Madison Consulting Group

The Need For Speed

Developing IT Strategies for Financial Institutions

A Madison Paper

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The Need For Speed: Developing IT Strategies for Institutions

By John Rhodes

I. Introduction

In our consulting practice, we are often asked to contribute to the development of IT strategies, either for individual businesses, or at an enterprise level. The kinds of questions embedded in these assignments include centralization versus decentralism issues; absolute cost levels, competitive strategies, legacy versus de novo, e-commerce versus traditional technologies, etc. Sometimes these questions are posed as problems: Why do systems take so long and cost so much? Why are the results so often disappointing? Why doesn't IT understand my business? – or, why don't my users understand their own requirements? Why am I behind my competitors? Why do I have to keep paying to replace my infrastructure with the latest gizmo? Why doesn't my legacy ever quite go away?

The purpose of this paper is to offer some of the lessons we have learned, and to suggest some approaches that may be helpful. We suggest four 'propositions'.

- There is no difference between an IT strategy and a business strategy; indeed, an IT strategy is a subset of a business strategy. There may be no useful practical distinction between strategy and tactics, or, indeed, the correct strategy may be to develop the capability to be tactical.
- Most IT dollars are spent on products with declining profit margins, rather than on those with growing margins.
- Systems support the businesses they were designed for, which is not necessarily the businesses that exist
- Strategies can seldom predict exact outcomes, therefore strategies must be constantly recalibrated.

Our general conclusions are:

Markets and markets forces are much more dynamic than the old theories of strategic planning suggested. Therefore the length of time necessary to implement strategic solutions is simply too long to support evolving business needs. The need, as the saying goes, is for speed.

E-commerce is simply exaggerating this phenomenon.

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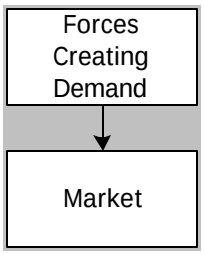
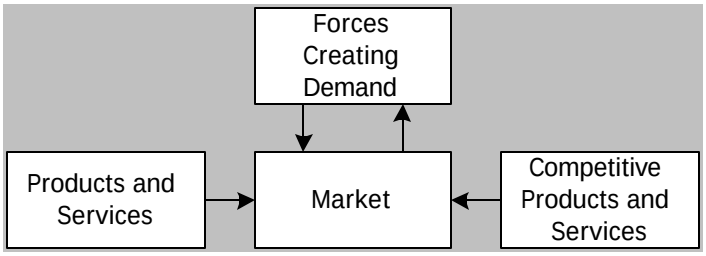
II. Proposition I: Financial Institutions Respond To Market Forces in a Feed Back Loop

A successful IT strategy must be a subset of an overall business strategy, which, in turn, must reflect the dynamics of the business.

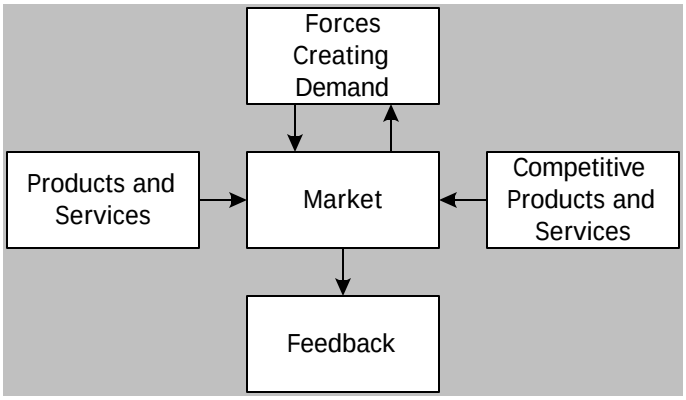


Complex forces create demand. These forces include social, economic and political drivers; technological innovation; demographics; trade and commercial patterns; etc. Some are subjective, such as mood – as in the case of Alan Greenspan's struggle to interpret seemingly "irrational exuberance". In general, these forces and their interactions are very complex, and therefore very hard to predict. In most practical terms, they are not comprehensible until they exhibit themselves in the market, in the form of demands for products and services.

Financial institutions offer their products and services to the market to meet demand. So do their competitors. Occasionally, a truly innovative and successful product or service can influence underlying forces, and amplify demand. Illustrative examples of these influential products and services include the successful introduction of ATM's and POS devices in the 1970s, the advent of derivatives, the securitization of risk, etc. A current example is the success of online brokerage services.



The market reacts to product and service offerings, either by buying, or not buying, or buying from competitors. One of the great advantages of a market economy is that the success or failure of a product is never in doubt. The market judges absolutely and unmistakably.

