

Strategic Growth Dynamics - the Challenge for Smaller Firms

By: David Exelby and Kim Warren
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STRATEGIC GROWTH DYNAMICS - THE CHALLENGE FOR SMALLER FIRMS

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Much attention has been devoted to the management, structure and process issues facing leaders of smaller firms. However, these firms face challenges too in the substance of their strategy. In addition to identifying and evaluating potentially attractive positions in their industries, smaller firms share with larger businesses the difficulties of growing their resource-base and ensuring that their business system remains robust through periods of often rapid relative growth. This paper illustrates a means for tackling these challenges in the context of a large marketing-led growth initiative for a small firm operating in the Internet space.

BRAND CONSOLIDATION – AN UNAVOIDABLE STRATEGIC CHALLENGE

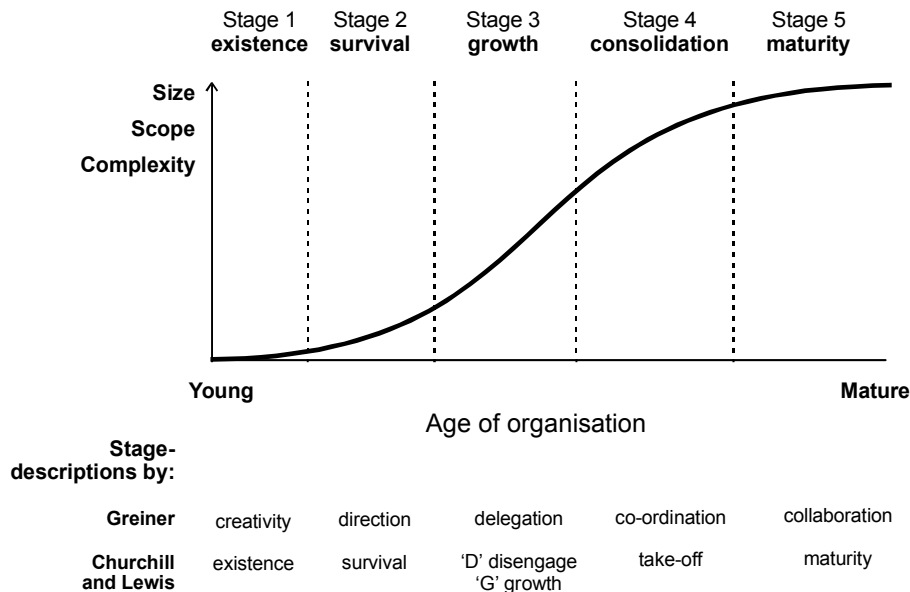
Writing and research into smaller firms recognises two important distinctions (see, for example, Deakins 1999). First, issues of importance to small firms are distinguished from those facing new venture start-ups. Would-be entrepreneurs wishing to create new ventures need to identify and validate a hypothetical business, win backing from providers of venture-capital, attract a core team of colleagues, develop an initial product or service offering, and make the first break into their chosen market. In contrast, consideration of smaller firms starts from the presumption that these initial hurdles have been cleared, and that a basic business model exists that is surviving, albeit at a small scale.

The second distinction concerns the motivation of the leadership. Many smaller firms are content to continue at a modest scale, often providing a reliable, if unexciting financial return to their owner-managers, together with the benefits of an appealing life-style. On the other hand, leaders of other small firms most certainly seek growth, whether for financial or other motivations. This paper focuses on the challenges facing this last category of small firms, whose leaders have an existing business, and who wish to develop that business substantially.

Writers addressing this concern of enterprise development generally congregate around some form of life-cycle or stage model of growth. Two established stage models are those of Greiner (1972), and Churchill and

Lewis (1983), which characterise and distinguish the successive stages somewhat differently (Figure 1).

Figure 1: Stage model of enterprise development.



