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Learning to think like an entrepreneur? A comparison of the views of tutors and entrepreneurs on SWOT.

by

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Swot is an interesting case also because Sandra Lerner who devised it was an entrepreneur (founder of Cisco systems)

Environmental determinism –swot is one man’s attempt to break free from the env determinism of econ

Cognitive dissonance

Teachers have a larger degree of cognitive homogeneity than entrepreneurs and the two cognitive ranges have little overlap

Abstract:

A study of the marks awarded to students' SWOT analyses by 10 tutors suggests that they may be looking for balance between the four factors. The author concludes that this pedagogic device invites, but offers no proof of the value of such balance in the formulation of successful corporate strategy, and as such is potentially misleading. To test whether it is, the author conducted interviews with 10 entrepreneurs -who could all be considered to be demonstrably successful strategists- in order to assess their approach to SWOT. From this the author concludes that the use of SWOT in the education of students of enterprise and business needs to be reconsidered.

Key words: *SWOT. Pedagogy. Entrepreneurship. Strategy.*

The purpose of this research is to make a contribution to the debate on what works in business education, and why. Although there is tentative evidence that enterprise programs seem to encourage entrepreneurial intentions regardless of the audience (Souitaris et al, 2007), how they do this is unclear. Indeed, there is a lack of information on both what is actually taught, and learnt, on such courses, and what effect different elements of it have on enterprise. So, while we have seen a large rise in the number of such courses, quite what they have achieved and why is open to debate. One thing that seems to have been very widely taught on such courses since their inception is SWOT analysis, which also figures very prominently in all manner of business related education.

SWOT analysis is often traced back to Harvard and the work of Learned, Christiansen, Guth, and Kenneth Andrews (1969), or possibly to Albert Humphrey's SOFT analysis which appears at around the same time and seems essentially the same as SWOT, except that Flaws replace Weaknesses. What is perhaps more clear is that its initial popularity was largely down to the efforts of Kenneth Andrews (1971) in popularizing the idea that corporate strategy should be framed in terms of the need to match internal factors (the organizations Strengths, and Weaknesses) with external developments (the Opportunities and Threats), as a part of the on-going attempt to separate strategic analysis from the environmental determinism (in essence the primacy of the O's and T's) of neoclassical economics that dominated debate on strategy at Harvard at the time, and thus provide this 'new' subject area with its own foundations. This desire to pull away from the determinism of the economics of the day (although as the work of Rumelt (1984,1991) shows this battle has to be fought on a regular and on-going basis) being seen as essential in justifying the existence of the subject in its own right, since if as economists like Milton Friedman argued if firms' strategies have no effect on the long run equilibria, and are effectively just noise, then they could be treated as black boxes in any science that lays claim to understanding the nature of those equilibria, with the study of strategy being consigned to the realms of historical description, not of science (to which it aspired).

Since then different schools of thought have placed different elements within the SWOT framework, depending on which side of the internal/external distinction they want to place the emphasis, since there is no underlying theory that shows that these four factors are dominant explanatory variables in formulating optimal corporate strategy, or any empirical evidence that they might be, other than to say that occasionally successful firms have occasionally conducted SWOT analyses. Quite what examining these four factors can be expected to achieve remains therefore a moot point, and today SWOT is largely used as a descriptive device, in effect becoming an acronym under which students are required to make four lists, useful though that might be many an astute student has asked why it should be presented in a matrix if that is all it is. No doubt some have been invited by their tutors to use it in a more sophisticated cross tabular way (effectively looking at combinations of Strengths and Opportunities, Weaknesses and Threats and so on and so forth), but in the main the tabulation is redundant, with the S,W,O, and T's, merely being presented alongside each other for convenience, or if you are a student who feel obliged to try and present your work in the tabular format, extreme inconvenience. This tendency is reinforced by the fact that while a few authors insist on placing the S,W, O and T outside the box to imply cross referencing of some description, most put them inside, as shown below, confirming each as labels of the outputs of the model rather than parameters of inputs into it.

