

Is Mortality Improvement in Our Future

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Abstract

What are the possible future implications to insurance companies of significant improvements in mortality? How can futurism techniques be used in research? The formation of the mortality improvement study group at the Principal Financial Group was the first step toward examining the issue of mortality improvement. In an interactive format, we will present what we learned about mortality and futurism techniques by participating in this group. The Meeting Agenda is: (1) Introduction: Imagine living in the year 2010! (2) Exercises in Futurism: Stretch beyond the official future with us as you join in our adventures using futurism techniques to investigate mortality improvement. How could these techniques be used for other kinds of research? (3) Strategic Implications for Principal: Participate in the generation of ideas to help the company evaluate and prepare for this contingency.

**Actuarial Research
Conference**

Is Mortality Improvement in our Future?

A Case Study in Applied Futurism



August 11, 1999

2000

2001

2002

2003

2004

2005

2006

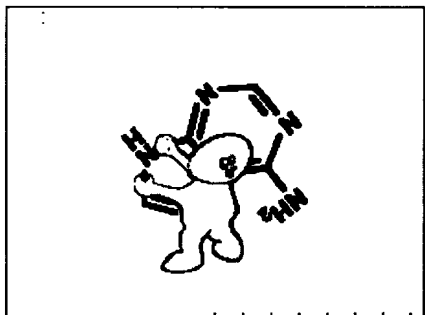
2007

2008

2009

*Welcome to
2010!*





2009

2008

2007

2006

2005

2004

2003

2002

2001

2000

Welcome back to
1999



“You cannot plan the future by the past.”

-Edmund Burke (1729-1797)



Futurism Projects

Creating plausible futures from “what if” thinking.



Steps in Process

- “What if” Question
- Identify Primary Strategic Concern
- Research Pertinent Issues
- List Driving Forces (STEEP)

STEEP

- Social
- Technological
- Economical
- Ecological
- Political

Steps in Process (cont)

- Rank Driving Forces
- Determine Scenarios (Worlds)
- Examine Strategic Implications
- Identify Early Indicators

“500 Weeks” Activity

- Which event(s) would have the most dramatic impact?

“The trouble with our times is that the future is not what it used to be.”

- Paul Valery (1871-1945)

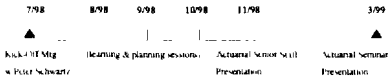


Our Charge:

Explore possible future implications to the Principal Financial Group of significant improvements in mortality
Recommend actions Principal should take to address these implications



Timeline:



Focal Issue:

How will changes in life expectancy require the Principal Financial Group to redefine its strategy?



Driving Forces -micro (company & industry)
- macro (STEEP)

- S - social
- T - technological
- E - economical
- E - environmental
- P - political

Prioritize to determine:

- The most important
- The least predictable

Our driving forces:

- Medical technology/genetics
- Access

“Scenarios are not about predicting the future, rather they are about perceiving futures in the present ”



-Peter Schwartz

Scenario Building

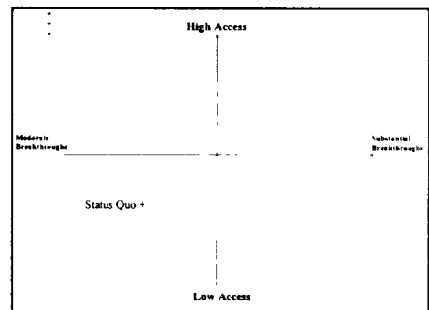
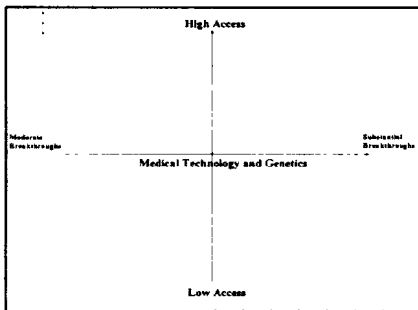
Do's

- Start with driving forces
- Think of key factors and trends
 - STEEP
 - Predetermined elements in all scenarios
- Memorable names
- Consistent time lines