The Greiner model focuses within each stage on issues of management, style, structure, systems, rewards, and the different kinds of crises likely to be faced. Churchill and Lewis, on the other hand, deal briefly with style and systems, but add consideration of the type of strategy that should be followed at each stage:

Existence stage strategy = 'existence'

Survival stage strategy = 'survival'

Success (disengage) stage strategy = 'maintaining profitable status quo'

Success (growth) stage strategy = 'get resources for growth'

Take off stage strategy = 'growth'

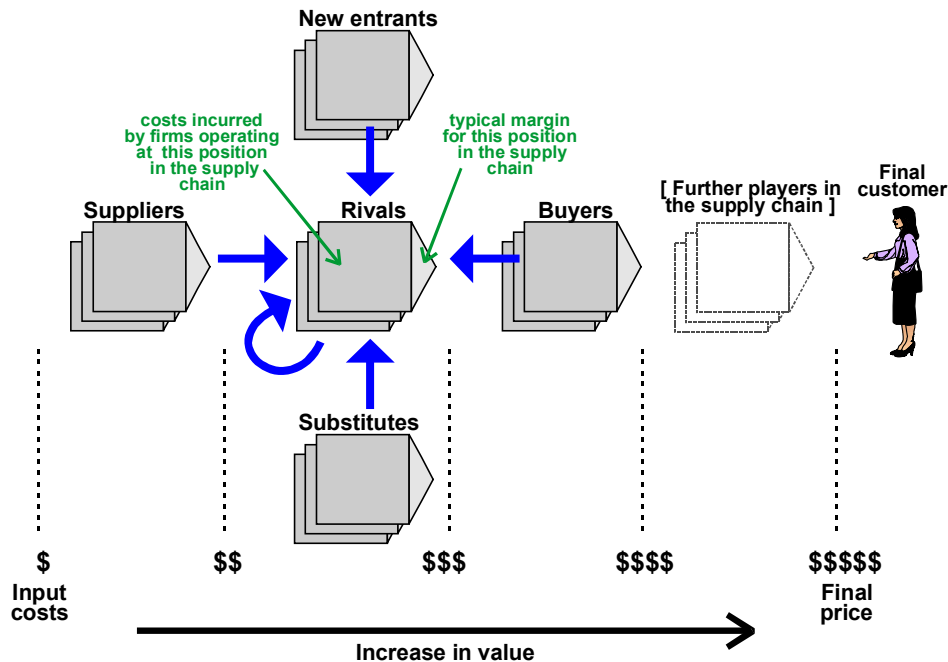
Maturity stage strategy = 'return on investment'

Bearing in mind that the Strategy field itself has progressed significantly since these two frameworks were offered, it should nevertheless be noted that an appraisal and definition of firm strategy would nowadays be somewhat more structured and formal. Strategy development would start from a focus on the over-riding objective of creating value for investors, recognising that 'value' is rigorously defined as the present value of the future stream of free cash flow - operating cash flow, less taxes, net interest and the investment needed to achieve this growth (Copeland et al 2000)¹. From this point, a sound strategy should address two questions; *where* to compete, and *how*?

STRATEGIC POSITIONING

Classically, management is recommended to make their choice of where to compete on the basis of the likely competitive forces they will face (Figure 2, Porter 1980).

Figure 2: 'Five forces' limiting the profitability of a business activity



Thus, the strategic manager is advised to choose a position in the industry where the pressures from these external forces are likely not to compete away the opportunity for profit - for example, where the firm's product is relatively essential to customers who cannot easily switch to alternative suppliers and where it is difficult for new firms to enter the market.

The question of how to compete is also traditionally expressed in terms of industry positioning. Indeed, contemporary advice to small businesses still refers to the need to choose between efforts to differentiate (*offer unique products or services that customers value more than the extra cost of providing them, and that rivals will find difficult to replicate*), to focus (*choose a particular category of customers whose particular needs are not well-served by alternative suppliers*), or to pursue a cost-leadership position that enables business to be won purely on price – a particularly difficult challenge for small firms to tackle in many sectors (see for example Burns and Harrison 1996).

Unfortunately, recent evidence suggests that such industry factors offer a desperately poor explanation for firm performance (Porter and McGahan 1997), which devalues both the benefits of searching for attractive positions in an industry, and the potential for selecting and sustaining any of these generic strategies.

RESOURCE-BASED AND COMPETENCE-BASED VIEWS OF STRATEGY

This weakness of the industry-conditions view has turned the attention of Strategy writers to the firm factors that explain far more of the variance in business performance. These firm factors are taken to comprise the resources and capabilities that the firm owns, or to which it has somewhat reliable access (Wernerfelt 1984; Barney 1991; Mahoney and Pandian 1992; Peteraf 1993). To provide the basis of competitive advantage, resources should be difficult for others to copy, purchase, or substitute with alternatives, and should be durable and complementary. These are likely to include both tangible factors (staff, products, customers) and intangibles (morale, reputation, staff skills, product functionality).

