

Thanks ...



Christina Spencer

GSD Ltd

John Morecroft

London Business School

David Exelby

HVR Consulting

Lars Finskud

Vanguard Strategy

Suresh Mistry

SDS Ltd

... and many more.

The Jay Wright Forrester Award for contributions to System Dynamics, 2005.

Kim Warren: 'Competitive Strategy Dynamics', J Wiley & Sons, 2002.

My Story ...

15 years strategy professional ..

- *Oil, petrochemicals [boring+dangerous], so ...*
- *Beer and food [YUM!]*



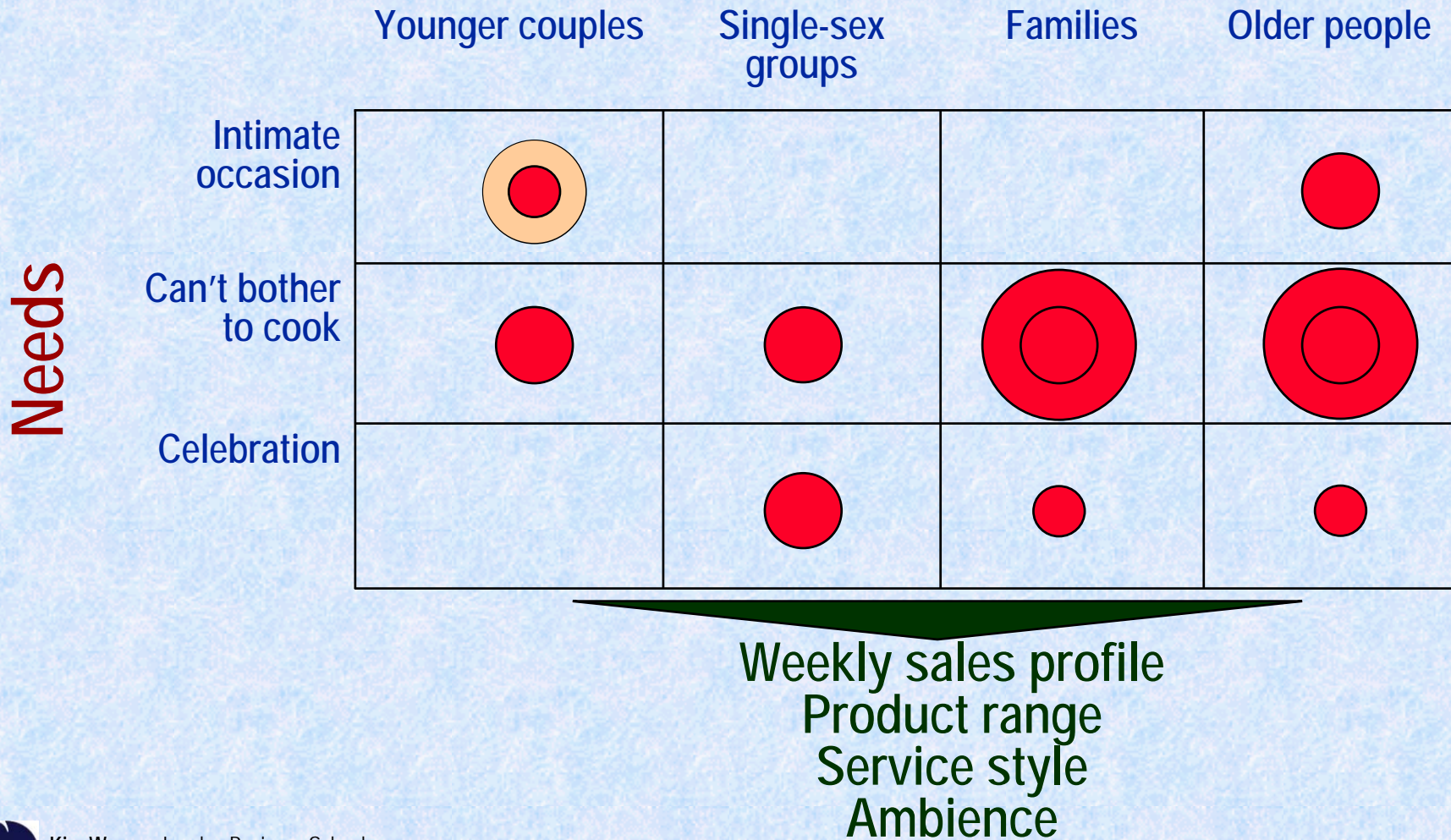
A professional approach to Strategy

**Work out what people
want [or might want]
... and give it to them !**



Professional approach to strategy in restaurants

Consumer groups



The result of professional strategy in restaurants

Early 1990s ...

30% of all U.K. adults = regular users

>300 branches

Europe's most profitable such company



Why did it work ?? We worked out how to ...

win customers ...

keep customers ...

develop customers [get them to
visit more and spend more!]



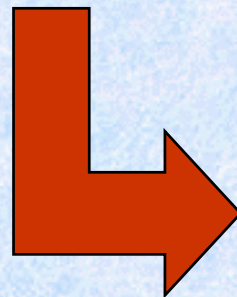
Early 90s [after I left!] .. an alternative approach?

Think up a catchy slogan
... and hope it works !

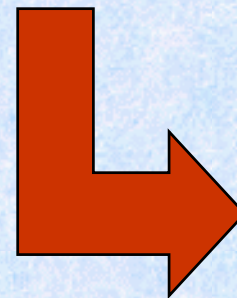


Think up a catchy slogan ... and hope it works !

	Younger couples	Single-sex groups	Families	Older people
Intimate occasion				
Can't bother to cook				
Celebration				



"The Best in British Cuisine"



sales collapse ...
restaurants close ...
profits fall ...

Whitbread PLC - a sad tale ...

- 1995 .. a €2bn/year, highly profitable company, dominating many consumer services markets
- 2005 .. lost lead in every market, under threat of Private Equity take-over



Strategy – not a complicated idea ...

What to do ...

When ...

How much to do it ...

... to improve future performance

... by how much.



... applying key concepts from System Dynamics
to Strategy challenges ...

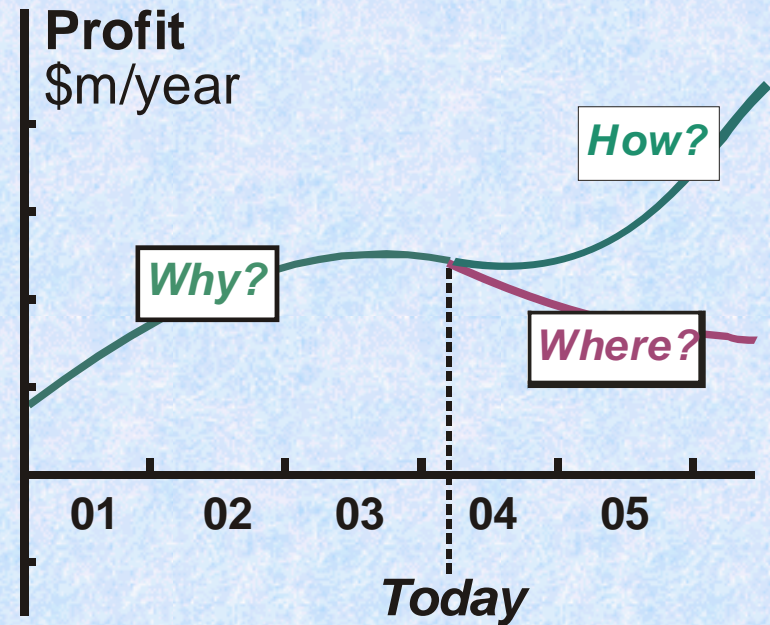


Opportunity for a fact-based, integrated, rigorous approach
to developing and steering strategy.



The Dynamics of Strategy - Key Questions

- **Why** is our performance following its current path?
- **Where** is it going if we carry on as we are?
- **How** can we design a robust strategy to radically improve this performance into the future?

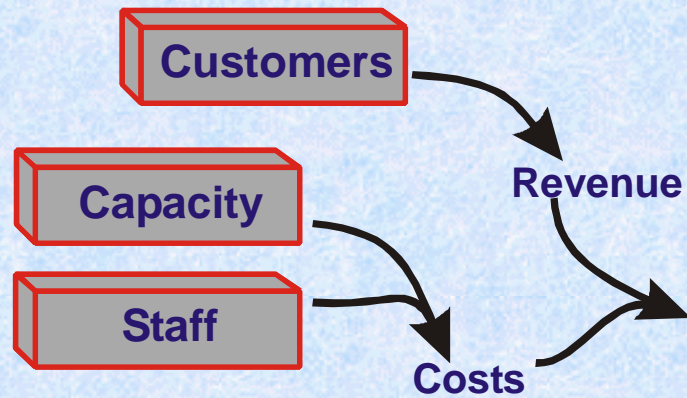


Most strategy tools do not address this question:

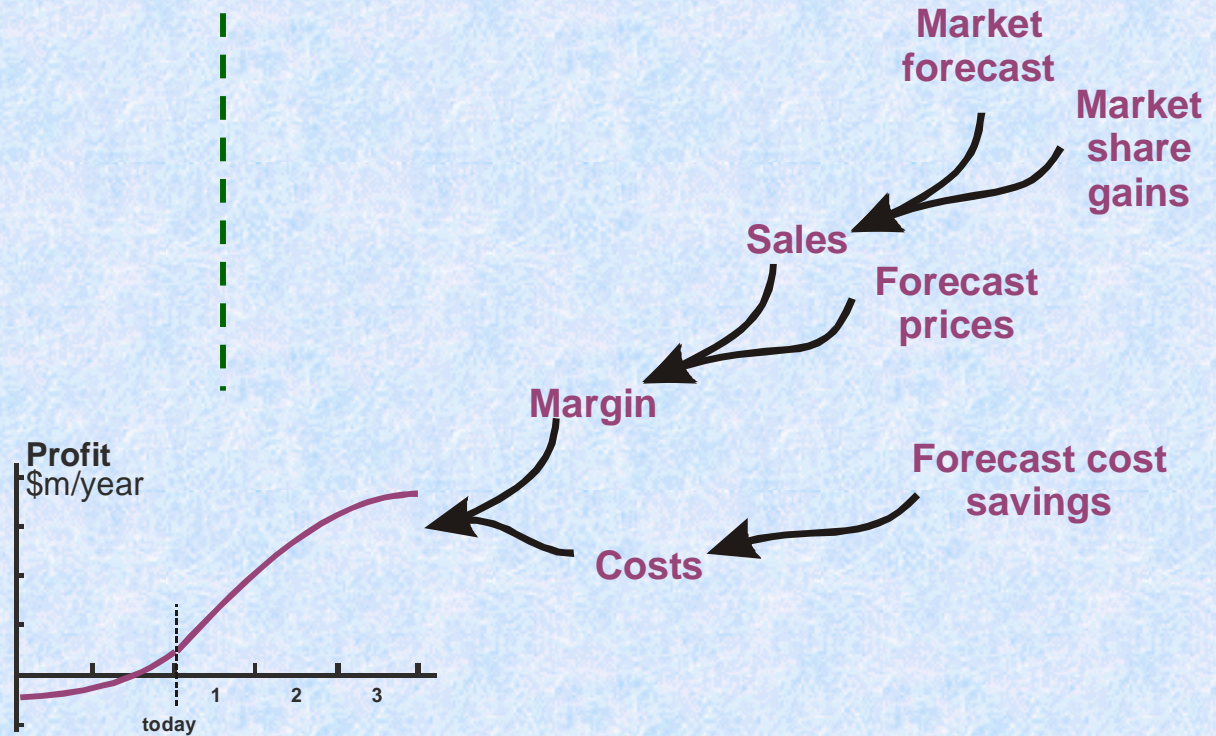
- they are based on explaining 'profitability' ...
- ... but investors value earnings growth

Competitive environment vs. internal view of Strategy

Resource-based start-point for forecasting earnings



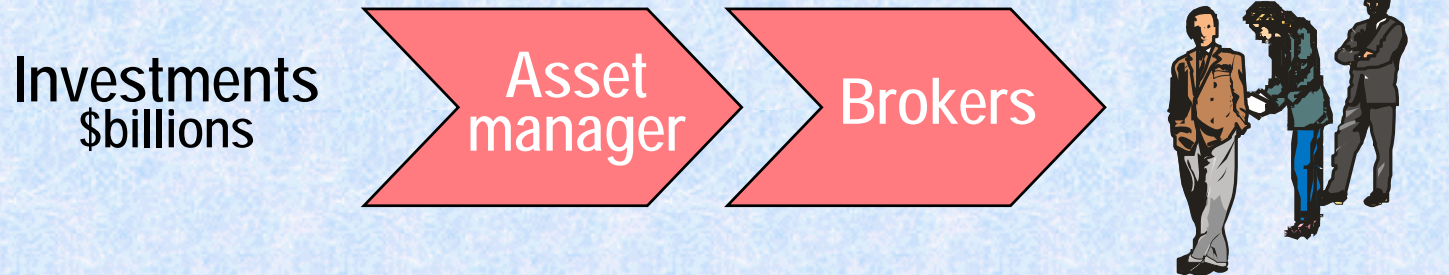
Standard start-point for forecasting earnings



A small example ...