## SWOT Matrix

Strengths	Weaknesses
Opportunities	Threats

Source: [www.swotmatrix.com](http://www.swotmatrix.com)

As this summary listing approach is what most critics of SWOT are railing against, it is little wonder that the critics of SWOT are numerous and often venerable, (Mintzberg, 1994, for example). Their criticisms amount to little more than questioning whether we can actually learn much from making such lists, as it amounts to no more than an invitation to use some headings to frame some research. A feeling confirmed by the way the benefits of doing this are normally presented in rather vague terms; a 'better understanding of where you are will help you make the right strategic decisions' being as good as I could find looking on-line. Such criticisms seem well founded, therefore, but they are not telling enough to see SWOT abandoned as a way of getting students started on the undoubtedly important task of investigating firms in some kind of contextual way. The result is we seem to be stuck with SWOT despite the criticisms. The focus of this study is therefore less about adding to the list of criticisms, and more to do with accepting SWOT as part of the landscape as far as teaching business studies and enterprise go, and to investigate the implications of this. In particular, to try to discern exactly what it is we expect students to do with it, by looking at what we give marks to in evaluating our students' efforts on this, and to determine how this relates to the real world of enterprise.

If we take the two dimensions by which a model is usually tested; efficiency and bias, then the issues in this paper are largely to do with bias, albeit that the bias in this case happens to be one of unwarranted balance, since what we seem to be marking is a student's ability to fill each box in the SWOT table. This expectation of balance is unwarranted, unless and until evidence can be found that such balance is mirrored in the real world, and the comments of the 10 entrepreneurs (this number being chosen simply to match the number of tutors) surveyed in this study, suggest that it may not be. The selection of these 10 being based on three factors, firstly that for symmetry a number would be chosen to match the number of tutors, although it's not actually a fight and such paring plays no substantive part in the analysis. The second fact borne in mind was the need to chose entrepreneurs who were inexperienced in SWOT and unlikely to simply repeat what was expected, to assist in this their SWOT analyses were conducted by recording a discussion of each factor, rather than by presented or boxes in which the urge to fill each box might be artificially encouraged. Finally, they were chosen on the basis of their success. However, the fact that all of the business leaders in this study have created successful businesses that are still solvent despite the current recession, does not in itself prove they are right in terms of SWOT. In one case, SimWood eSMS (company number.....) we can directly compare the views formed in the classroom with the SWOT factors as interpreted by the entrepreneur who established and runs the firm, that is not to say that we can prove who is right, but it does help us to see what the differences are and whether they matter, and why. From the pedagogic point of view falsifying the view of the entrepreneurs would be both a necessary and sufficient condition to ignoring the views of the entrepreneurs, but anything short of that suggests that tutors have something to learn about the pedagogy of SWOT from the comments of the entrepreneurs.

## Findings

By simply asking entrepreneurs to conduct a brief SWOT analysis of their own firm a difference between what they report and what we expect of our students becomes apparent in that the