A particularly important observation concerns the 'asset-stock' characteristics of resources and capabilities (Dierickx and Cool 1989). Recognising that any resource can only be accumulated and retained if the firm has access to *existing* quantities of resource, the process of asset-stock accumulation can be captured, both quantitatively and longitudinally through time, for all resources owned or used by the firm. The result is an integrated system of interdependent resources – a strategic architecture – that executives can design, develop and manage, through time (Warren 1999). This representation of the firm, foreshadowed by Forrester, (1961) is ideally implemented using system dynamics, and can be extended to capture intangible issues, such as firm reputation and staff morale, as well as competitive and industry dynamics.

Whilst the dynamic resource-system view of firm strategy is entirely consistent with established principles of system dynamics, it places far greater emphasis on the accumulation and depletion of resources, rather than devoting attention exclusively to the feedback structure. This emphasis reflects the observation that the process of accumulation-through-time is fundamentally different from that of instantaneous causality. Nor is 'accumulation' synonymous with 'delay'. The current level of a resource, say customer-numbers, is not 'correlated' with anything – it always was, is and will be identical to the sum of historic gains and losses up that moment. The accumulation of asset-stocks is a process of universal and deeply fundamental importance, and the mathematics of integral calculus are essential to the quantification of this phenomenon, but which is entirely subsumed in causal-loop representations of business and other systems that do not explicitly represent rates of resource-accumulation and depletion.

The Strategy field's failure to operationalise the accumulation of asset-stocks plays a large part in the inadequacy of existing frameworks. Put simply, if quantities of customers, staff, capacity, cash and so on are not correlated with other causal factors, then neither are any performance outcomes that are calculated from them. Thus profitability is not likely ever to be adequately explained by the rate of marketing expenditure, staff training, competitive efforts or any other explanatory variable.

THE GROWTH CHALLENGE FACING SMALL FIRMS

Given the resource-system depiction of an enterprise, the growth challenge facing small firms can be specified more precisely. Since we start from the presumption of a business model that already functions in a moderately stable and successful manner, this additional challenge comes in two parts.

First, it must be feasible for the firm to acquire and retain additional quantities of the same types of resource to which it already has access – more customers, more staff, further products, additional capacity and more cash. Secondly, the firm must be able to design a development path for these distinct resources that will continue to hang together as it grows, rather than becoming unbalanced. Service staff must be sufficient in number and skill, for example, to cope with the demands from a much larger customer base. The system must also be able to avoid spinning apart under the pressures caused by its increasing scale, diversity and complexity. Additional staff should not be so out of touch with how the existing system operates that they make operational or strategic errors. The enterprise, then, must be ‘scalable’ – it must be possible to design and grow each of the resources, not necessarily by equal proportions, but certainly in balanced proportions.

For the first of these challenges to be overcome, there must exist both sufficient quantity of *potential* resource, as well as a feasible means of developing that resource at the required rate. Being dependent upon highly specialist staff, for example, most of whom (apart from your existing experts) are already strongly committed to other employers, will not offer an encouraging basis for substantial growth. Nor will it be helpful if, say, vast numbers of potential customers exist, only a small fraction of whom can be expected to join you by any feasible means of attracting them².

Small firms face particular difficulties in taking on this challenge of identifying and developing substantial quantities of additional resources – be they staff, customers, suppliers, distributors or other partners. Their modest scale gives them little opportunity to discover either the scale of potential or the feasible rate of development. In addition, they often lack the financial resources, either to research these important factors or, once these are understood, to afford the heavy expenditures needed to capture them. This often places such firms in the hands of professional advisors – advertising and marketing agencies to help with customer-acquisition, for example, or recruitment specialists in the case of staff.

Assuming that these hurdles have been overcome, then, the next thing the small firm needs is a sound business model that can capture the interdependencies within the firm-system, so that imbalances can be anticipated and corrective action taken well before any difficulties arise.

² This difficulty is not restricted to small enterprises. Many retail banks grossly under-estimated the difficulty, cost and time required to persuade consumers to move from branch-based to internet-based services, an error that is reflected in the currently dismal performance of these once-exciting business opportunities.