Case example – asset management [i.e. mutual funds]

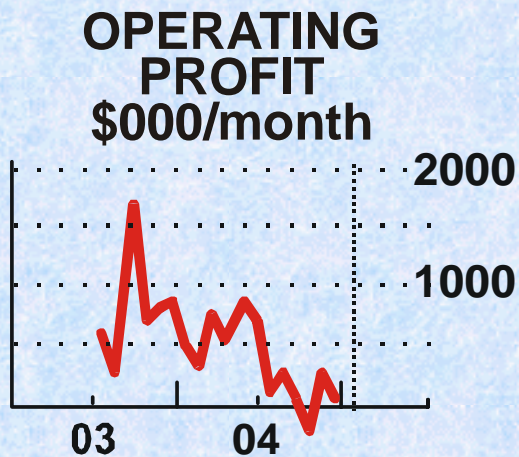
What this company does ...



- Mapping the starting situation ... the strategic architecture
- Working out a solution
- Modelling a potential new business

The challenge facing the asset management firm

How to recover profitability after a big negative performance on our key product?



- **WHY** are we in our present situation?
- **WHERE** are we heading?
- **HOW** to improve performance into the future?

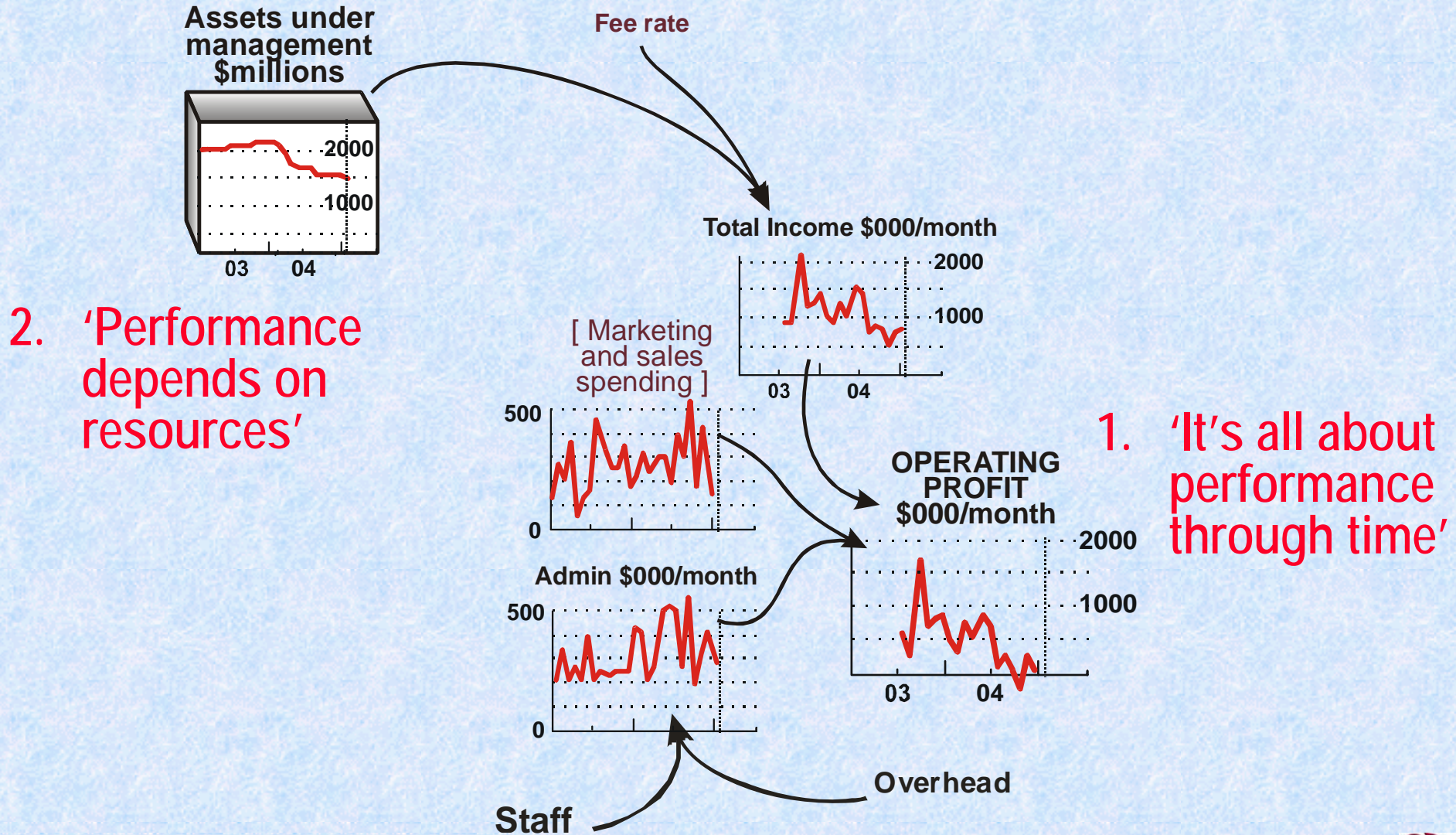


“What do you think you should be doing?”

1. Increase broker commissions to get them to favour our funds.
2. Send out marketing through industry channels.
3. Focus our sales effort on winning new brokers.
4. Introduce new products, to divert attention from past poor performance.



Drivers of operating profit

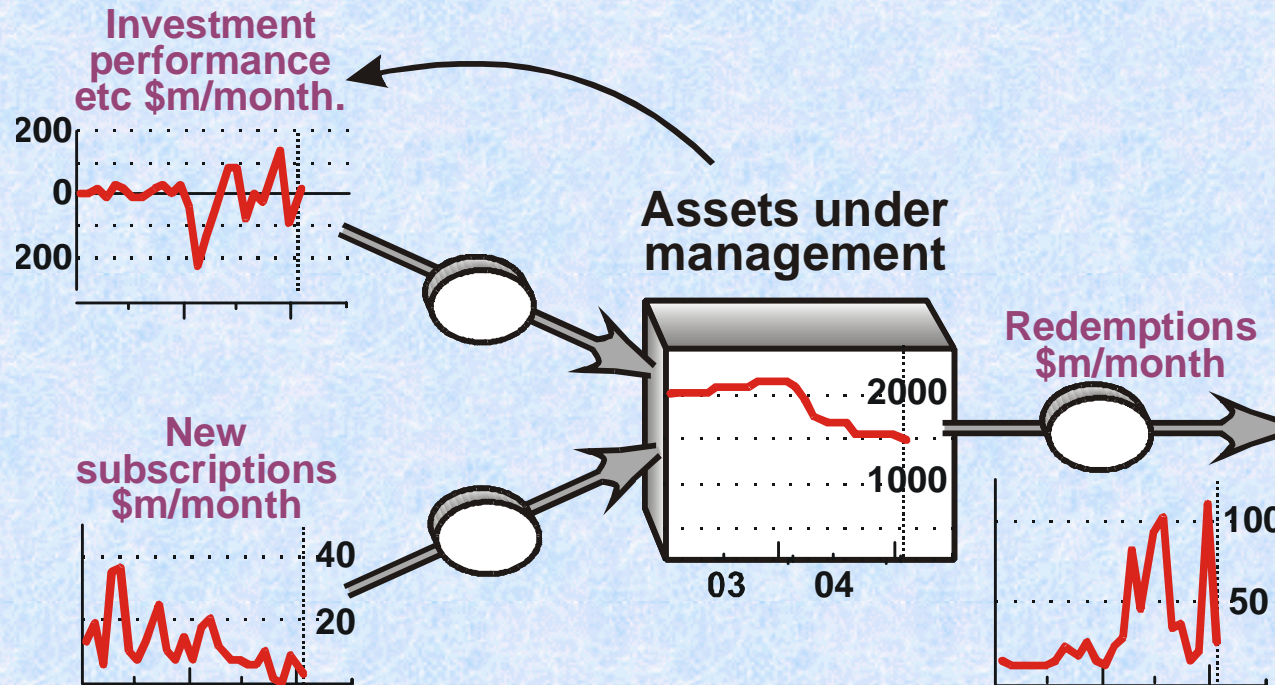


2. 'Performance depends on resources'

1. 'It's all about performance through time'



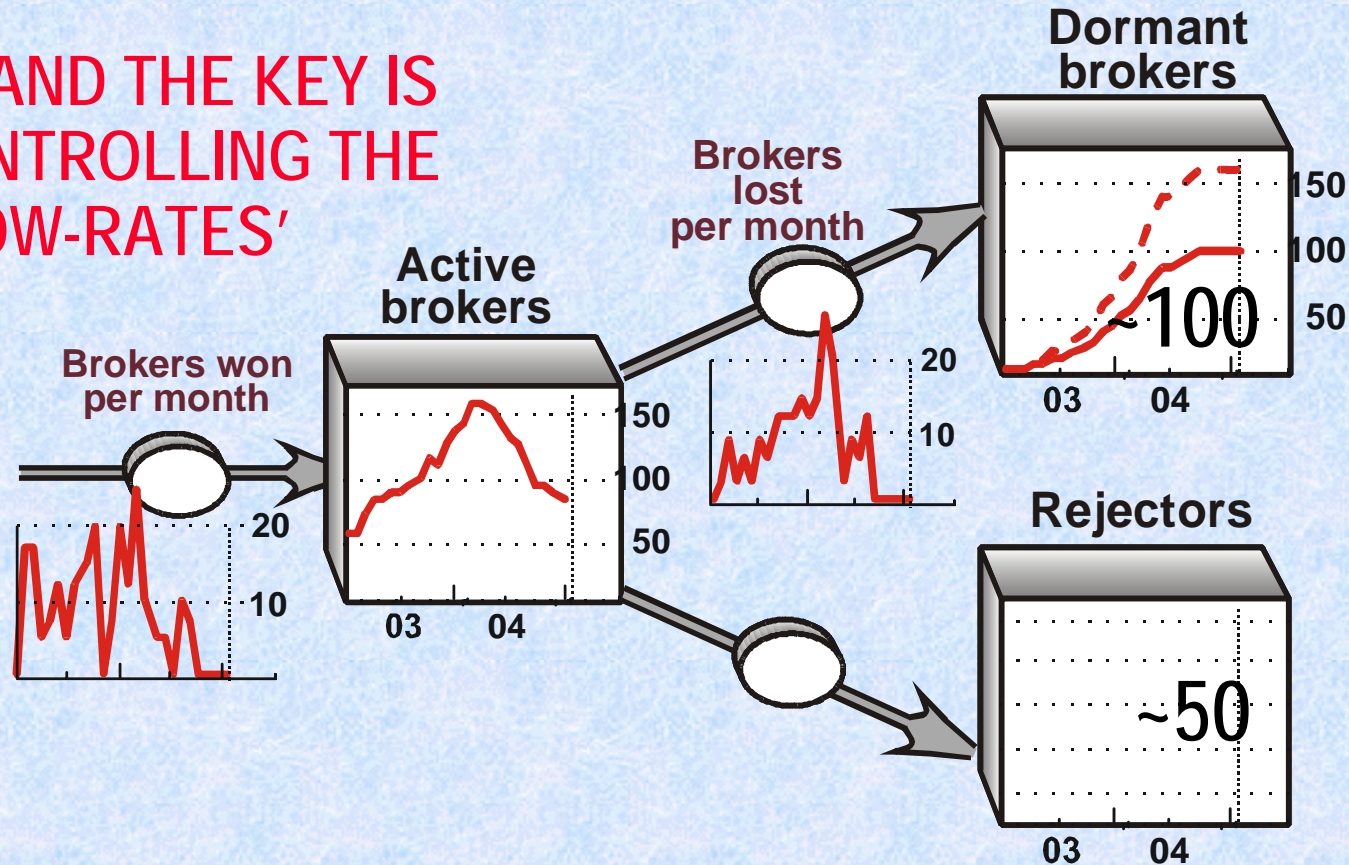
Changes in Assets Under Management



3. 'Resources fill and drain'