entrepreneurs did not share the need to balance their perception of the SWOT factors, which this research suggests is (for most tutors) implicit in what we teach, since it seems to be an important element in explaining the marks given in assessing students' SWOT reports, but seems to be an a priori assumption rather than something for which there is evidence, and which might, therefore, be commonly identified explicitly by the tutor, although one of the ten came close, being of the opinion that it was necessary to thoroughly review each of the SWOT factors and that the simplest way of demonstrating that they had was 'not to leave any gaps'. In the regression below the sample from this tutor are included on the basis that the following comments although possibly alerting some to a hidden agenda the comments that follow apply whether it is explicit or implicit. In the regression no independent variable is constructed to try and capture what might be described as genuine quality, given the measurement problems of defining this, and a simple regression of balance and marks is taken as sufficient to prove that there is at least an issue here, whilst acknowledging that balance and quality could be positively related, even within a word constrained assignment. The evidence that what tutors we are assessing is indeed the degree of box filing comes from studying the marks given by tutors at the University of Glamorgan in Wales, and one of its affiliated colleges in England, as well as at the Chartered Institute of Purchasing and Supply, which in total covers the marks given by 10 experienced tutors covering the period 2002-07. If the study had been confined to one tutor's marks then the simple expedient of asking them what they were looking for could have been employed, and in one of the ten can always find a tutor who is explicitly looking for balance, Although the intention was to look for factors that seemed to be common across markers, institutions and courses, as indicative of the general pedagogic picture on this issue, with one possible exception the need for balance was not articulated expedient of asking tutors what they were looking for was also employed, but with one possible exception, the feeling was that Discussions with the tutors concerned suggest that in fact none of these markers did anything as blunt as telling students to fill each box, and for the most part answers were not presented or expected to be inside the boxes, because of the difficulty of squeezing everything into one page of A4 paper. References to filling boxes is, therefore, as assessment of the quantity of

students comments under each heading, rather than literally the density of ink in each box. The procedure was simply therefore to count the number of points made by the student under each heading and test whether a greater balance between each is correlated with a better mark. No judgment is made on the quality, this is simply quantity as defined by the students (usually indicated by a new bullet, or number, or the start of a new paragraph), except for answers where students failed to write much at all, which were excluded on the basis that these could be balanced, but as they were balanced around zero they would fail the assessment. The degree of balance was measured using the coefficient of variation on the number of points made. An alternative, but possibly even cruder way of gauging this balance would be to count the number of words, but that was considered to be too time consuming and possibly not as accurate in terms of the different points being made, although of course some students will break an argument into more pieces than another student making the same point. The fact is, however, that marks and the balance between the S, W, O and T in student's answers do seem strongly related, as shown by the regression result below:

$$\text{Marks} = 60 - 18(\text{lack of balance})$$

$$n=263$$

The residuals for this equation look normally distributed and the equation passes the usual tests, the adjusted  $R^2$  is 59%, (with half the work being done by the intercept). The t statistics on the parameters are 91 and 19 respectively.

Some tutors expressed themselves content with this result, as one put it 'the best students will consider all the dimensions'. The issue is however, whether having considered them they are found to be balanced, or whether this is an assumption that results from the current use of SWOT as an introductory reporting device rather than a more interrogative and analytical tool. I have also divided the sample into courses with enterprise in the title and those without, finding no significant difference. If we plug the scores from the entrepreneurs in this study into the equation, the majority would fail, and only two would get a pass that they could draw any comfort from. Of itself a rather silly thing to do of



course but it does highlight a significant difference in perceptions, which may give some insights into the entrepreneurial mindset that may incline us to reconsider the balance assumption.

If we look at what the students actually wrote we find similar problems to those identified by Hill and Westbrook (1997) when looking at SWOTs done by professional management consultants, with answers consisting of long lists of cryptic phrases like "poor product quality" with no depth or precision about which products, in what ways and why. Secondly that there was no evidence regarding why people believed that it was product quality rather than something else, nothing for example on how they knew that their quality was any worse than anyone else's. Thirdly that strengths and weaknesses were often the same point expressed in opposing ways. To a lesser extent this also seems to apply to O and T, as every cloud has a silver lining, and as one student put it falling to spot an opportunity is a threat. As tutors we can of course take some succour from the findings of Hill and Westbrook (1997) since if even top consultants make such little of SWOT, tutors can perhaps be forgiven for any tendency to mark quantity rather than quality implied by these results. A more substantive point is that if we find these failings at all levels in the use of SWOT we can assume that the problem may be more with it, than with us. Of course for many the point of SWOT is simply to start a dialogue on the firm's internal and external position, between students and staff. Nonetheless, if the dialogue is trammled along certain lines by the nature of the tool applied to facilitate such dialogue then the debate will be skewed. Moreover, since attitudes affect behaviour (Ajzen, 1987) then if the use of SWOT is shaping students' thoughts on how to perceive their firm in a way that is not supported by the experience of the successful strategists running such firms then it could be that it is counterproductive on enterprise and business studies courses.