GROWTH AND BALANCE FOR THE BUSINESS ARCHITECTURE OF SWAPITSHOP

Swapitshop was established in 1999 as an online community for children to trade toys, videos, CDs and other unwanted goods. The business model was similar to e-Bay and other auction sites but with one important difference - Swapitshop provided a virtual currency, 'Swapits'. Children could acquire Swapits by selling items on the auction site, receiving Swapits rewards based on past trading behaviour or collecting Swapits issued by promotional partners. Indeed, selling promotional rights to large brand owning companies was the primary source of revenue anticipated for Swapitshop. To protect the anonymity of each member, Swapitshop acted as a conduit for fulfilment of a successful trade. The seller posts the item to Swapitshop who then forwards the item to the successful bidder and updates each party's Swapit account balance.

CHALLENGES FACING SWAPITSHOP

Swapitshop's strategic architecture, then, comprised four principal resources – child-members, Swapit currency, promotional partners, and the inventory of goods to be swapped – plus the staff and logistical resources needed for the system to function. After the initial successful launch of the business, it became apparent that further progress would depend on a substantial development of the member-base, taking Swapitshop into an era of large-scale marketing of which it had no experience. If this marketing push succeeded, the next challenge would be to manage the transition from an existing small customer base of members to becoming one of the UK's leading children's Internet sites. Swapitshop had secured a large national promotional partner (a snack food brand, offering Swapit currency on its product wrappers) and was planning a costly national TV advertising campaign.

Key questions facing the Swapitshop management were:

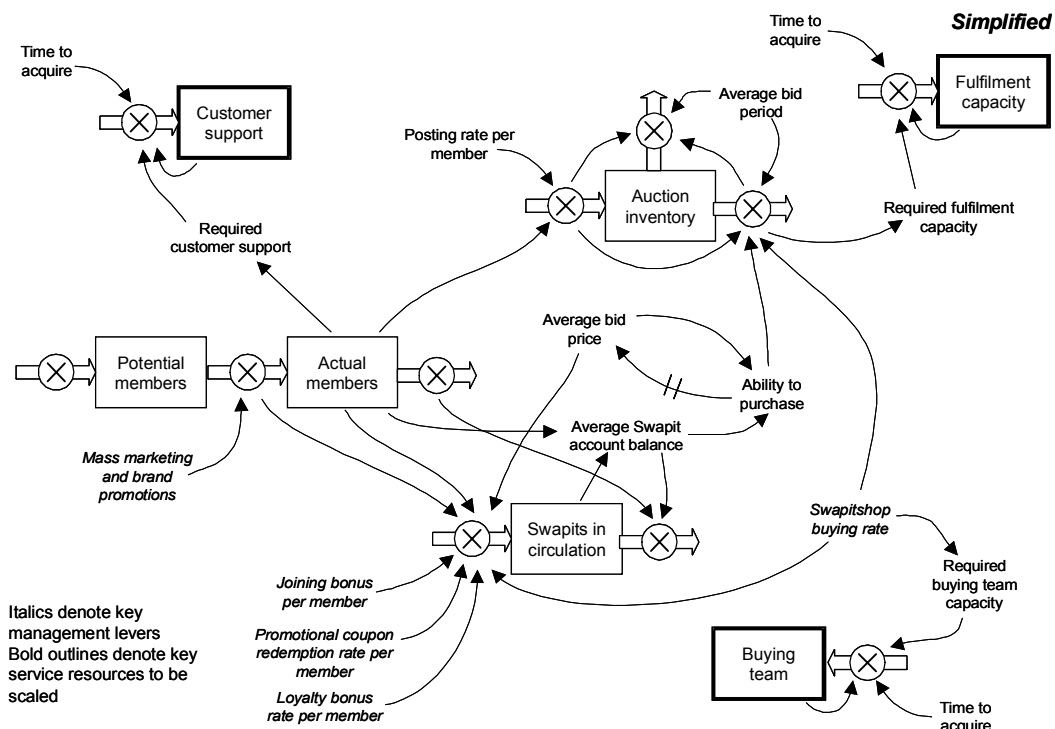
- What was the expected membership acquisition arising from a combination of marketing channels (promotion, advertising, word of mouth)?
- How would this membership acquisition impact on Swapitshop's required internal resources of support staff and external suppliers (those contracted to execute the fulfilment functions)
- How could Swapitshop manage its economy of Swapits – ensuring that sufficient Swapits were issued to stimulate trading whilst avoiding inflationary pressures to ensure a stable and sustainable trading community?