Brokers won and lost

4. '... AND THE KEY IS CONTROLLING THE FLOW-RATES'

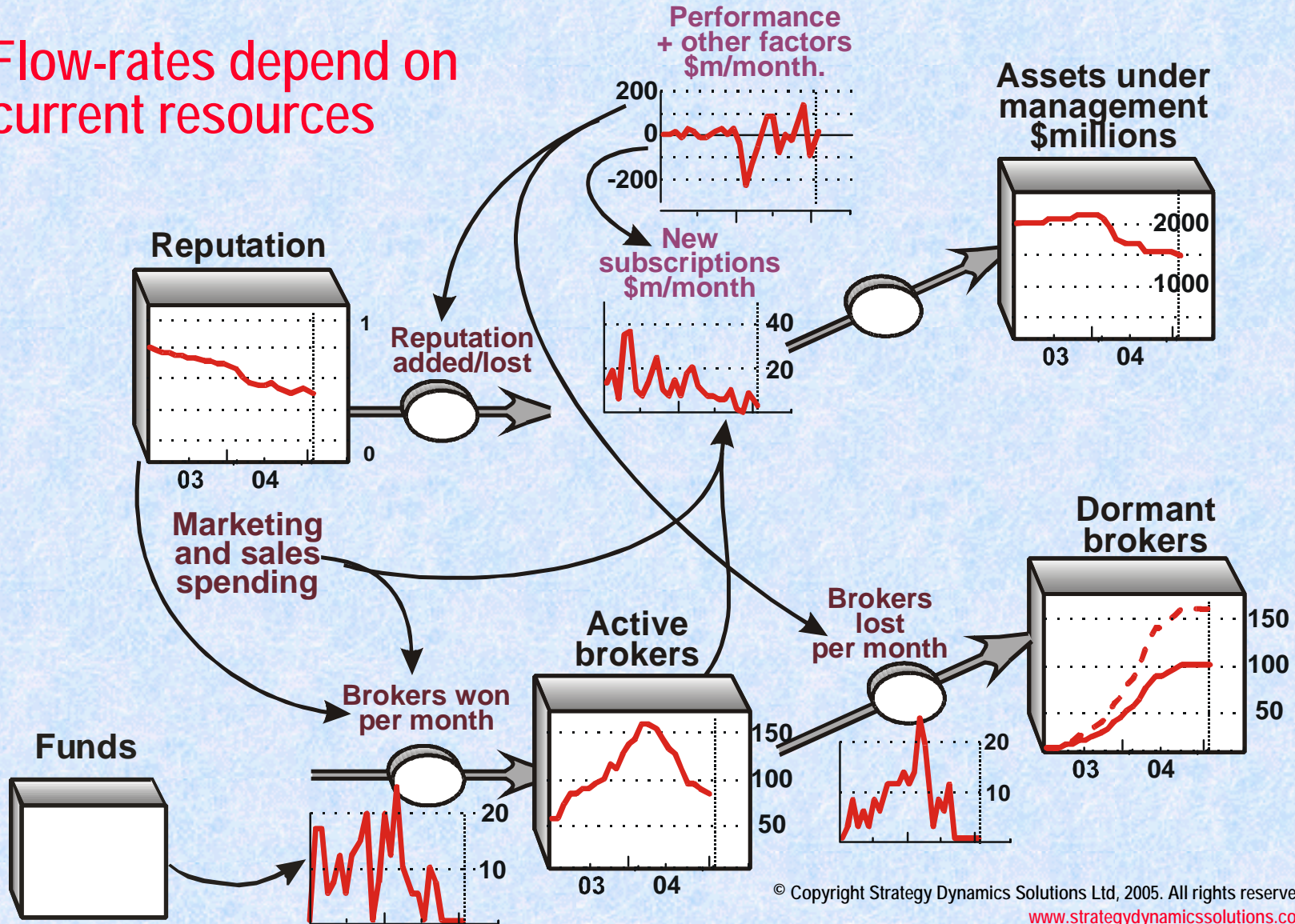


3. 'Resources fill and drain'

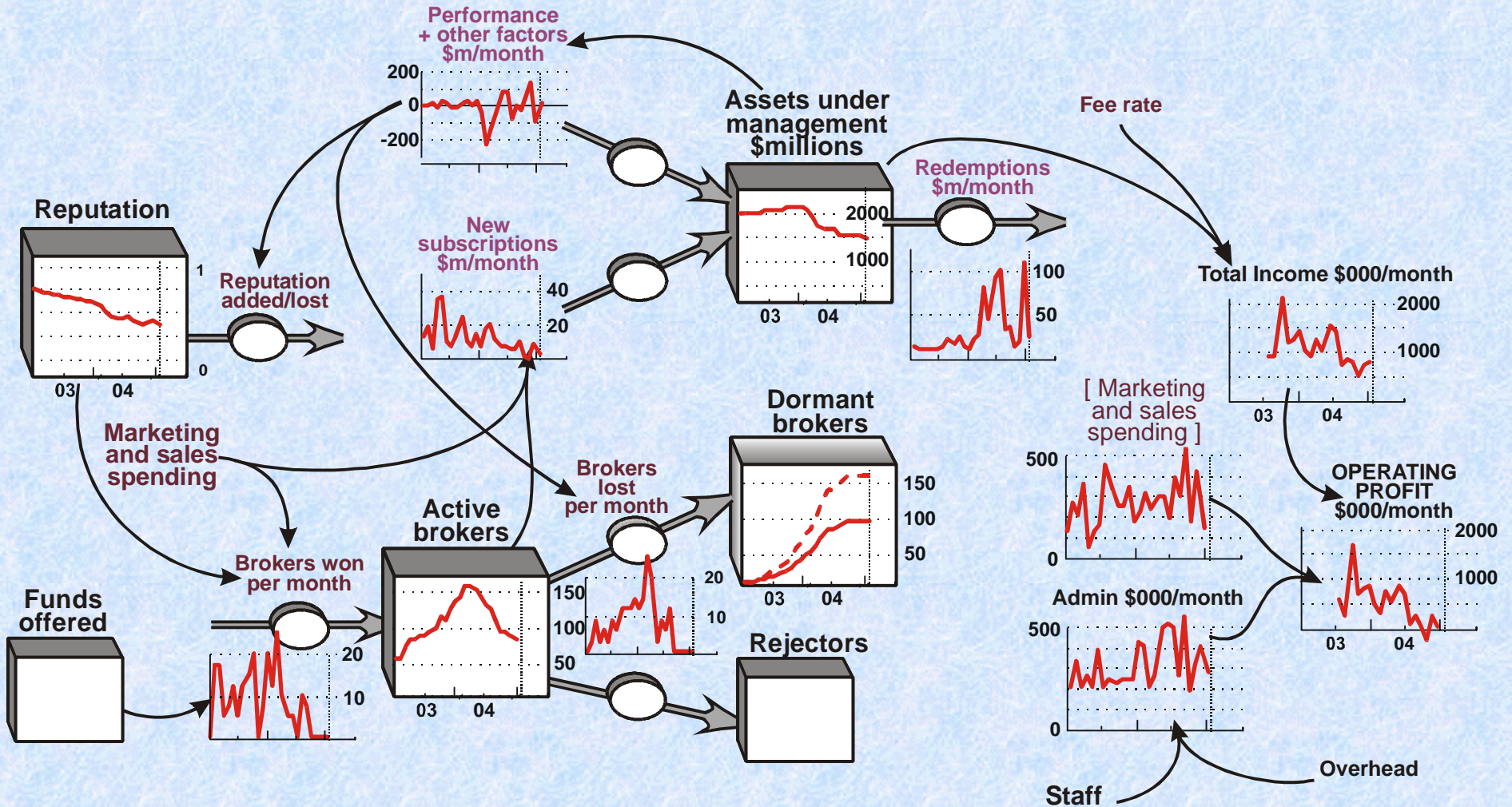


Reputation changes

5. Flow-rates depend on current resources



The overall strategic architecture

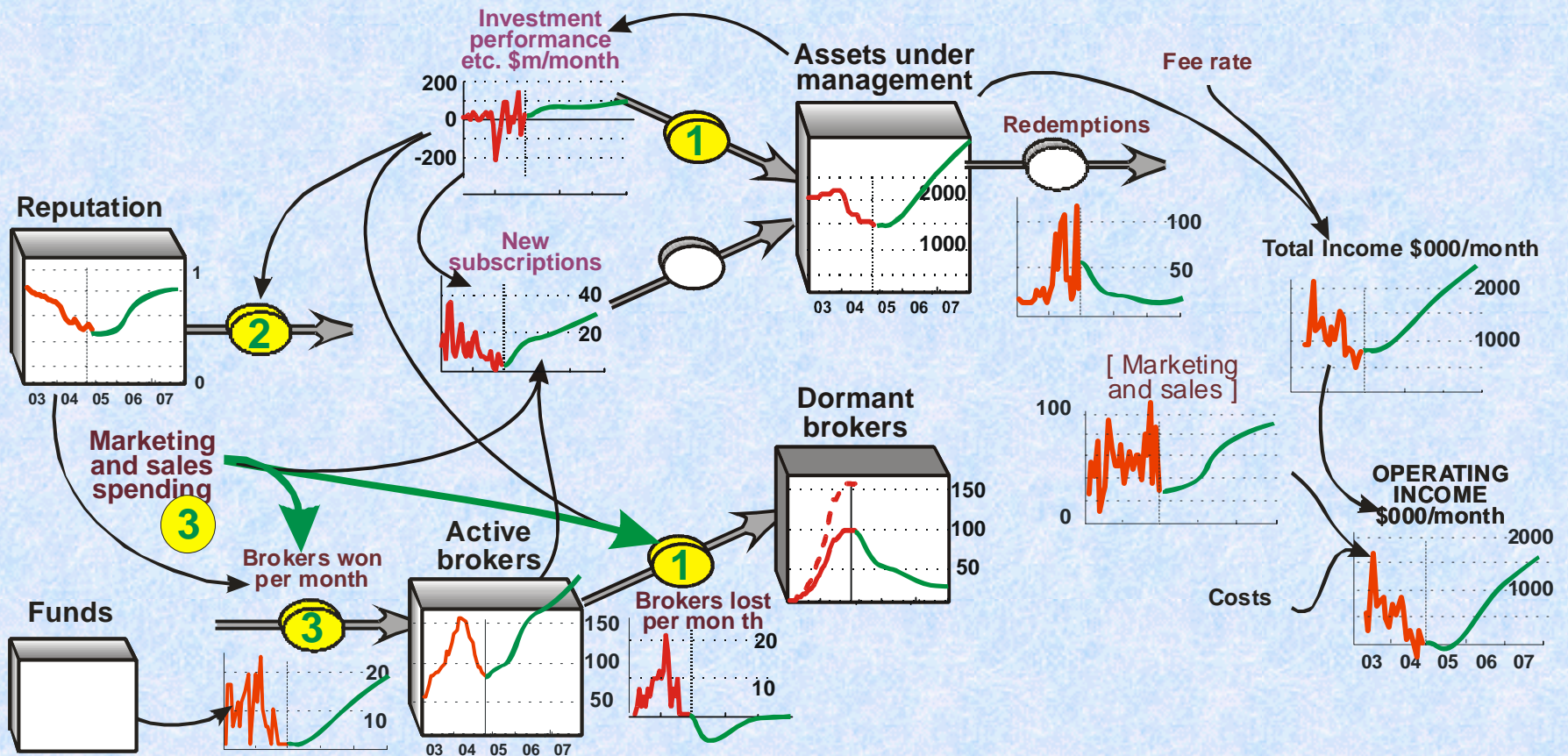


KEY MESSAGES FOR STRATEGY ...

1. IT'S ALL ABOUT PERFORMANCE OVER TIME
2. Performance depends on resources
3. Resources fill and drain [and this causes BIG trouble]
4. ... and so KEY IS CONTROLLING THE FLOW-RATES!
5. Resource-building is full of interdependencies [which creates feedback and even more trouble!]



