



IEEE

youngprofessionals

Career Planning Seminar Version for distribution

What I did while not being on holiday:
what went to plan, and what didn't

Duncan Hall
2018-07-06



Outline

Frameworks I've found useful for career planning

Helpful heuristics

What didn't go according to plan

Lessons I learned along the way

Summary, Q&A

Frameworks I've found useful for career planning:

Pro's – Con's

Strengths – Weaknesses

Opportunities – Risks

Planning horizons:

- Short term: ~today; ~week; ~month
- Medium term: this coming year
- Longer term: next five years+

Your LIFE is much, MUCH, more than your career

From Engineering New Zealand: Top 10 tips

1. **Be you**

Figure out what works for you – and don't try to be someone you're not

2. **Focus on first principles**

Use critical thinking to find the simplest solution

3. **Keep learning**

The best engineers never stop learning

4. **Stay focused on your goals**

Make sure you know what they are and where you want to end up

5. **Questions are good**

Never be afraid to ask

6. **Take every chance to gain new experiences and demonstrate leadership**

7. **Leadership opportunities are everywhere:**

Sports teams, work projects, community groups

8. **Be passionate**

Do what makes your heart sing

9. **Have fun!**

Find a balance between working and spending time with friends

10. **Stay generalist if you can**

Doing a great job and taking every opportunity that comes your way will give you more options than taking a very specialised route

Online career planning (from my employer):

Tools from Careers NZ: <https://www.careers.govt.nz/tools/>

Career Drivers Assessment:

<http://www.crowe-associates.co.uk/wp-content/uploads/2013/11/Career-Drivers-Assessment.pdf>

For entrepreneurs / starting up your own business

If you decide to start up your own business seek advice about tax obligations
Investigate thoroughly what's involved in running a small business, for example:

- [Business.govt.nz](http://www.business.govt.nz)
- [Small Business Administration](http://www.smallbusiness.govt.nz)
- [Business Owner's toolkit](http://www.business.govt.nz/business-owner-toolkit)
- [The Business Owners' Idea Café](http://www.business.govt.nz/the-business-owners-idea-cafe)
- [Home Businesses](http://www.business.govt.nz/home-businesses)