This paper will focus on the first of these issues although support was provided to the Swapitshop management team advising on all aspects of building and maintaining the membership resource and ensuring a sustainable Swapit economy. This support involved developing a perspective on the dynamics of the membership expansion, constructing simulation models and presenting plausible scenarios. In addition, the Swapit economy and the role of Swapitshop as a central bank was defined in terms of fundamental economic theory.

SWAPITSHOP'S MEMBERSHIP RESOURCE SYSTEM

Figure 3 illustrates a simplified resource map for the Swapitshop membership base and economy. This illustrates the key resources and also the management levers available to the business to both build the membership base and also to manage the Swapit economy.

Figure 3: High-level strategic architecture for Swapitshop



The core resources represented are:

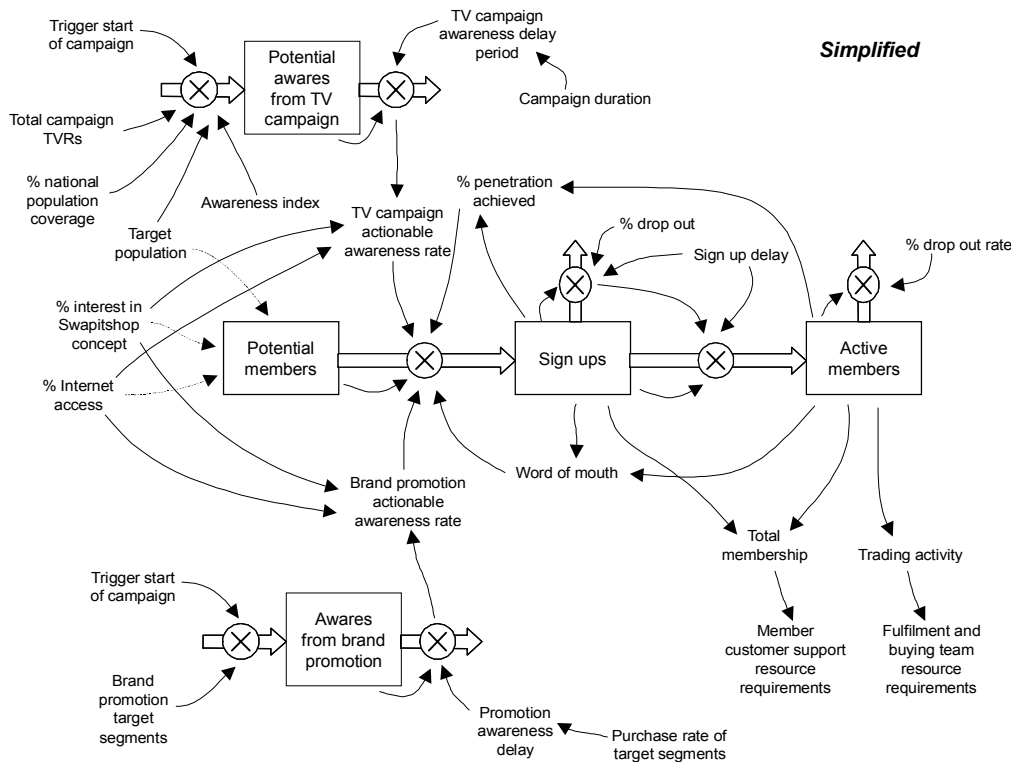
- Potential members and the actual membership base – the potential membership base comprises children with Internet access who are interested in the concept of Swapitshop. The primary lever to acquire members is through mass marketing. This is described in more detail below.
- Auction inventory – members post items and these will remain on the site for a period before being withdrawn or successfully sold. The success rate at

which items are sold will depend the members' ability to bid to the reserve price (Swapitshop developed a series of guide prices for this). A large inventory base and successful trading rates were seen as a vital influence on the attractiveness of the site to the members

- Swapits in circulation – Swapits are introduced into the economy by a number of routes – Swapitshop giving them away to members (joining incentives, bonuses), actually purchasing items from members or from redemption of coupons by brand promotions. The currency in circulation and membership base determines the average holding by each member.
- Member support services – members require two key support services – customer support through email and telephone help desks and also the fulfilment capacity for successful transactions. These need to be appropriately scaled as the membership grows.
- Buying team - One of the early key insights from analysis of the basic resource architecture was the realisation that it was likely that there would be a shortage of Swapits initially and this could stifle successful trading on the site. In order to inject Swapits into the economy AND to promote trade, Swapitshop was advised to purchase items from the site (these items could be stored and re-sold once the economy was well established). This requires an internal buying team to purchase items.