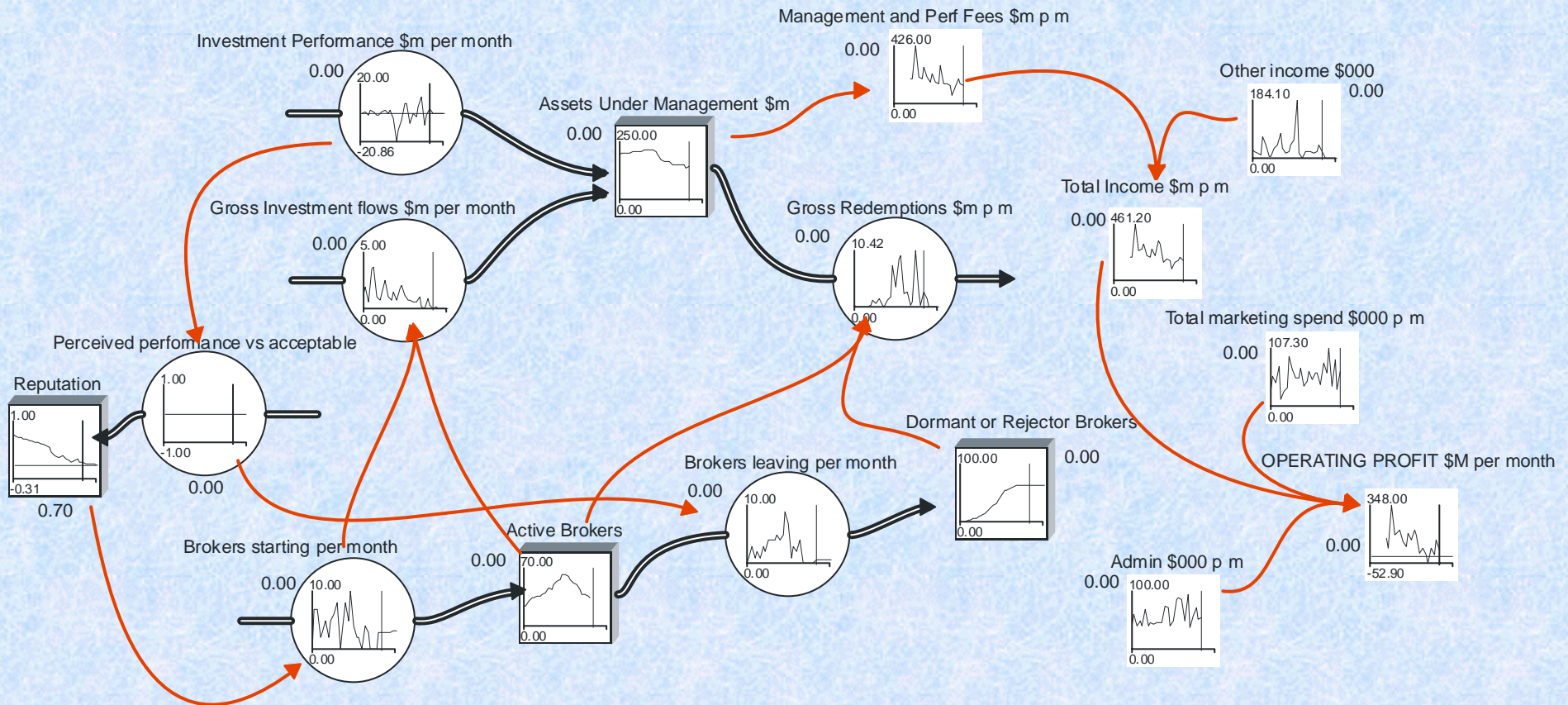
Improving future profits – a ‘Performance Panel’



... then more possibilities - adding funds, increasing sales effort, entering new markets etc.



... the actual architecture built with the team



“What do you now think you should be doing?”

In time-phased order ...

1. Get back to dormant brokers we have been neglecting.
... which will slow the investment redemption rate
2. Focus on current fund performance - drop other fancy ideas!
3. Use marketing to rebuild reputation.
4. and when this is done, get after new brokers.
... all of which will raise subscription rates, fee income and profits.

THEN you can get on to build a new business ...



Asset Management – new business opportunity

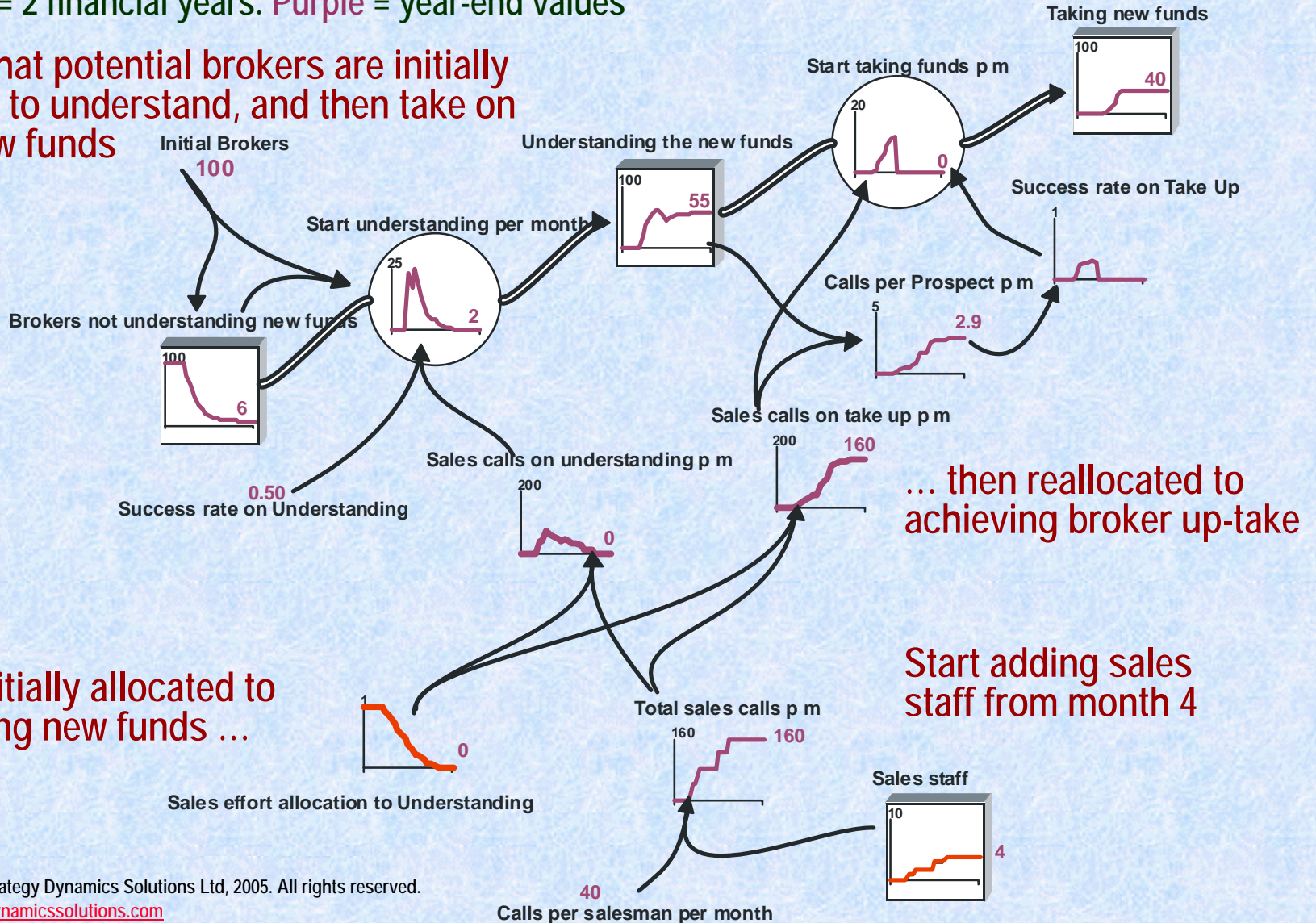
- Source a new class of funds with a lower risk profile for investors
- Deploy a few key sales people to:
 1. explain why this new class of funds attractive
 2. get take-up amongst brokers, so they start promoting these funds to their investors
- As the business develops:
 1. add to this range of funds, to fill further needs of investors
 2. re-allocate sales effort from explaining the funds to achieving broker take-up



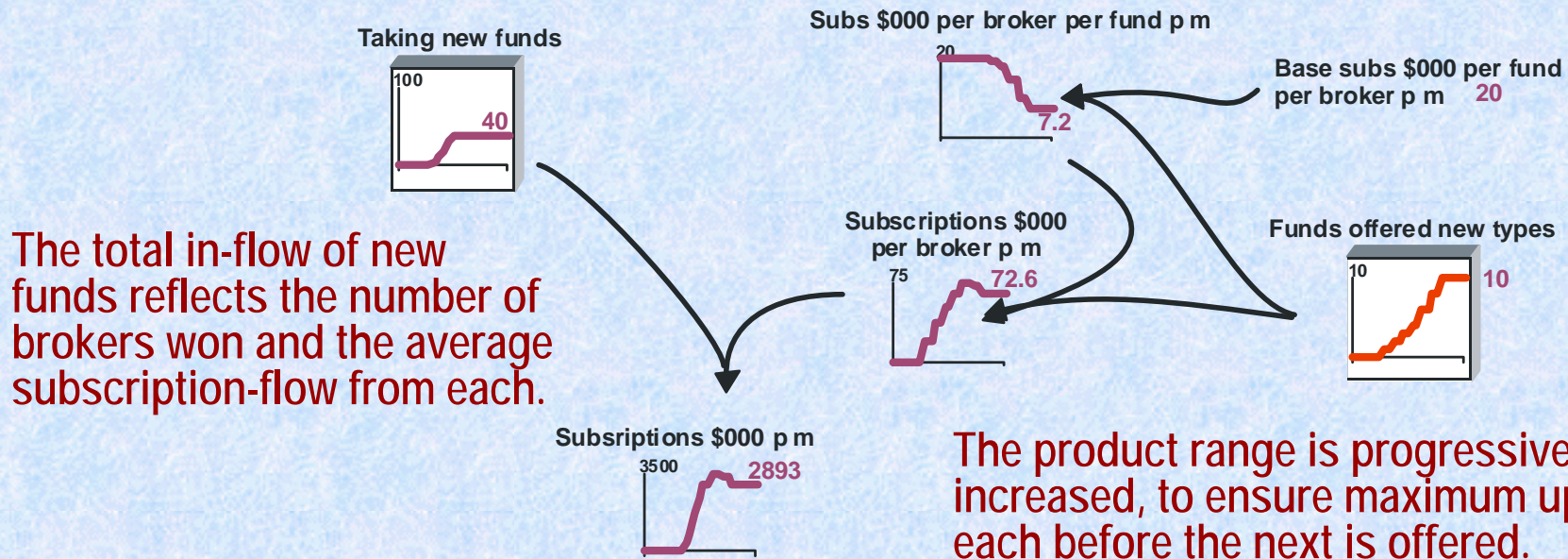
Winning brokers to the new product range

Timescale = 2 financial years. Purple = year-end values

... so that potential brokers are initially helped to understand, and then take on the new funds