Helpful heuristics

If you come to a fork in the road, take it

\$ are important

But also, \$ are **NOT** important

Second order (and +) terms dominate, e.g. **FUN**

Listen to your quiet inner voice

Mens sana in corpore sano: look after yourself

Stress: distress, eustress

Invest in your own CPD

Cultivate 'real options' perspectives

Think of your career as a portfolio of projects

Always have at least one alternative plan

Always prepare an exit plan

What didn't go to plan: e.g. first year following ME



LIST AND INDEX
OF
PERMANENT OFFICERS
IN THE
POST OFFICE
ON
1 APRIL 1981

What didn't go to plan: e.g. first year following ME

035 ENGINEERING

22

GRADE .02 - CONTINUED

1	MCMANON JT	ASST ENGR	POHQ	3/52	7/73	BE, NZCE
2	HENDERSON BC	ASST ENGR	CH	12/56	4/74	BE, NZCE
3	VEAL WJ	ASST ENGR	POHQ	11/54	1/73	BE (HONS), NZCE
4	MELVILLE DT	ASST ENGR	TU	8/55	6/73	BE, NZCE
5	DUNCAN CC	ASST ENGR	CH	7/55	1/74	BE
6	MCCULLOUGH RE	ASST ENGR	POHQ	7/56	1/75	BE
7	MYERS PM	ASST ENGR	CH	7/56	1/75	BE
8	SCHRODER BE	ASST ENGR	POHQ	10/56	1/75	BE
9	ANDREW EM	ASST ENGR	CH	10/57	1/76	BE (HONS)
10	HALL DA	ASST ENGR	POHQ	12/57	1/76	ME
11	BRIDGTON AGJ	ASST ENGR	CH	4/58	1/76	BE
12	KINGSTON SJ	ASST ENGR	POHQ	1/58	1/76	BE (HONS)
13	KOSOVICH SM	ASST ENGR	POHQ	3/59	1/76	BE
14	RILEY JD	ASST ENGR	POHQ	1/58	1/76	BE
15	VAN HUYTEN H	ASST ENGR	POHQ	8/57	1/76	BE
16	SAVORY MO	ASST ENGR	POHQ	11/56	2/76	BE
17	AKED PS	ASST ENGR	POHQ	3/57	1/77	BE
18	HAZLEWOOD PF	ASST ENGR	POHQ	10/57	1/77	BE
19	JOYCE CA	ASST ENGR	POHQ	12/58	1/77	BE
20	KENDALL GN	ASST ENGR	CH	8/58	1/77	BE (HONS)
21	KERGOPA RF	ASST ENGR	HN	3/57	1/77	BE
22	NANA D	ASST ENGR	POHQ	11/57	1/77	BE (HONS)
23	LYNCH MJ	ASST ENGR	POHQ	11/56	1/78	BE, BSC
24	BOURNE GL	ASST ENGR	POHQ	4/58	1/79	BE
25	STEPHEN RDC	ASST ENGR	CH	11/51	1/72	BE, NZCE
26	OLSEN JH	ASST ENGR	POHQ	11/51	12/72	BE, NZCE
27	MURCH WJ	ASST ENGR	CH	5/55	12/71	BE, NZCE
28	ZWAAGDYK C	ASST ENGR	AK	11/55	1/75	BE, NZCE
29	HUMPHREY-TAYLOR RH	ASST ENGR	CH	3/56	1/75	BE
30	CASSEY DJ	ASST ENGR	POHQ	7/56	1/75	BE
31	RUSS PL	ASST ENGR	DN	8/56	1/75	BE
32	SAUNDERS GD	ASST ENGR	WN	10/55	1/75	BE
33	GORDY M	ASST ENGR	WN	7/57	1/76	BE
34	MCCOMBIE BJ	ASST ENGR	IN	8/57	1/76	BE
35	MCNEILL RC	ASST ENGR	IN	7/58	1/76	BE
36	MEYST RA	ASST ENGR	WR	5/57	1/76	BE
37	SIMPSON GB	ASST ENGR	POHQ	6/57	1/76	BE

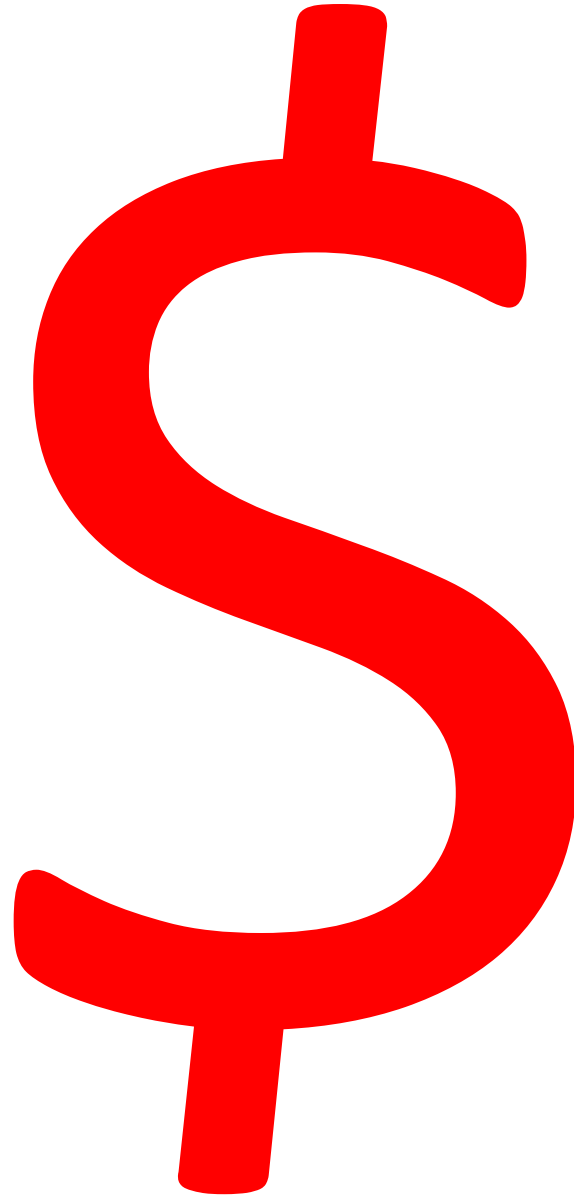
What didn't go to plan: e.g. first year following ME