Figure 4 is a more detailed map describing the causal relationships driving accumulation of members.

Figure 4: Detailed drivers of member acquisition.



In this case, the member resources were defined as three separate entities:

- Potential members – as before, children with Internet access and who are attracted to the Swapitshop concept.
- Sign ups – these are children who have registered with Swapitshop but have not yet undertaken any active trading
- Active members – these are children who are actively trading.

Three primary factors drive the member sign up rate: national TV advertising campaign, brand sponsored promotion, and word-of-mouth amongst members and their friends.

The objective of the TV campaign is to create high awareness rapidly within the target population. A number of factors will influence the ultimate awareness level. These factors include coverage of population, TVRs³ delivered and the degree to which the audience responds. Advertising and media buying agencies can apply detailed modelling to predict the first two of these but the actual awareness response within the population is more difficult. In this case we applied the Millward Brown Awareness Index to estimate the impact of the media delivery. An index of 10 corresponds to a

³ TVR: Television Rating Points are the units by media evaluation companies in relation to the audience achieved in broadcasting. One TVR equates to reaching 1% of the population with one 30 second advertisement.

10% awareness level per 100 TVRs within the viewing audience. This index is high compared to the index that would be applied to adult targeted advertising reflecting children's responsiveness to advertising (as any parent will be well aware of!). The rate at which awareness develops in the population depends on the intensity of the campaign i.e. duration over which the TVRs are delivered and a perception delay. Campaigns typically exhibit s-curve awareness profiles that can be effectively modelled as a smoothed delay function within dynamic simulation models.

The other key driver of member acquisition was through sponsors' brand promotion. The sponsor's product packaging – in this case, a snack food line - included full details of Swapitshop and also contained redeemable coupons for Swapits. Usage profiles provided a useful segmentation of the brand-buying population within the target population with heavy users most likely to build awareness rapidly and join.

Word of mouth is an additional potential driver of recruitment, reinforcing further acquisition of new members. Further complexity arises, since each channel is not targeting an exclusive audience. A system dynamics model was developed representing both member recruitment, their trading behaviour and impact on the overall Swapit economy. This was used to assess behaviour over the planned campaign.

SCENARIO DEVELOPMENT

A series of scenarios was developed based on sensitivity experiments for three key variables:

- Internet penetration – internet access within households was well defined through market research but access for members could be through friend's machines or even schools creating a level of uncertainty
- Awareness index – the actual value of the awareness index will depend on the impact of the advertising message. High awareness indices are expected for children if a comprehensible message is presented
- Interest in the Swapitshop concept – Swapitshop had undertaken market research via an omnibus market survey to assess potential interest in the Swapitshop concept but the actual levels of interest were considered to be an area of uncertainty.

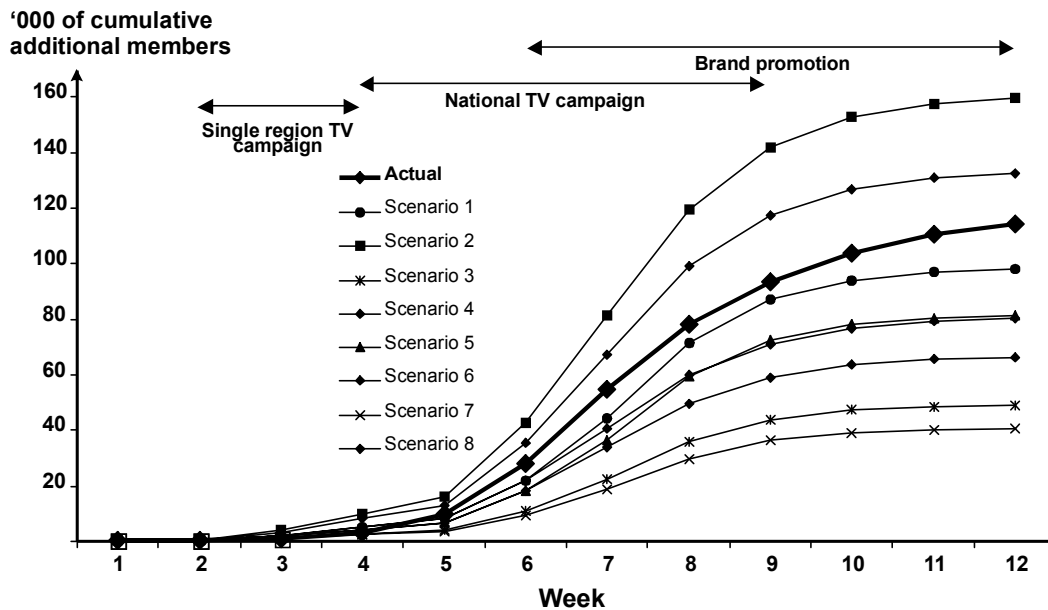
Probabilities were attached to each of the variable values, based on the extent of uncertainty in the estimate of these factors, yielding an overall probability ranking for each scenario.