The results from questioning 10 entrepreneurial business leaders, from a range of industries, which included both a SWOT exercise and subsequent discussions of their thoughts on this, shows a number

of significant differences between their perceptions and what students are taught. In particular it is clear that the entrepreneurs did not see things in the kind of balanced way that would have got them good marks according to the regression results reported above. The results from the entrepreneurs show two things that rather conform with the stereotypical view of what entrepreneurs are like –firstly that weaknesses seem to be understated while opportunities seem to be overstated. There are significant subtleties in this, however, since while on the former the entrepreneurs in this study seemed to be irrationally opposed to recording anything as a weakness, the justifications for this were sufficiently detailed and precise to be convincing. All participants either implied or stated directly that they felt that weaknesses were something they try to address, so while a student looking in on a firm from the outside might decide that there was something that the firm was deficient in, from the inside an entrepreneur can be inclined to feel that these are variables that they cannot directly influence, and of little interest, therefore, in formulating strategy, or they reflect strategic choices they have made. In one case, for example, a firm that could enter a bigger market -on a smaller margin- chose not to, but the man that made that decision refused to ascribe his company's inability to service the larger market as a weakness, as it 'was a choice we made' to focus on the top end of the market. From this perspective what remains is everything that they hadn't had a choice about, which just reflected where they found themselves; a state of the world, rather than something internal, which it would be pointless to dwell upon. Whether it is pointless when looking in from the outside is a moot point, although the question of whether under weaknesses we were to include quantitative factors was raised by some entrepreneurs as it was felt that there was a gap between the facts and the interpretations. For example, the fact that a firm had a small market share would be a fact that might be interpreted as a weakness (lack of power), or a strength (more flexibility).

On the second finding, it is worth noting that –again- there are significant subtleties to take into account. While the idea that optimism is intrinsic to the entrepreneurial mindset is often found in the

'trait' literature, specific evidence on whether this is rational and appropriate, or merely indicative of bias, is scarce. One study, Arabsheibani et al (2000) does confirm that in the UK at least the self-employed were inclined to an element of what looks like unfounded optimism, and de Meza and Southey (1996) suggest that such over-optimism can explain high start-up failure rates for small businesses. With this in mind it seems, prima facie at least, that there is bias amongst the entrepreneurs surveyed in this study in the degree of imbalance between the O's and the T's, since the degree of turbulence (Burns & Stalker, 1961) and thus uncertain (Knight, 1921) facing some of the businesses in question makes the author suspect that there should be more of both opportunities and threats in some cases. But, again, that is the speculation of an outsider, and none of the entrepreneurs questioned are novices, and their strategic abilities are confirmed by the fact that they are all still in business today, despite the recession. In addition, many of their comments suggested that this was more than blind optimism and that a great degree of care had been taken in formulating their expectations. For example, one of the entrepreneurs was taking a public sector charity and turning it into a social enterprise (company number 06973271), a kind of pioneering privatization about which many people in the UK—including the entrepreneur in question—have serious misgivings about, and one that she described as putting her into 'a goldfish bowl' of inspection by all manner of interested parties and on-lookers. She saw this as a great opportunity to be regarded as an innovator, but one could conclude too that she was driven in part by the threat of failure, but it was not blind optimism that led her to downplay this side of the equation, but rather a careful evaluation that led her to conclude that the external forces were favourable to this kind of development in a way that they never have been before, and that in fact the innovative nature of this venture was opening more doors than it was closing in terms of support from the government and the business and public communities.