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What didn't go to plan: e.g. first year following ME



What didn't go to plan: e.g. first year following ME

- UAT for 9,000 hours of software development
- Circuit switched PSTN dimensioning:
 λ , μ , Poisson, Erlangs
- IDN, ISDN, X25, part time teaching
- \$ for WAS

But my quiet inner voice said:

- Start to understand the world of \$
- Get some 'mud on your boots'
- When offered, decide to go all the way south

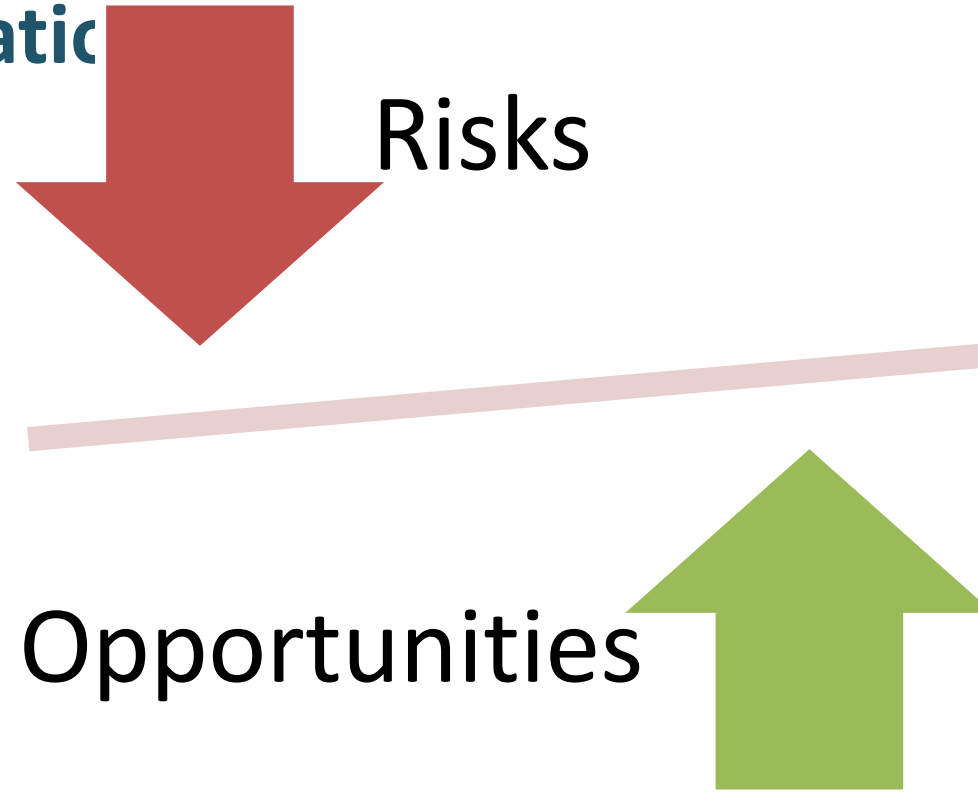
Unexpectedly, the best decision I ever made . . .