Higher confidence levels were applied to other variables including drop-out rates (known from the existing membership base), demographics of the target

population, TV campaign coverage and TVR delivery, and awareness through sponsor brand promotion.

Figure 5 illustrates the resulting simulated plots of total membership. Although there is high variation between these scenarios, this provided a set of membership trajectories against which to assess the resulting actual joining rates as the various campaigns began.

Figure 5: Alternative scenarios for Swapitshop’s marketing-driven membership growth.



| Scenario | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|----|----|----|----|----|----|----|----|
| % internet access | 35 | 35 | 35 | 35 | 29 | 29 | 29 | 29 |
| % Interest in Swapitshop concept | 19 | 19 | 10 | 10 | 19 | 19 | 10 | 10 |
| Awareness Index | 2 | 5 | 2 | 5 | 2 | 5 | 2 | 5 |
| Overall assigned scenario probability (%) | 15 | 34 | 6 | 15 | 6 | 15 | 3 | 6 |

In the early weeks of the main TV campaign, it became clear that the initial estimate would be surpassed. From this point on, the team’s estimates for the power of each factor driving member-acquisition could be updated in the light of each week’s results. The Swapitshop management team used the model for several purposes. For instance, it enabled the initial recruitment of customer support staff to be quantified, along with subsequent additional recruitment. In addition, Swapitshop was able to size, dynamically, incremental warehousing and logistics capacity to handle the inflow, inventory, and delivery of swapped goods. Furthermore, additional detailed modelling of members’ trading activity, and the Swapit economy, was used to scale

fulfilment contracts and also to develop the Swapitshop buying team to purchase items from the site to inject currency into this new economy. These and other applications of the resource-architecture and model enabled the business to be grown, whilst keeping all supply-side resources (staff, capacity etc.) in balance.

Critical insights for the Swapitshop management team occurred throughout the project. For example, the management team had initially thought that success of the TV campaign and brand promotion alone would be sufficient to create a successful trading community but it became clear that this had to be matched by appropriate expansion of the Swapits currency supply. They had not recognised the initial shortfall in money supply from the planned marketing mix and had not foreseen the need for the Swapitshop buying team to promote trade and to inject currency through this initial period.

CONCLUSIONS

The rigour that system dynamics adds to the design, control and development of Strategy for organisations of all kinds is evident in the particular case of Swapitshop, where it has delivered specific benefits:

- increased confidence in aspirations for membership growth
- appropriate scaling of the supply-side resources to ensure both unconstrained demand growth and an economically viable business.

In the process, we have illustrated or noted principles of wider applicability.

- for organisations generally, the importance of a shared, quantitative understanding amongst the management team of the business architecture that they are seeking to operate and build,
- the need to develop an evidence-based rationale for the prospective scale and development rate of key resources (notably customers)
- the need for a continuous, dynamic balance between demand-side and supply-side resources, and
- the feasibility of using system dynamics to portray, accurately the resource-system of the firm, and play out its prospective performance through time

These principles are of considerable relevance for the specific strategic challenges facing SMEs who are pursuing rapid growth. Such firms are engaged in a process of resource-development that is particularly intensive. They thus require both especially powerful accumulation processes *and* mechanisms to maintain balance in order to ensure that the developing resource-system neither stagnates, nor falls apart.

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