

FRACTALS AND THE SIMPLE TRUTH ABOUT BUSINESS

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Fractals and the simple truth about business

“One of the most pernicious misconceptions ... is that complexity and chaotic behaviour are synonymous,” states the Encyclopaedia Britannica. And I agree – complexity should not exclude understanding – especially if it has fractal properties.

Fractals are shapes that have some form of self-similarity. You’ve probably got one in your refrigerator – take a cauliflower and break off a floret. Now study the floret and you should notice something – it looks like the whole cauliflower. The pattern of the floret resembles the pattern of the whole. If you break off another piece, you’ll notice the same. And so on.

Jonathan Swift, the author of *Gulliver’s Travels*, illustrates this point most succinctly:

*Big fleas have little fleas
on their backs to bite them,
and little fleas have lesser fleas,
and so ad infinitum.*

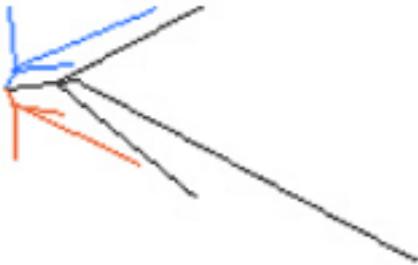
Whether generated by computers or nature, fractals are produced when ‘output’ is fed back into the system as ‘input’ again and again, as I shall demonstrate with the four simple lines below:





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The figure below has an additional two sets of the exact same pattern (one in red and one in blue), the result of which still does not resemble anything special.



But if we repeat it a few thousand times, we discover the beautifully graceful and familiar Black Spleenwort fern.





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No matter how complex a system is, fractals emerge when a simple formula is fed back on itself. This four-line formula works exceptionally well for the fern, imbuing it with the qualities it needs to flourish and survive – those four simple lines can explain the entire form.

Similarly, to construct and maintain a profitable organisation, I have found nothing more is needed to explain overall performance, than these four 'lines' of activity:

1. Sell more to existing customers
2. Get more new customers
3. Spend less on bad assets
4. Spend more on good assets

If you were to survey a corporation from different 'heights', these 'lines' would apply equally well at all levels: the holding group, operating units, departments – all the way to the individual on the shop floor.

Those accountable to shareholders ask themselves these questions all the time – it's the basic fractal for performance. And when this basic pattern is repeated, the picture that emerges is a beautiful one.

About the author

Sid Peimer is the Executive Director of the Cape Chamber of Commerce & Industry. His book *'The Clear Win: Pitching for new business – the strategies that work; the myths that don't'* can be found on Amazon [here](#)

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