Telecommunications fibre network deployment in Southland

Almost all risks can be re-phrased to then describe

opportunities: both are deviations from expectations



"Division":

Category:

Register #:

Source/Cause/Hazard

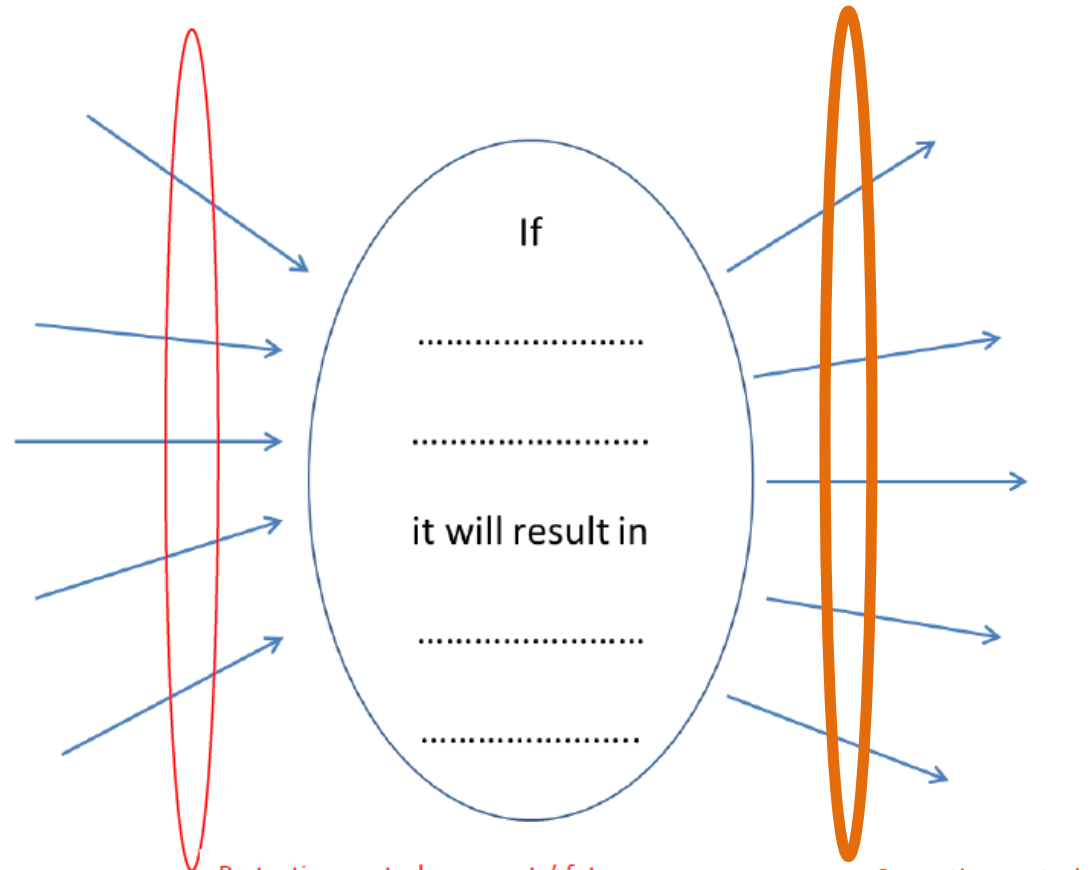
[Any of below]

Actual Risk

Current risk score:

Impact

[Potentially all of below]



Protective controls, current / future:

