



Innovation Business

Chris Brown, DSR Seminar, July 2008

Innovation and the Oil & Gas Upstream Business

Upstream = Exploration, Appraisal,
Development , Operation, Export



- Mature
 - Capital Intensive
 - Commodity
 - Competitive & Interdependent
 - Selective Risk Acceptance
- } Performance managed



***How to encourage individual
and collective innovation?***

Challenges for Innovation

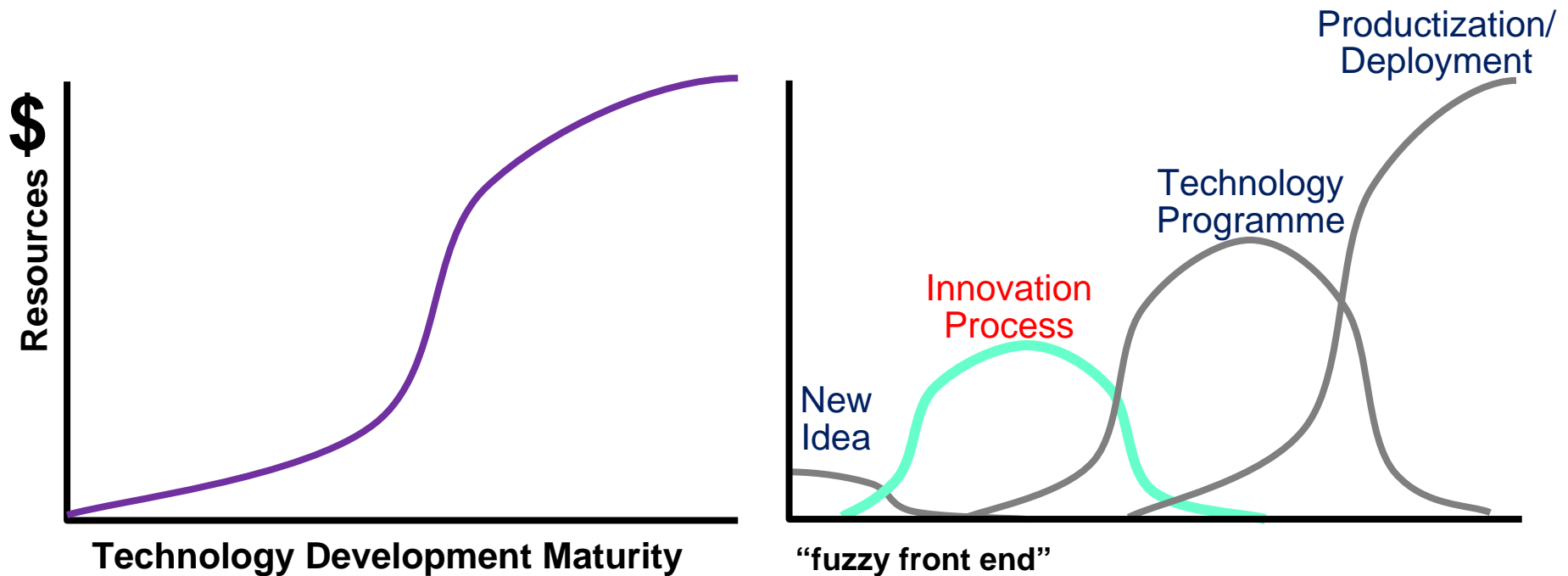
Typical issues...

- might have the right idea, but wrong time to get attention in Business Units
- Technology Programme locked into multi-year commitments with annual updates
- testing & prioritization for funding inhibits immature proposals
- pressures from shorter term needs, timely pay-back
- workload drives ongoing activity (the tyranny of the urgent)
- uncertain whom to approach with unusual ideas
- innovation means risk, but failure is not wanted
- just not enough time to do everything
- etc

The Innovation Challenge: getting the synergy between Performance Management & Innovation Options

Innovation operational targets and processes

- Set up an “Innovation Board” with individual and collective accountability
- Identify where an Innovation process fits it...



Bridging “the Valley of Death” between idea conception & product development

Innovation operational targets and processes

- Identify underpinning process...