Increasing the range of funds to boost sales



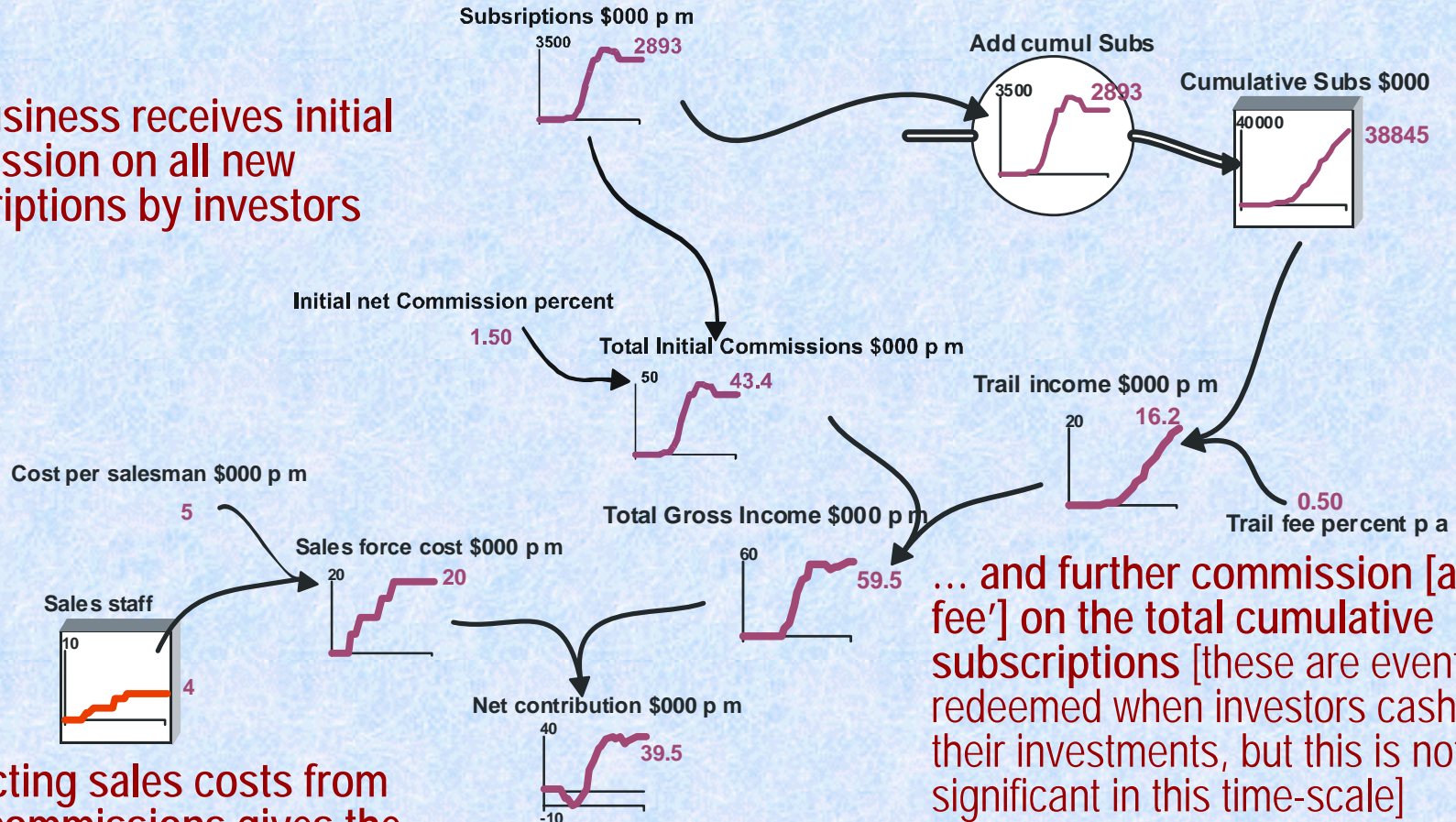
The total in-flow of new funds reflects the number of brokers won and the average subscription-flow from each.

The product range is progressively increased, to ensure maximum uptake of each before the next is offered.



Income growth from the new funds

The business receives initial commission on all new subscriptions by investors

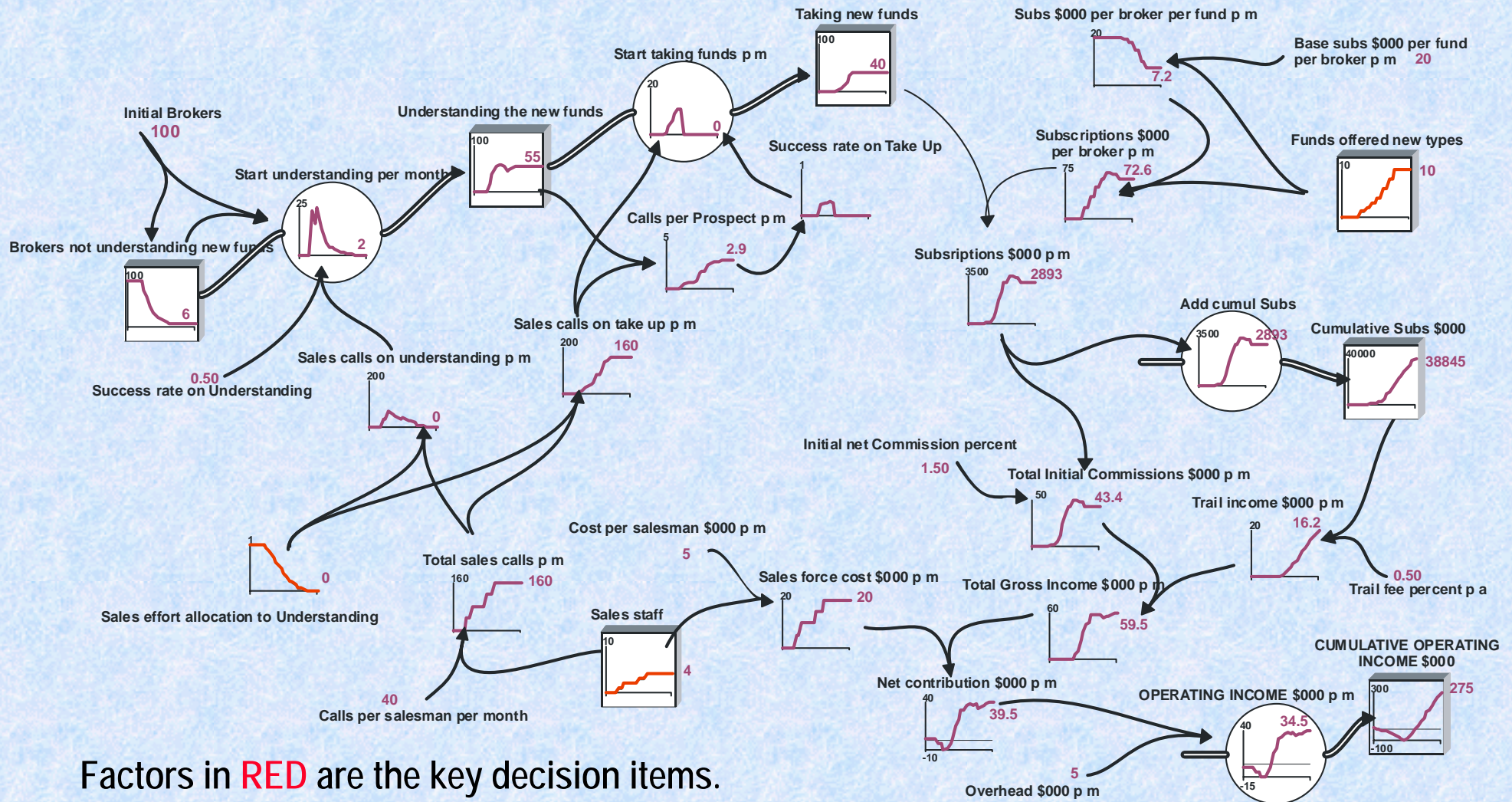


Deducting sales costs from total commissions gives the profit contribution

... and further commission [a 'trail fee'] on the total cumulative subscriptions [these are eventually redeemed when investors cash-in their investments, but this is not significant in this time-scale]



Strategic architecture and simulation model for the new business



Factors in **RED** are the key decision items.

NOTE - the full model includes the additional cost of account managers to sustain the relationship with brokers.



CHALLENGES FOR MANAGING STRATEGY ...

- There is a huge opportunity to do better
- Managing resources is genuinely difficult
- It's tough to understand what causes what!



KEY MESSAGES FOR STRATEGY ...



Huge opportunity !!

1. IT'S ALL ABOUT PERFORMANCE OVER TIME
2. Performance depends on resources
3. Resources fill and drain [and this causes BIG trouble]
4. ... and so KEY IS CONTROLLING THE FLOW-RATES!
5. Resource-building is full of interdependencies [which creates feedback and even more trouble!]

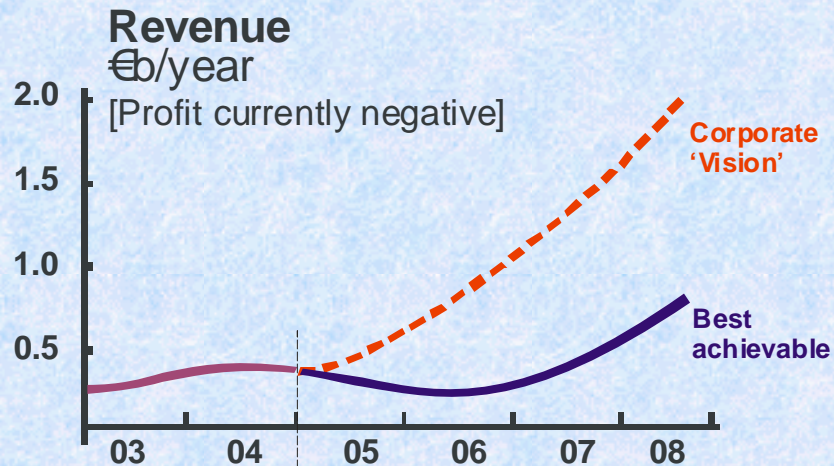


We can do better: two classes of error ...

Pursuing aims that are completely unreal ...



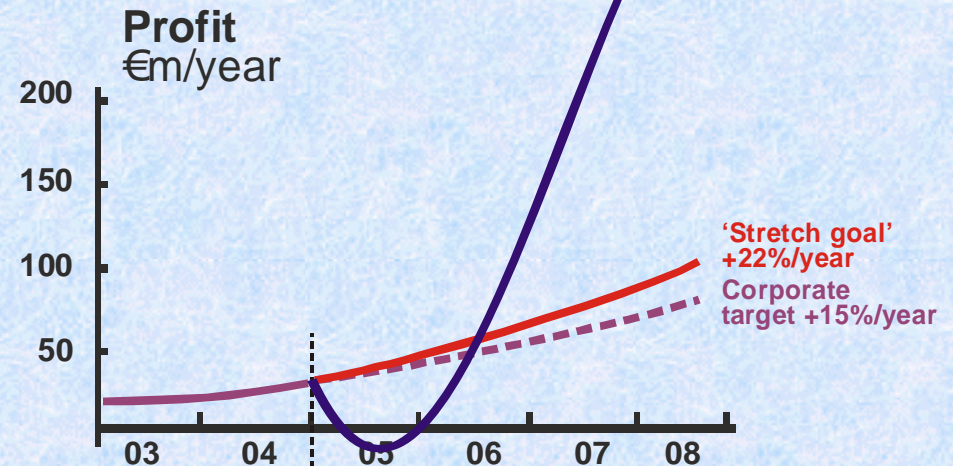
I.T. technology corporation



Massively under-shooting the opportunity ...



East European bank credit-card business



Managing resources is genuinely difficult ...

1. IT'S ALL ABOUT PERFORMANCE OVER TIME
2. Performance depends on resources
3. Resources fill and drain [and this causes BIG trouble]
4. ... and so KEY IS CONTROLLING THE FLOW-RATES!
5. Resource-building is full of interdependencies [which creates feedback and even more trouble!]



This is tricky!!

... but wait a moment, we already know how to do this – it's just what we do with cash.

Solution is to 'account' for movement of real resources.


	Cash
Opening balance	Cash at start of year
Additions	cash inflow
Losses	cash outflow
Closing balance	Cash at year-end

It is more complex for non-cash items, because their 'quality' varies .



'Accounting' for movement of real resources.