Scenarios Building

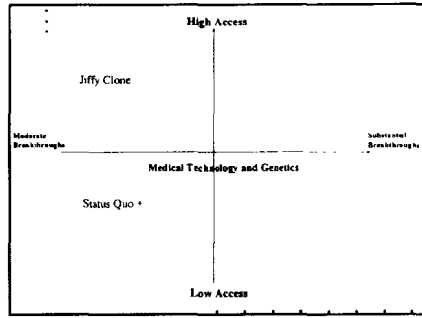
Don'ts

- Don't assign probabilities
- Don't directly address strategic concern



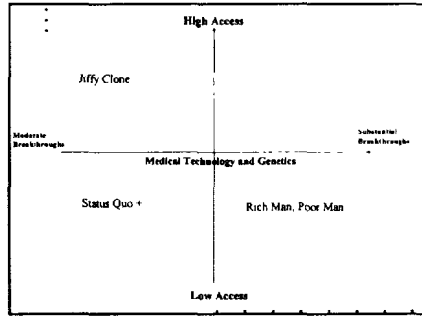
Status Quo Plus

- Continued, incremental improvements in technology lab-grown organs
- near monopoly, costly
- government programs don't cover, insurance expensive
- small increase in life expectancy for a few people



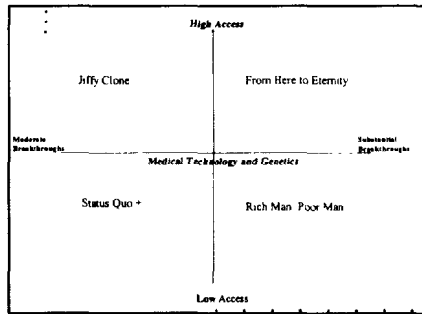
Jiffy Clone

- Rapid advances in cloning technology
- Inexpensive, mass-produced organs
- Large influx of private capital, competition
- Regular check-ups relatively inexpensive, covered by insurance
- Moderate increase in life expectancy for a significant number of people



Rich Man, Poor Man

- Genetic treatments available for aging
- Expensive
- Available *only to the wealthy*
- Not covered by government or insurance
- Substantial increase in life expectancy for a few people



From Here to Eternity

- Disease largely cured, cure for aging just around the corner
- Affordable treatments for most
- Competition assures majority access
- Substantial increase in life expectancy for a majority of people

Scenario Summary

- Possible futures, not predictions
- Set the stage for creative strategic thinking
- Plausible and surprising

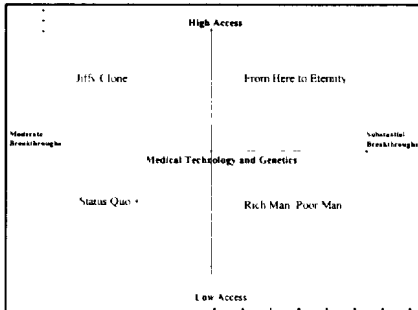
“Using scenarios is rehearsing for the future. You run through the simulated events as if you were already living there. You train yourself to recognize which drama is unfolding.”



-Peter Schwartz

Steps in Process

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- Rank Driving Forces
- Determine Scenarios (Worlds)
- Examine Strategic Implications
- Identify Early Indications

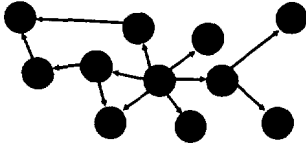


Research

- Demography
- Biotechnology
- Regulation, Legal, and Social

Driving Forces

- Futures Wheel



Early Indicators

- Items used to track which "world" is developing
- Examples
 - Research Advances
 - Mandated Coverage for Treatment
 - FDA Approvals
 - Ethical Debates

Issues / Considerations

- Asset Accumulation
- Mortality Guarantees
- Changing Risk Characteristics

Recommendations

- Ideally, a direction could be developed that works in all worlds
- If one world is "fatal" to the organization, can try to work toward reducing the likelihood that it occurs (lobbying, product changes)
- Use early indicators to dictate what course of action to take

Recommendations

- Examples
 - Become experts in asset management
 - Be prepared for risk charges to change or shift

