

- Start now
- Start making time with the things you do most often
- Start making time for the business
- Start fixing yesterday while you fix today

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Using all the time you've found

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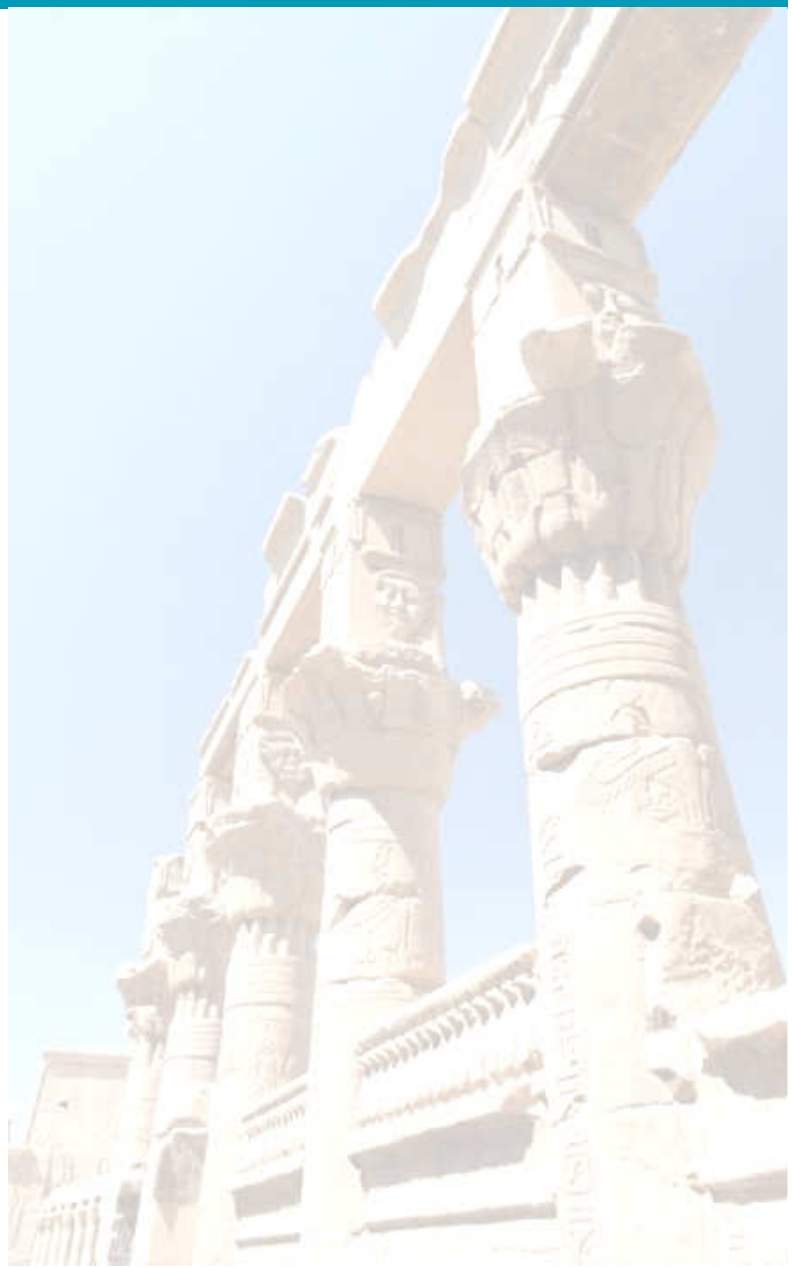
Innovation

- Situational Computing
- Mobile solutions
- Collaboration
- Build value from consolidated content
- Take advantage of the long tail

Software Archaeology

- Understand the landscape
- Shore up with pit props first - build unit tests
- Catalogue the findings
- Wrap the good and scrap the bad



Polish your assets

- Factor out the project specifics
- Extract the asset from as high up as possible
- Take and polish the accompanying tests
- Fully describe with the Reusable Asset Specification

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Tips for Time Travellers

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Doesn't mean you never experience the bad stuff

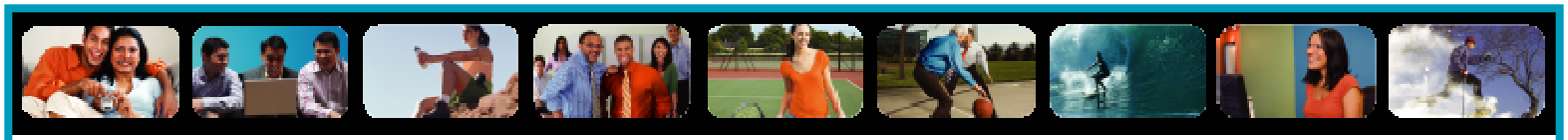
- You just don't have to experience it twice
- Learning by reading about history could be less painful
  - Remember that generally the winners write history
- You still get to learn from failure

It can be use for both good and bad

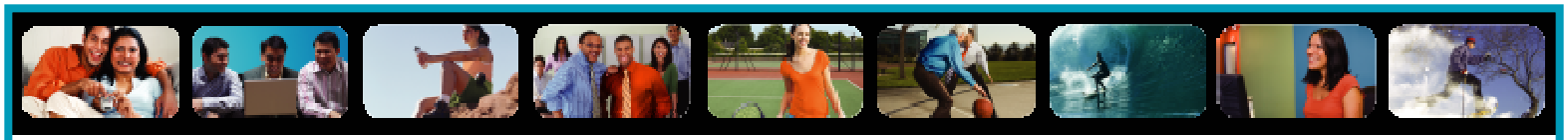
- Lucky successes can be used as good examples
- Ground Hog day can still happen if you don't learn
- You must not steer just looking though the rear view mirror

Finally Learn Business Lessons from Einstein

- Don't time travel badly
  - Avoid the "Twin Paradox" effect
  - The organisation stays on planet Profit IT - goes to the distant planet Technology
- Create time dilation
  - Occurs when two objects more relative to each other
  - Don't follow the market lead it but with cunning
- Use gravity to create time
  - The higher up we operate the faster things appear
  - Get proactive high level support for your projects



Questions



Thank You

Tony Grout – Business Value Leader

tony.grout@uk.ibm.com