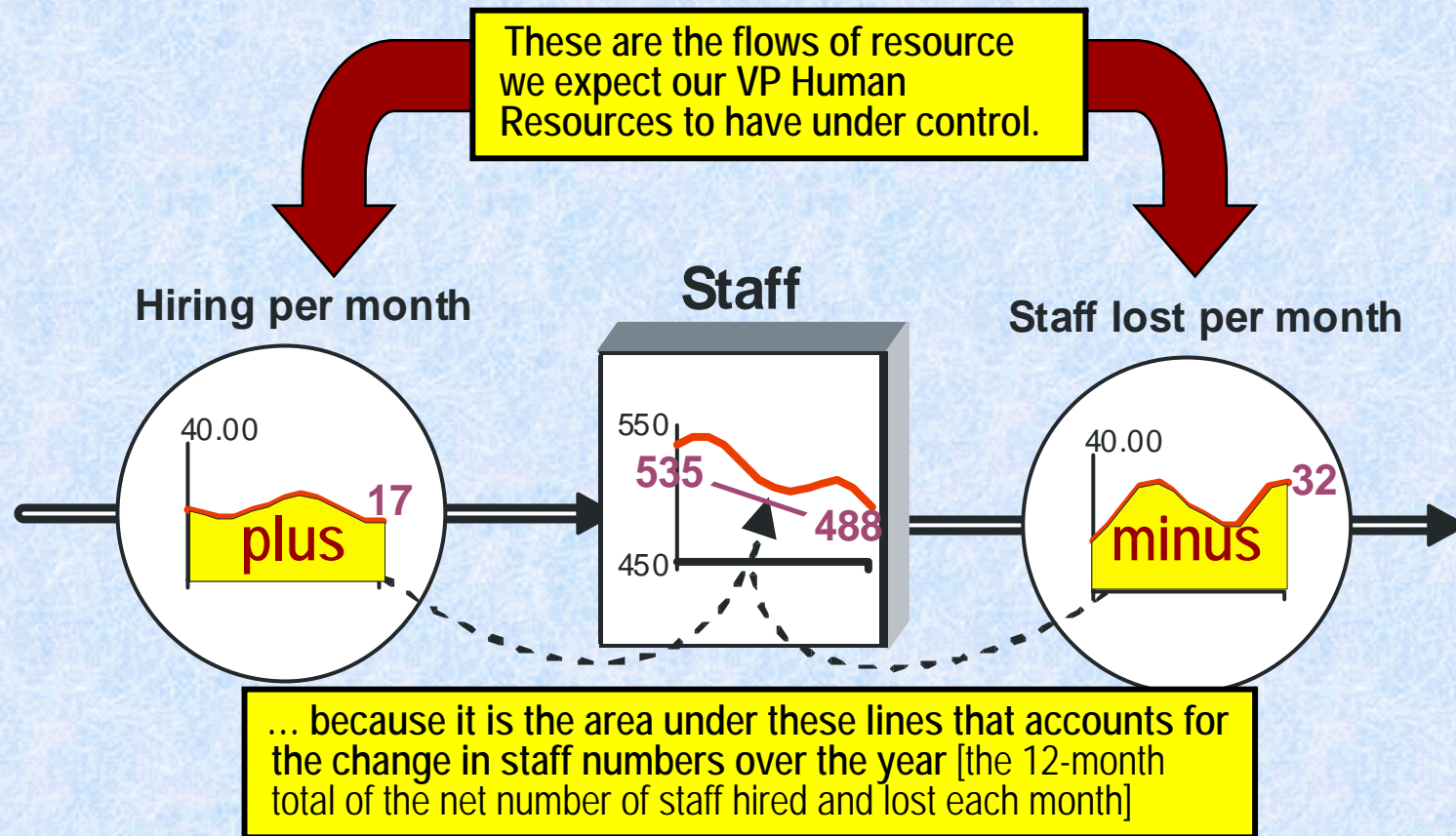
	Total staff
Opening balance	535
hired	243
lost	-290
Closing balance	488



... and we would want to report on changes in attributes, e.g. average experience .

Just as for cash, our management control is continuous.

Timescale = 1 financial year. Purple = year-end values

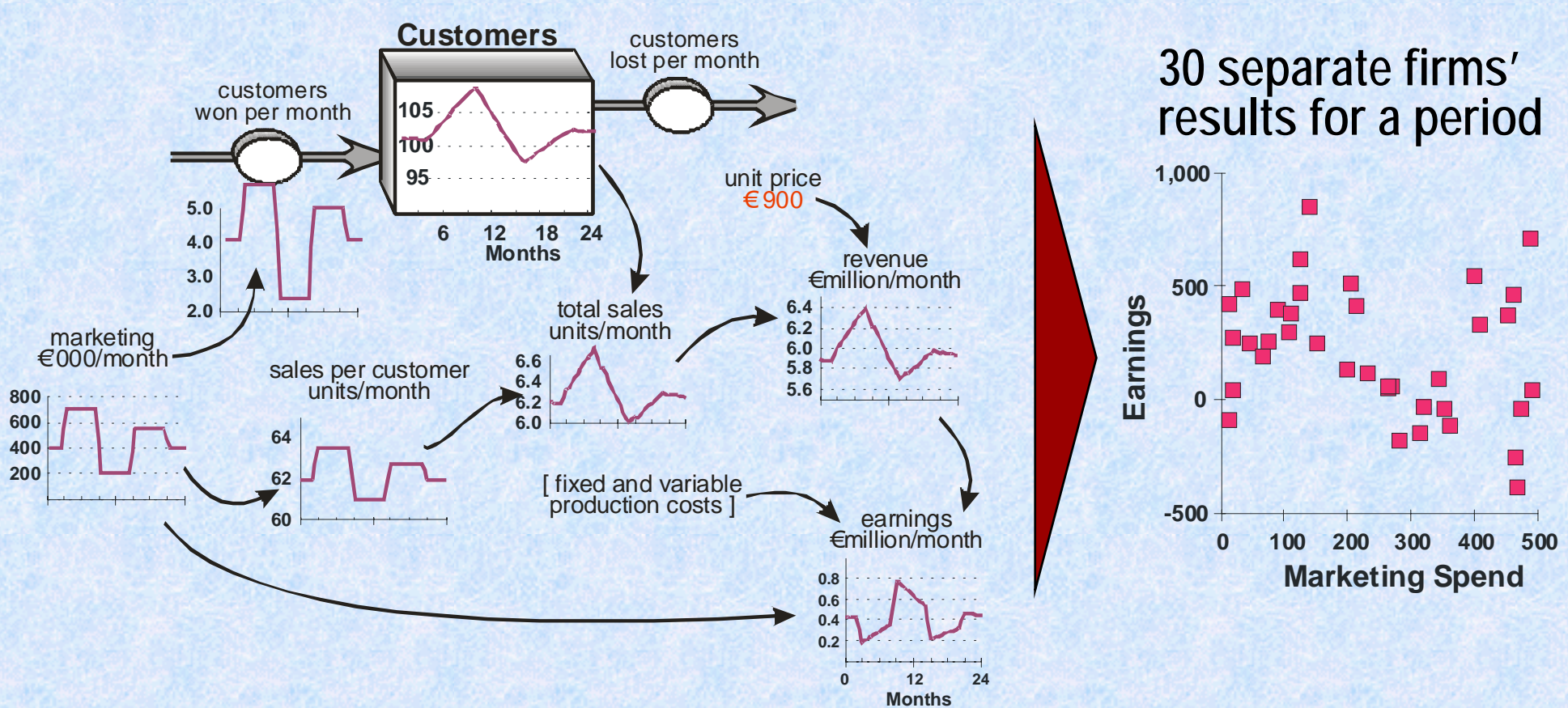


A further BIG problem in Strategy

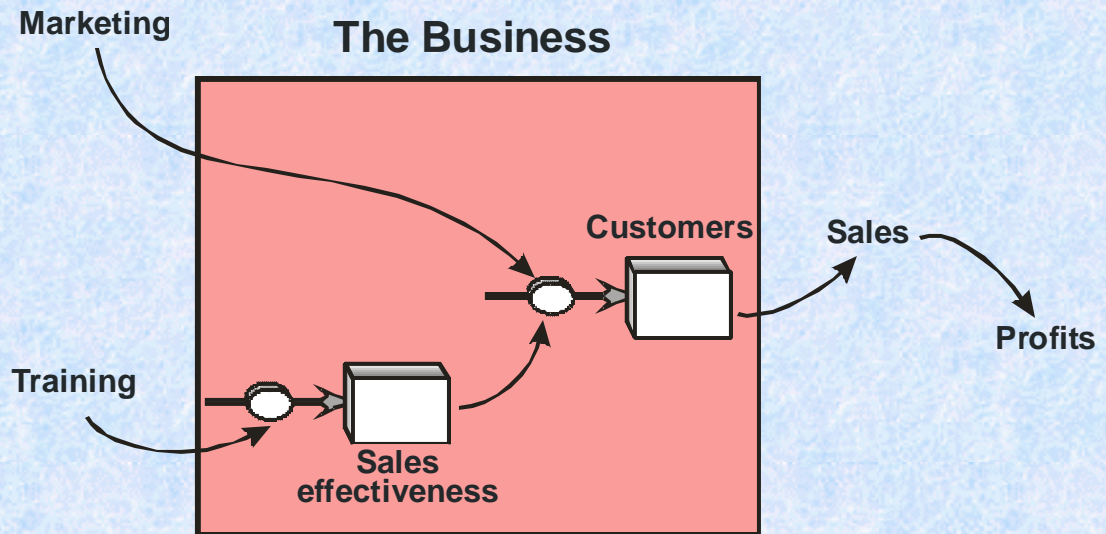
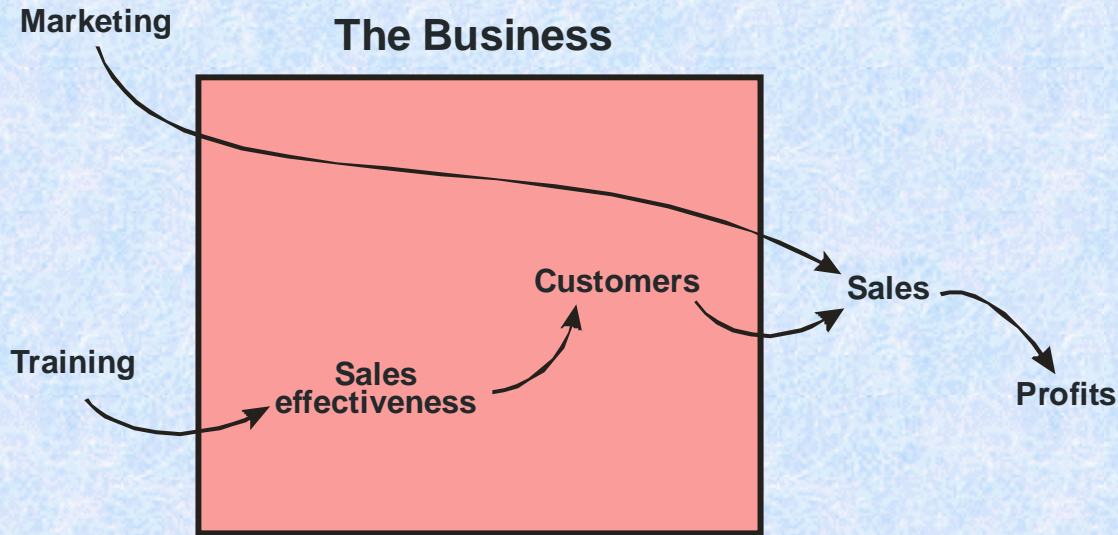
We often don't understand cause and effect – why?



Stock accumulation confounds 'causality', as commonly understood



Do 'accumulating resources' destroy confidence in correlation?



What's the problem in getting System Dynamics used for Strategy? – Why don't they 'get it'?

Managers struggle ...

can't deduce performance time-path from even the simplest feedback structure

can't deduce the feedback structure from a performance chart

[and feedback may not be involved at all]

'Where are those pesky "stocks"?'

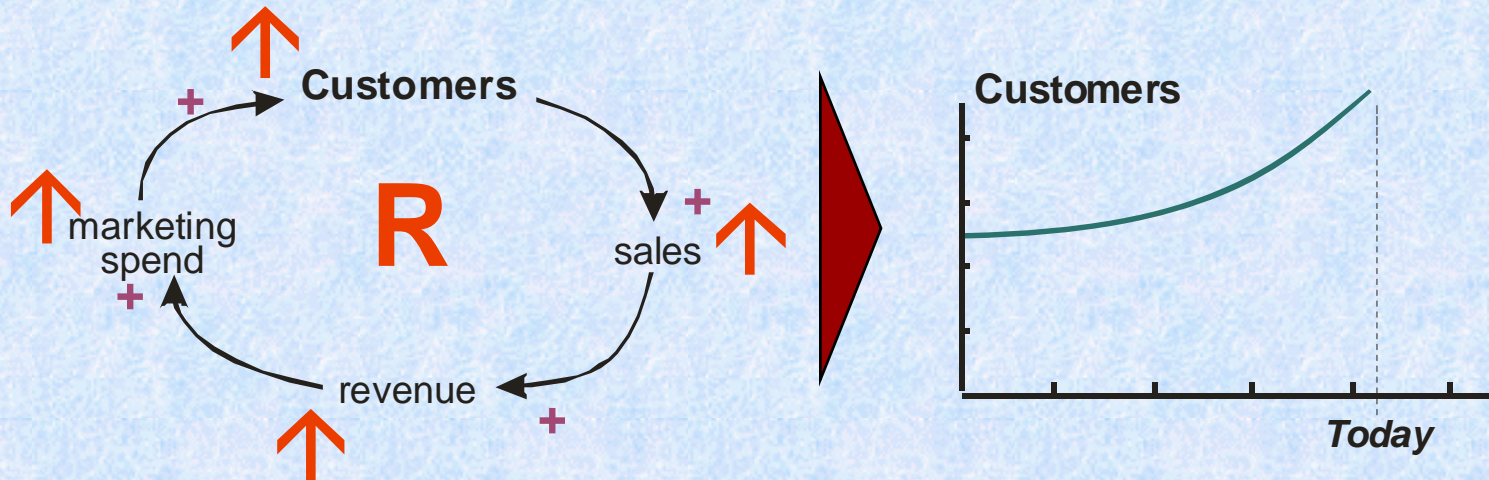
fundamental factors that should be under intense management scrutiny – not an after-thought

What's this got to do with my problem?