- Policies
- Process
- Organisational structures
- Culture
- Tools
- People

Corrective controls

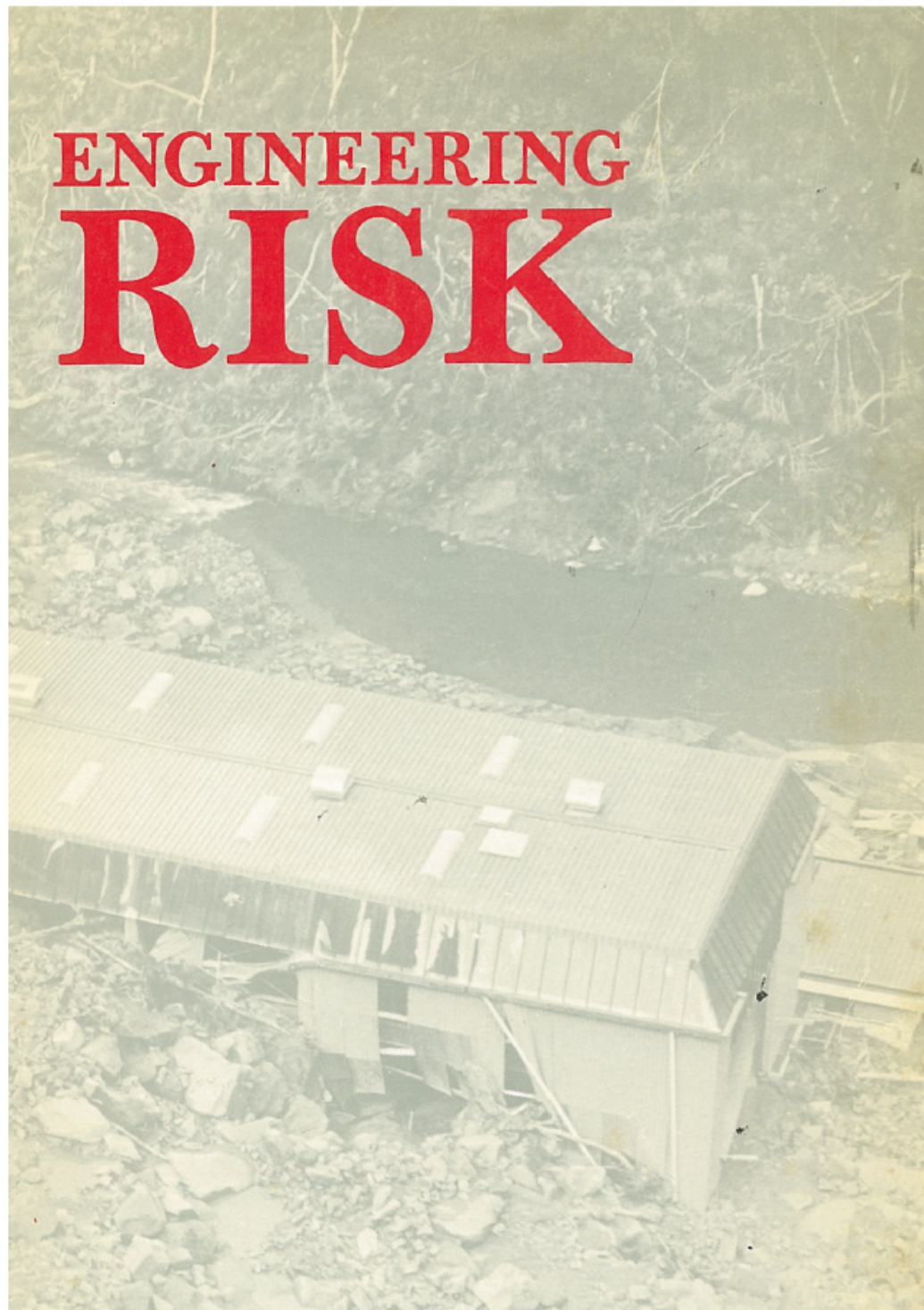
Risk Owner:

Treatment Manager:

Likelihood-Consequence Matrix

LIKELIHOOD	Almost Certain	Medium	High	High	Extreme	Extreme
	<ul style="list-style-type: none"> Expected to occur in most circumstances Occurs every 6 months or more frequently >90% chance of event occurring 	11	16	20	23	25
Likely	<ul style="list-style-type: none"> Will probably occur in most circumstances Occurs every 6-12 months 75%-90% chance of event occurring 	7	12	17	21	24
	<ul style="list-style-type: none"> Could occur at some stage Occurs every 12-24 months 50%-75% chance of event occurring 	4	8	13	18	22
Possible	<ul style="list-style-type: none"> Will occur in exceptional circumstances Occurs every 24-48 months 10%-50% chance of event occurring 	2	5	9	14	19
	<ul style="list-style-type: none"> May occur in exceptional circumstances Occurs every 4 or more years <10% chance of event occurring 	1	3	6	10	15
Unlikely	<ul style="list-style-type: none"> Will occur in exceptional circumstances Occurs every 24-48 months 10%-50% chance of event occurring 	2	5	9	14	19
Rare	<ul style="list-style-type: none"> May occur in exceptional circumstances Occurs every 4 or more years <10% chance of event occurring 	1	3	6	10	15
CONSEQUENCE		Negligible	Minor	Moderate	Major	Severe
Reputation						
Stakeholders						
Financial						
People						
Legal						
Operational Delivery						
Programme/Project						