In the particular case where we had the students studying the firm of one of the entrepreneurs in the study, one who seems to have significantly understated the weaknesses of their firm. The firm (company number ), arbitrages line space on the internet and it is quite clearly objectively and incontrovertibly smaller than its main rivals, and by any reasonable use of the term weakness this

should feature in even the briefest of SWOT analyses of this company. This means we cannot conclude from this study that the entrepreneurs are necessarily right and the tutors wrong, tutors could no doubt teach the entrepreneurs a thing or two. The problem is both that the bias to balance says nothing about whether in achieving that balance the right things are said, but it does suggest that at least in some cases all four factors should be considered and the simplest way of conveying that is for students to fill each box. But there are two problems with this, in such a large number of cases the idea that all will have factors that are all equally important (and thus deserving of marks) is an unproven assumption that needs to be assessed and the entrepreneurs have a special place in all of this, particularly when some of the courses in this study, and in general employing SWOT are named after what they do, rather than what the tutors do (which is to say business studies). Indeed, in many cases some set their sights on emulating, or at least getting to grips with the mindset of the entrepreneur, in pursuing the studies on which they encounter the SWOT. So it is imperative that we consider that we don't just note this discord, but attempt to explain it and it could be argued that even in the face of such an apparent weakness it may not be worth dwelling upon and that the entrepreneur in question should be given a better mark than his lack of balance might imply, were he to hand in his SWOT of the firm (that he founded, directs, and owns) for marking.

The entrepreneurs in this study did not seem to have the primary objectives of beating their rivals, in the case of SimWood it being by nature a global business, with firms based on very different models in different countries, it was not something that the entrepreneur in question could do much about and was not a major factor except if and when they did something that could be learnt from. It was not, therefore, at the front of his mind and as there is empirical evidence that students over react to competitor information, (as judged by profit sacrifice) in experiments (Messick and Thorngate (1967)) and that managers may do this in practice (Leeflang and Wittink (1996)), it would be unfair to dismiss his view as ignorance. Indeed, since the company provides calls at a similar average cost to its largest rivals what can be learnt by classifying this as a weakness is unclear. Of course it means there are options that some can take that other can't, but on both sides, which means we need to weigh them

before we can make such a determination (or revert back to double entry SWOT). We cannot conclude from this that the entrepreneur is right, and the students and tutor wrong, but that the entrepreneurs might be right -in some cases at least- is interesting in two respects, firstly in that it undermines the validity of looking for balance a priori, but also in itself since it gives us some insights into the entrepreneurial mindset, since all the entrepreneurs in this study shared, albeit to varying degrees, the trait of understating weaknesses and threats.

## Conclusion

The background of most lecturers in business schools and the history of the subject of enterprise means that much of what is taught under its banner is actually business studies, rather than the aspects of enterprise that differentiate it from this, such as creativity and the ability to spot opportunities (Kourilsky, 1995). This is not to say that there haven't been significant changes in recent years, in particular more emphasis has been given to business start-ups. However, it seems that seldom is the emphasis on the originality, or opportunism, inherent in this and as displayed by the entrepreneurs in this study, but rather on the procedures process, and plans that stem from this, (Kuratko & Hodgetts, 2004). In this context it becomes beholden on teachers of entrepreneurship to 'expand their pedagogies to include new and innovative approaches' (Solomon, Duffy, & Tarabishy, 2002, p82) and it is difficult to see SWOT playing much part in that, since the results presented in this paper suggest that entrepreneurs would do badly in this ubiquitous element of enterprise courses as it reflects not how they view the world but how teachers do. While psychological research suggests that *transfer* of learning across situations is (at least sometimes) surprisingly weak (Loewenstein 1999, p29), tools like SWOT that enable people to transfer their experience from one situation to another can be very powerful teaching aids. However, in the case of SWOT this tension between pedagogy and reality is a particular problem as it means that SWOT has in effect become an embodiment of what Chia and Holt describe as management knowledge based on representation rather than exemplification, for even if aping entre is not the goal, EVEN ON

enterprise courses, nonetheless if SWOT is intended to inform good strategy making then we need to take into account any inconsistencies between the views of successful strategists and where this tool takes us, or –more importantly- our students, regardless of who is ‘right’ or ‘wrong’.

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