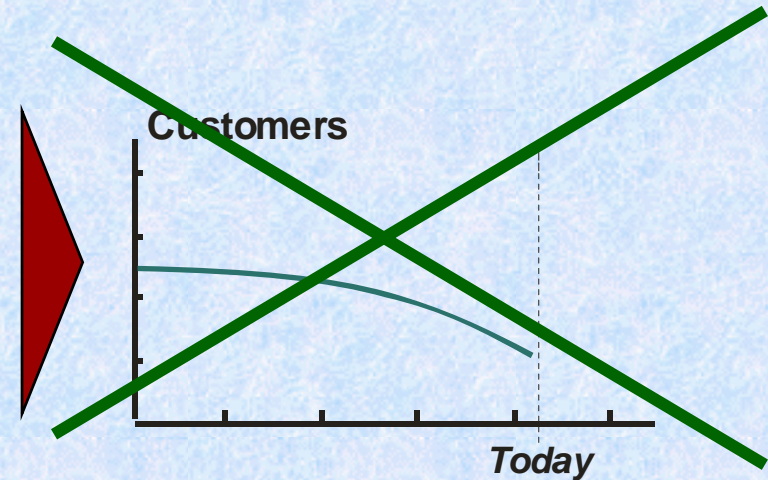
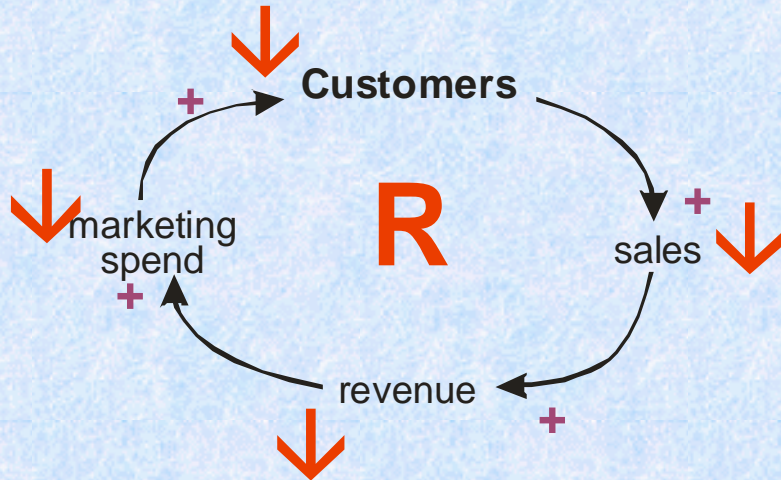
performance time-path as an integral part of the 'mental model'

Causal-loop feedback seems straightforward ...

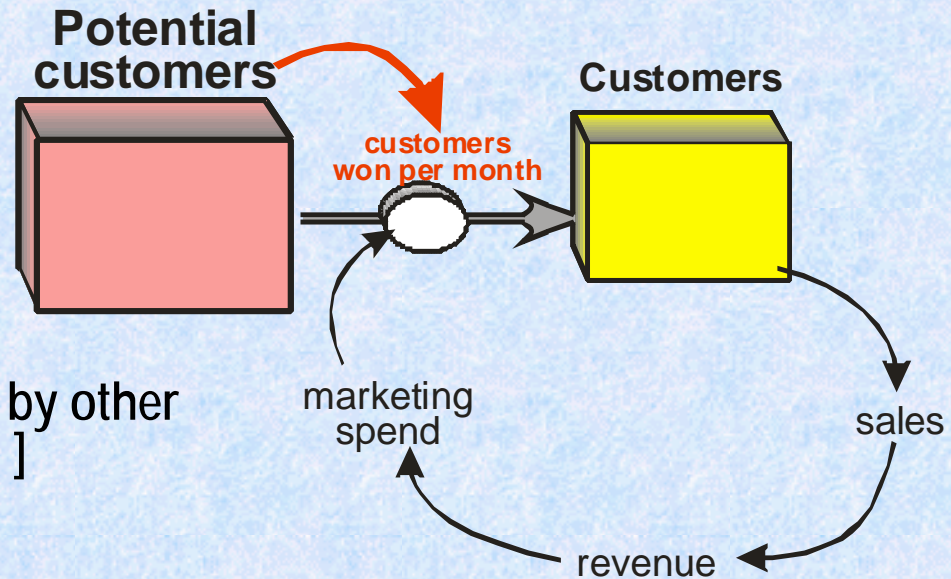
... but when left on their own, people get it wrong – why?



How can this 'R' structure decline?

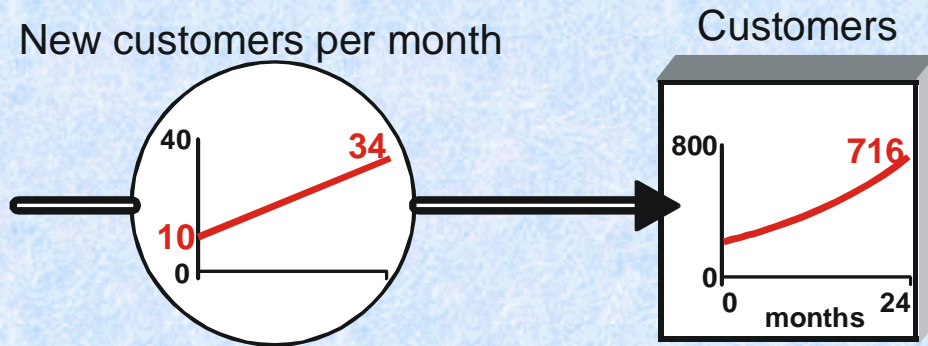


Marketing operates on people who are not even in the structure – potential customers.

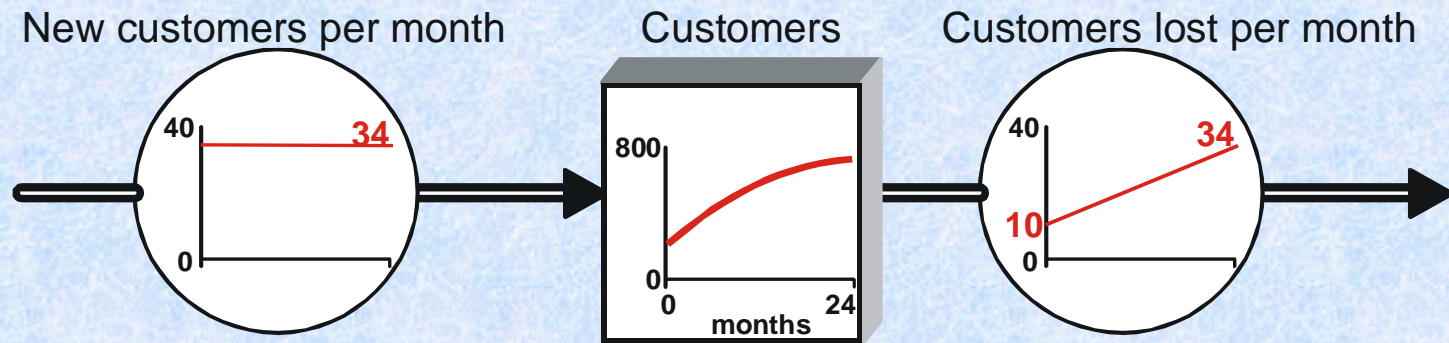


[Customer losses are driven by other factors – e.g. price or quality.]

Feedback creates escalating growth, and limits to growth, right? – not necessarily ...



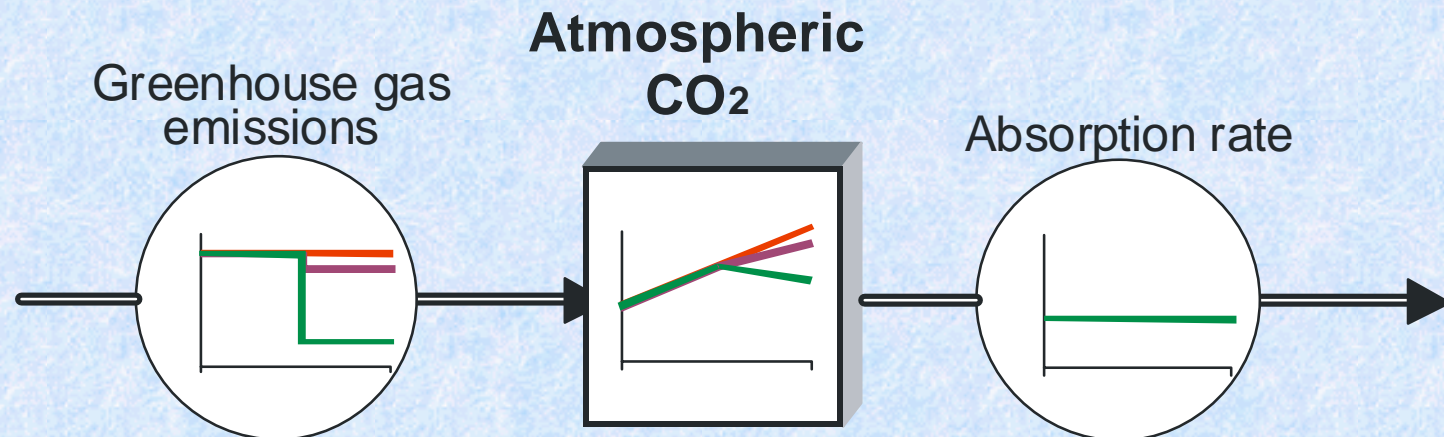
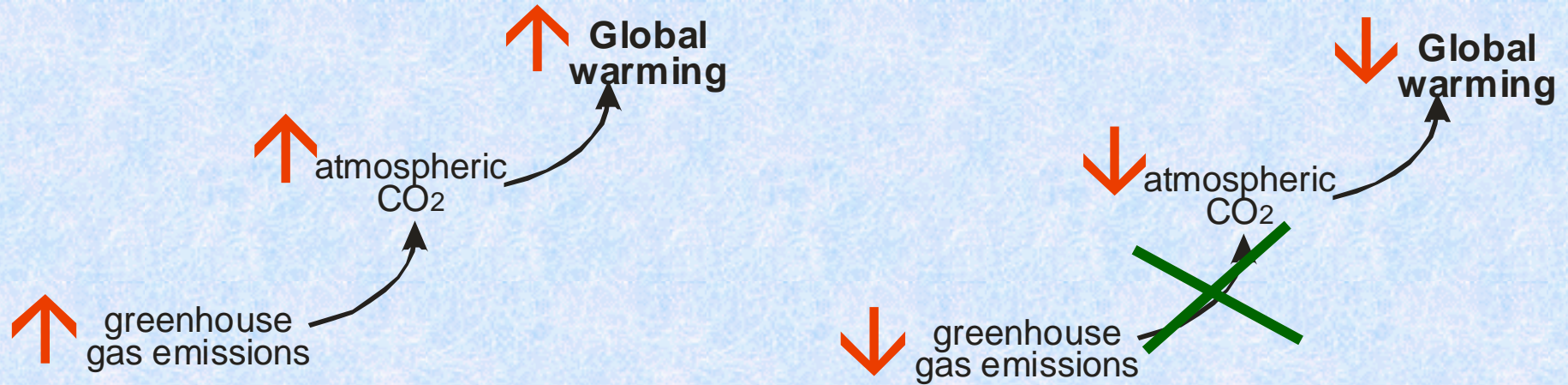
e.g. new demand for insurance in China