ENGINEERING RISK



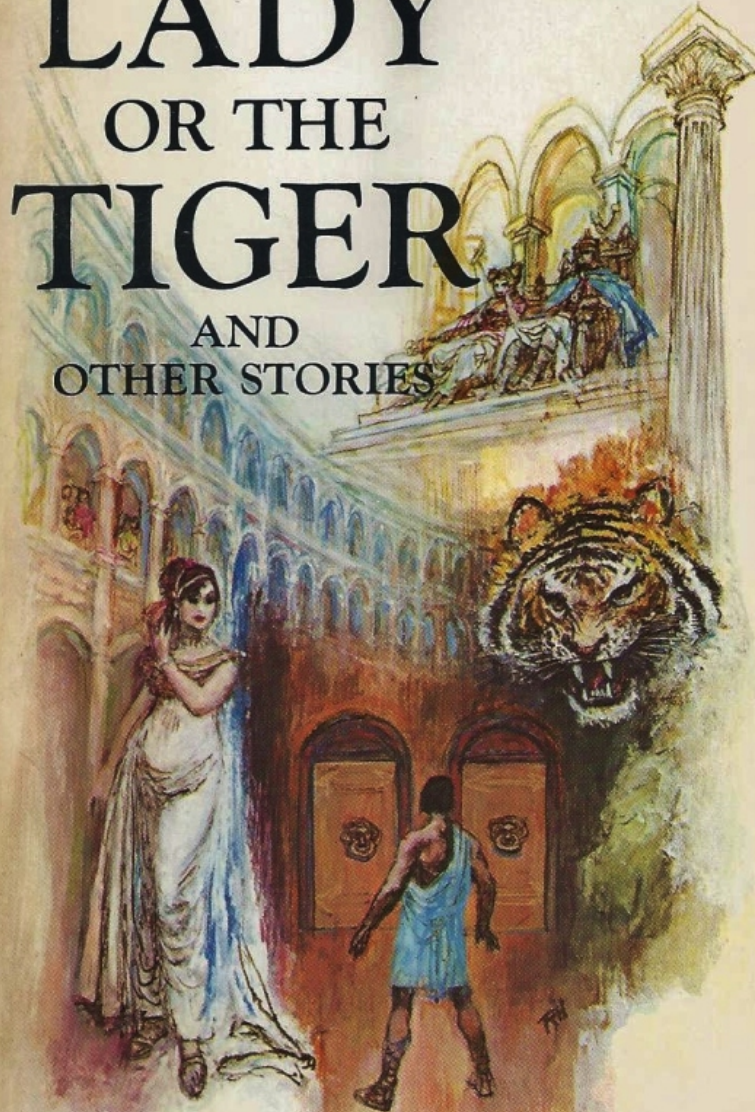


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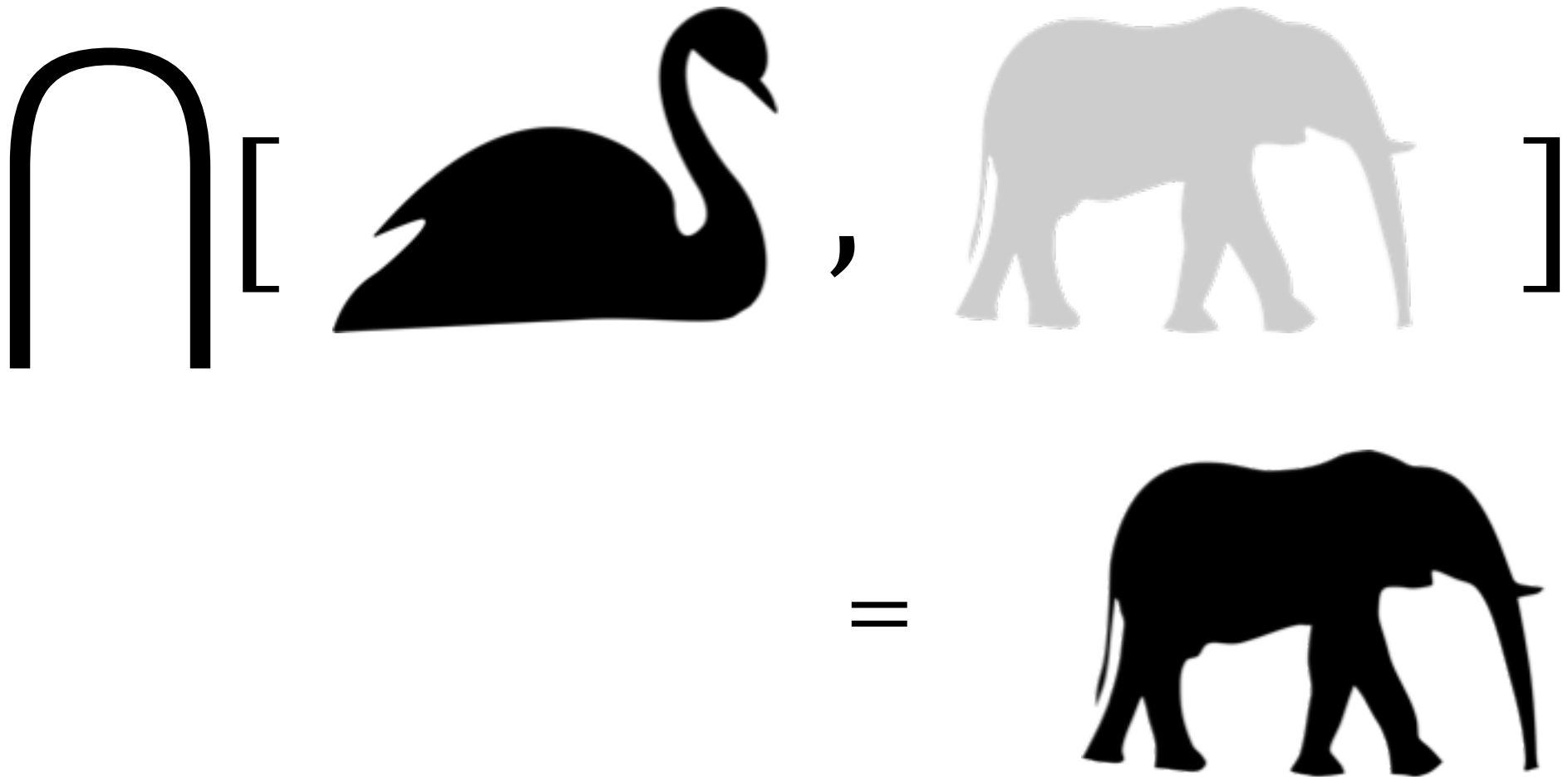
THE
LADY
OR THE
TIGER
AND
OTHER STORIES

**FRANK
STOCKTON**



Introduction by Francis R. Gemme

In hindsight, life is full of 'predictable surprises':