Issue: Culture Change as an input or output

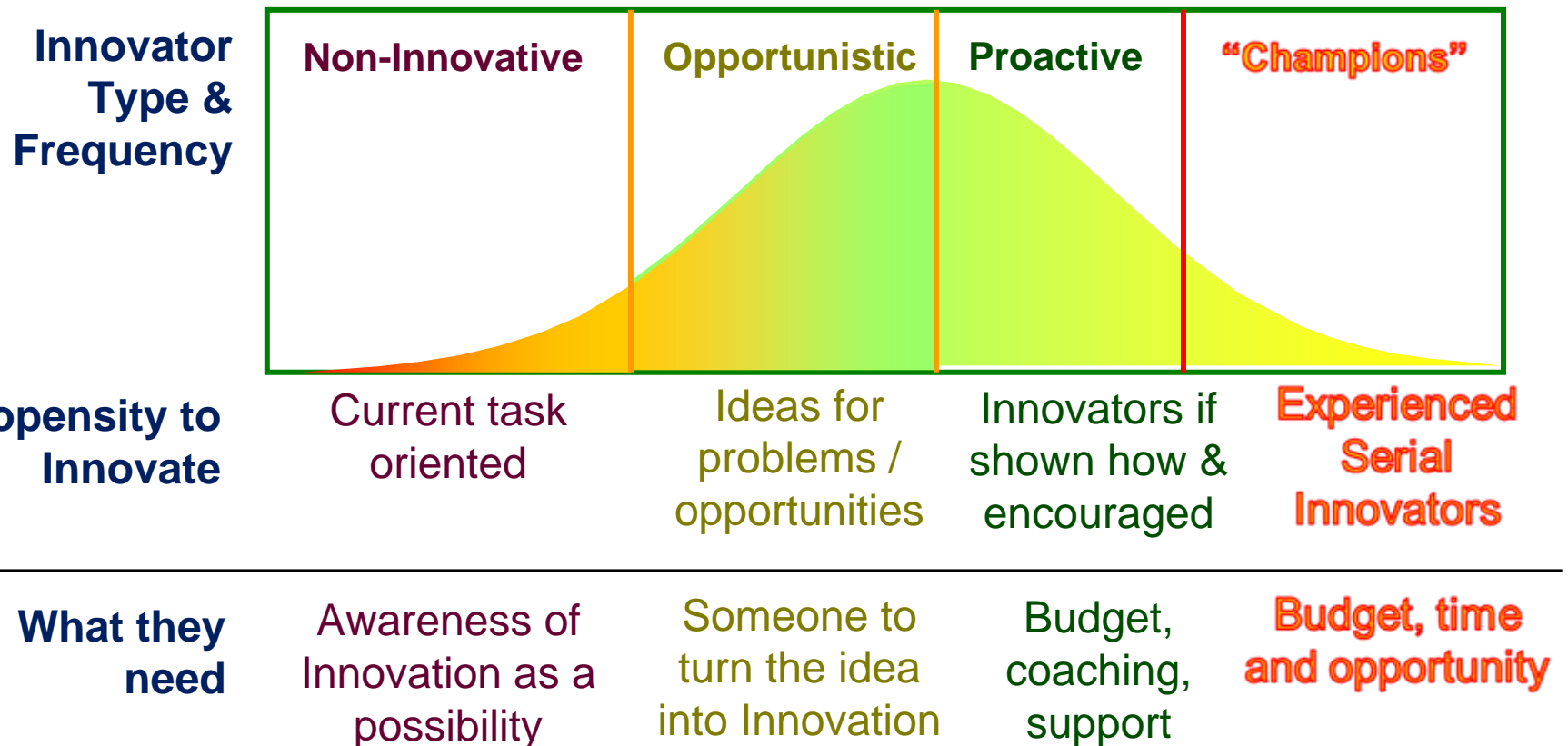
Creativity is thinking up new things. Innovation is doing new things.“

-- Theodore Levitt

- Put in place the machinery – Intranet based idea entry, project proposal, evaluation, management, information and data base
- Adopt & simplify established management processes
- Identify the constituency (people!) and what they need to succeed...

Identify the constituency and what they need to succeed

What *interventions* are useful? (*suggestions box vs. skunk group*) - the “*market*” for individual’s attention, energy & time needs a varied range of support...



Innovation Learning (Key Success Factors)

- Ongoing commitment by senior management within a clear business strategy is essential to sustain an innovation process – ensure the results are visible to them
- Recognise and exercise the inherent innovation capability to strengthen the “innovation muscle” and let an innovation culture emerge
- Innovation does not mean abandoning effective management, and must be actively supported as a part of the main activity sets.
- Successful innovation requires intimate knowledge of customer and user needs – beware of “build it and let the customers come” !
- Innovation often occurs under the stimulation of a cooperative endeavour or of a clear need rather than a lone individual’s unbidden insight.
- Innovation is easily blocked and needs active support

Conclusions

- A targeted process has been developed to add to the Innovation capability in an Oil & Gas Industrial technology division
- The approach is fairly light touch, adaptive and responsive; it recognised distinctive challenges for innovation in an industrial context...
 - it's about turning high potential ideas into real opportunities
 - new, novel & immature; risky & unusual
 - only indicative value & cost estimate
 - turning opportunities into products usually takes significant additional effort
- The process has been running for ca. 8 years over which time it has
 - provided awareness, training and support to 1000's technical staff
 - stimulated ca.1000 innovation proposals
 - provided funding and coaching to 100's of projects
 - created a track record of project delivery and material successes
 - established itself as a useful adjunct to the main technology programme
- The approach is being adopted by other companies.