e.g. Vodafone sales in Japan

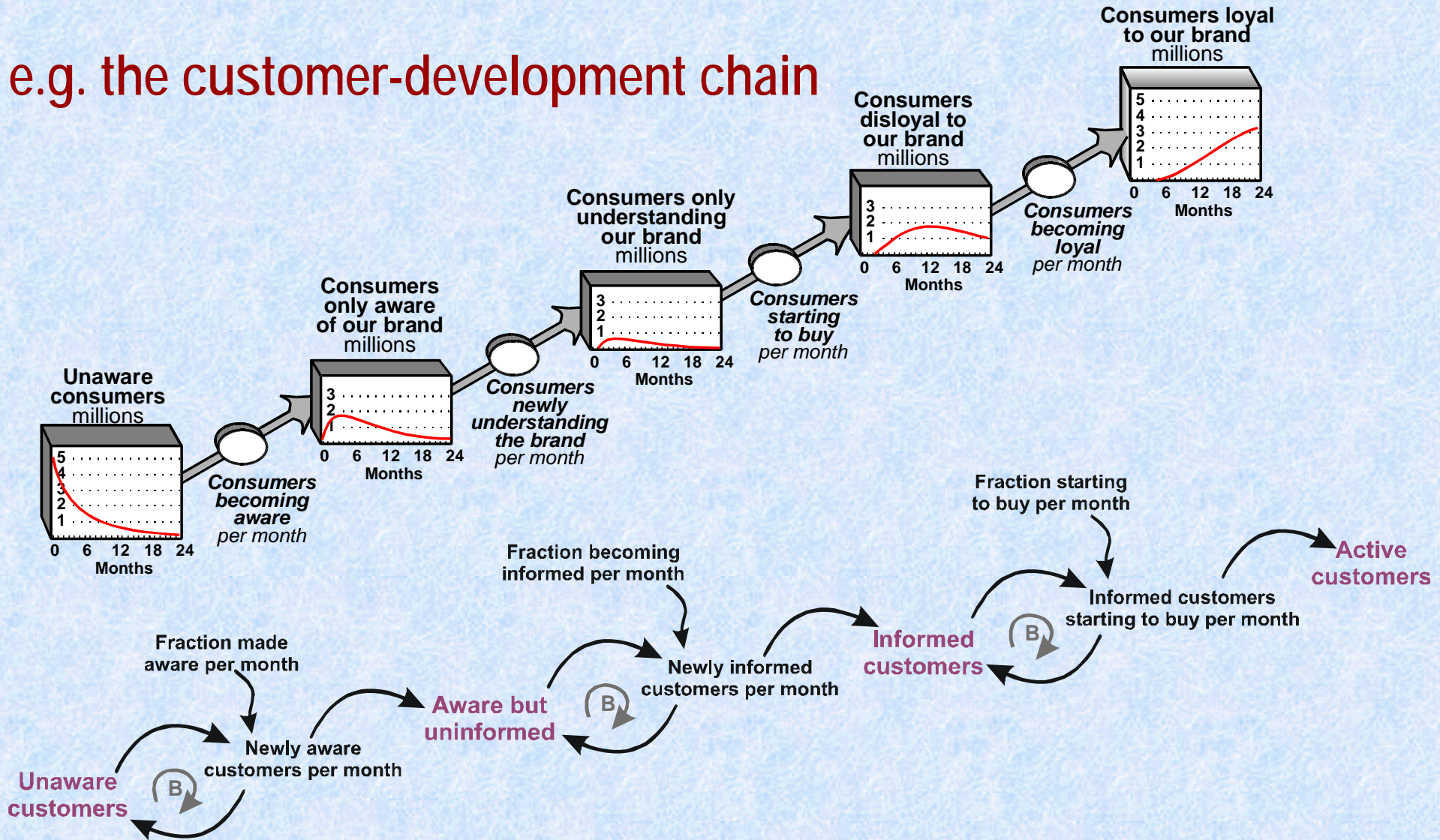
Resource-flows alone cause problems with performance over time, even without feedback.

A more serious misunderstanding of causal links vs. flow-rates ...



Some very common structures are puzzling in feedback terms ...

e.g. the customer-development chain



So why don't they get it?

Managers can't do it

can't deduce performance time-path from even the simplest feedback structure

can't deduce the feedback structure from a performance chart

[and feedback may not be involved at all]

'Where are those pesky "stocks"?'

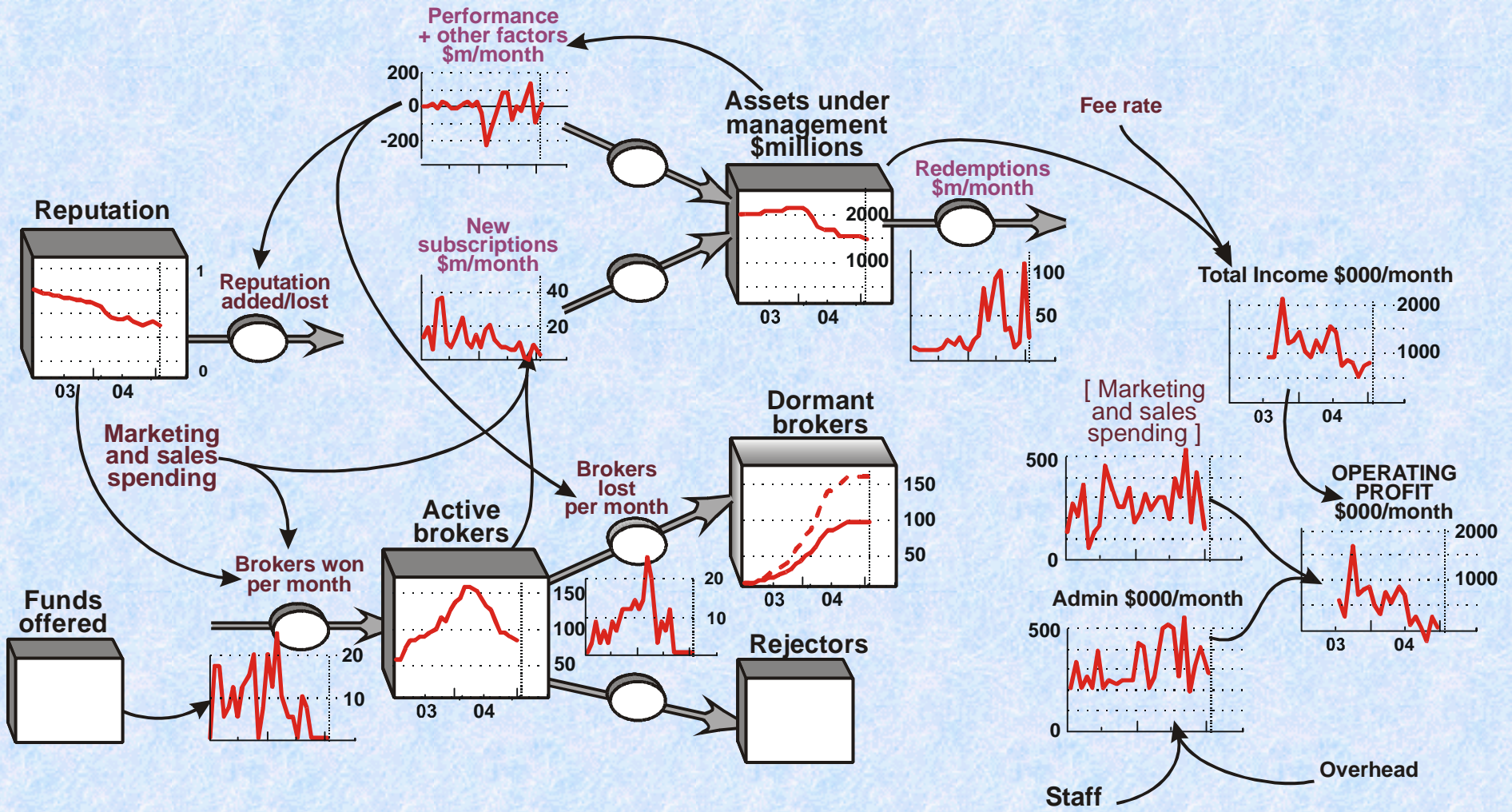
fundamental factors that should be under intense management scrutiny – not an after-thought

What's this got to do with my problem?

performance time-path as an integral part of the 'mental model'



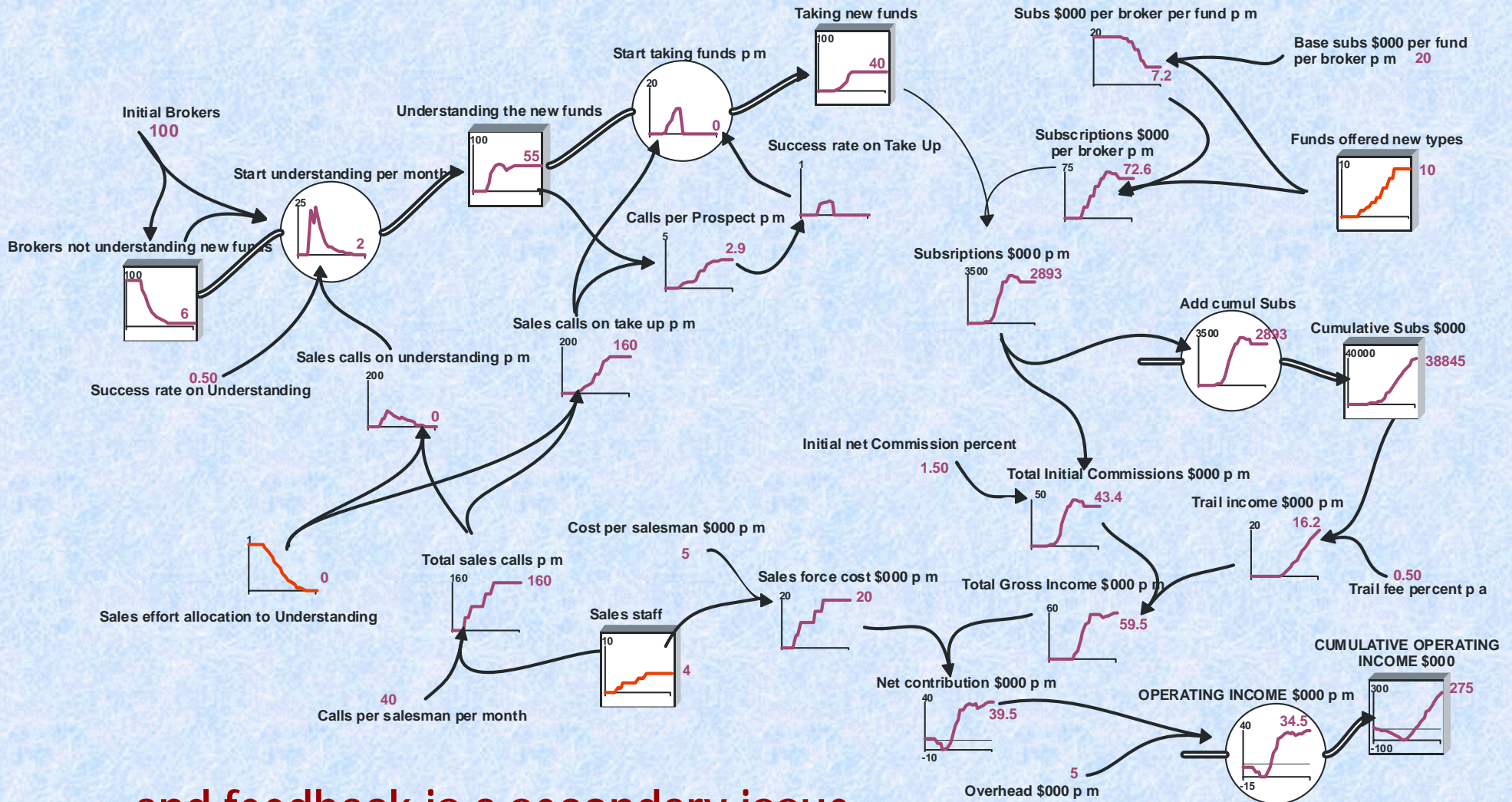
The overall strategic architecture



Feedback is not the problem here.



Strategic architecture and simulation model for the new business



... and feedback is a secondary issue for this new business opportunity.



Don't get me wrong ...

~~'Oh hi – you're the guy who
doesn't believe in feedback'~~

ABSOLUTELY NOT, BUT ...

- there are vast numbers of problems out there, solely [or mostly] caused by resource-flows alone
- the numbers have to be worked out
- we can't have feedback without accumulating resources



SYSTEM DYNAMICS' CONTRIBUTION

1 How our world behaves is complicated by stuff that accumulates.



We have to do the numbers of these processes - over time - if we are to understand and manage things better.

... AND ...

2 How our world behaves is complicated by powerful feedback effects.



We have to map and model this feedback to understand what is going on, and to manage things better.

My Story ...

- 15 years strategy professional ..
 - *Oil, petrochemicals ...*
 - *Beer and food*
- 1990 'Been there, done that' so ...
- off to London Business School to teach Strategy
- Very puzzled by what we taught, but luckily ...
- John Morecroft converted me to System Dynamics [hooray!]
- 1996 – got PhD!
- Why don't they get it? Why can't they do it?

To 2005 ..

- Teaching, writing, learning materials ...

NEXT ??



What next?

Improvements needed in the 2nd edition of 'Competitive Strategy Dynamics' !

- Stronger connections to well-known Strategy frameworks
- Illustrate widely-used case-studies
- More reference to work in system dynamics
- Open up the models
- Learning materials support