The unexpected happened: in 1984, again in 1987



In the meantime, instead of completing a BCom:

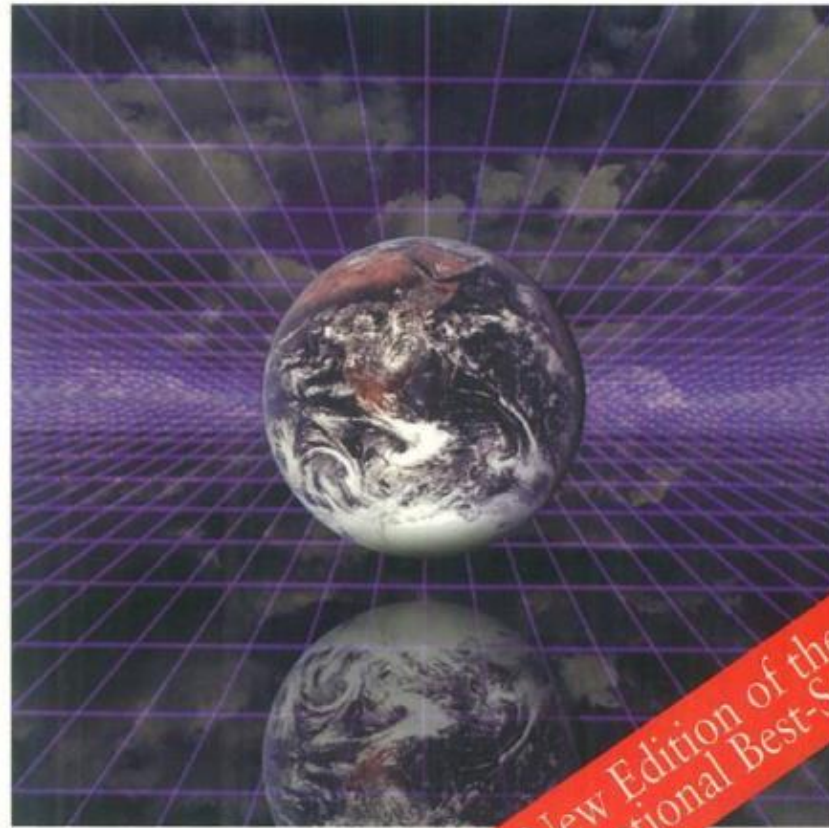
Photo of University of Otago MBA11

Unexpectedly, the MBA delivered the opposite of my plan:

Claymation video of Plato's cave allegory

Gareth Morgan

IMAGES OF
ORGANIZATION



New Edition of the
International Best-Seller

What's in your toolbox?

- Decomposition
- Abstraction
- Quantification
- Visualisation
- Peer review



'Reductionist'

Note:

- Useful for 'tractable' problems
- Challenged by 'wicked' problems

A helpful way of looking at career opportunities

Real options exist because of three factors:

- Uncertainty about the future (risk)
- The time irreversibility of decision outcomes
- The ability to act on new information
 - Recognise:
 - The inevitability of change,
 - Options for flexibility, and
 - Opportunities to exercise judgement

Examples of real options:

- Option to delay
 - Wait for new information and learn before committing,
 - Or accelerate decision in light of recent information
- Option to expand beyond initial position
 - Expansion contingent on initial investment
- Option to abandon or switch
 - Once additional experience and learning is gained

Indonesia:

Photo of collaborative planning

Ulaanbaatar, Outer Mongolia:

Photo of the team in Ulaanbaatar

Yes, it's a long way down



Up on the new surface



In the New Mexico desert



In the Western Australian desert







Lessons I've learned

Expect the unexpected

View your CPD as an investment, not an expense

Say ~2% of income?

Rol is qualitative as well as quantitative

Explore outside your 'cave'

Many real-world problems are 'wicked'

Power = control over resources and destiny

Management ≠ Leadership ≠ Diplomacy

Try to be nice to everyone:

You never know who your next boss might be

Summary

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