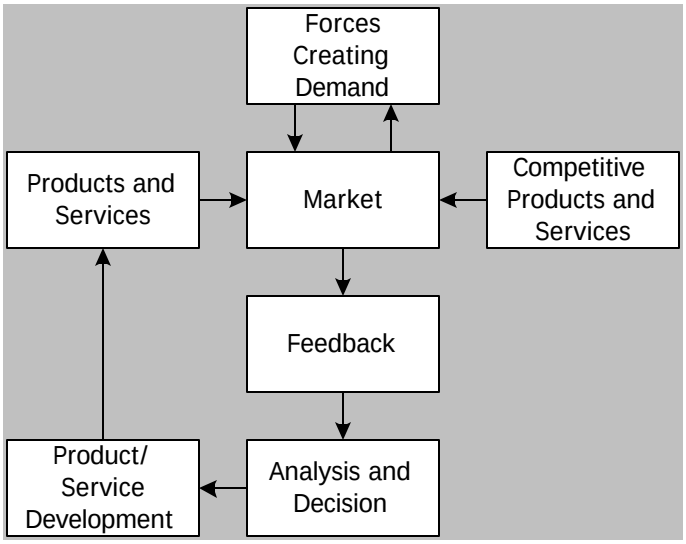


Embodied in that judgment is not only the relevance of the product or service to demand, but all of its characteristics, such as its method of distribution, pricing, packaging, ease of use, comprehensibility, embedded risk characteristics, after sales service, etc.

Financial institutions analyze this feedback and decide how to react (or not react). Based upon these decisions, products and services are developed, modified, or withdrawn from the market. This modified array of offerings is then placed back into the market and, again, the market reacts, thus establishing a continuous feedback loop. For example, positive feedback might encourage the institution to increase its capacity; while negative feedback might cause it to reduce pricing. If the market clearly prefers a competitive product, the institution might change its own product to match its competitor's.

Success in the market depends on two things. First, one can lead the market, by anticipating or creating the sources of demand: however, for reasons discussed earlier, this is very difficult to

do. Alternatively, and more practically, one can react to feedback *correctly* and *quickly.* Thus, a company that is highly efficient in its feedback loop can rapidly adjust to market reactions and respond with products and services that meet current needs. A slow company responds to yesterday's needs. A fast company responds to today's.



What are the conclusions from this proposition?

- There is no really useful distinction between strategy and tactics. Strategy is an accumulation of tactics. One can have a great and prescient strategy and be successful; or, one can read the market and react like lightening. In practical terms, in a financial institution almost all product and service initiatives and changes have systems implications. Therefore, to be a fast reactor, an institution must have fast reacting systems, at an affordable cost.

- Many of the frustrations expressed by business users concerning the slowness of projects, the drag of legacy, etc, are symptoms of the institution's slow pace through the feedback loop. We can't react to the market because we can't change the systems fast enough. On the IT side, common frustrations are a mirror image. The users keep changing their minds, the users demand ridiculous timeframes, the uses keep asking for information we cannot give them, etc.

- So, perhaps the strategy for IT in a financial institution is to be capable of being tactical. Specifically, having nothing that can't be rebuilt in 6 months or less. Having nothing that one can't afford to throw away. The institution which the IT groups serve exists in a real time market, which is judging the institution's products and services, and comparing them to competitors, every day. Every day lost to exploiting a winner is a day of incremental profit foregone; every day lost in correcting a loser is a day of wasted expense, and therefore also a day of profit foregone.

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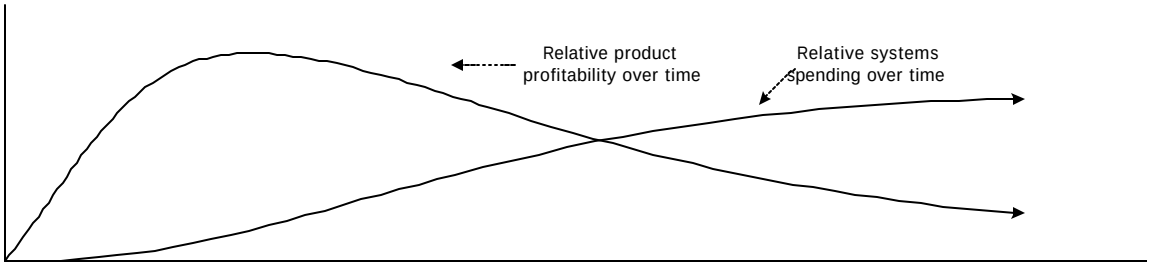
III. Proposition 2: IT Spending Increases as Margins Fall Unless Managed to the Contrary

The following diagram suggests (with some overstatement) the relationship between relative product profitability and IT spending to support the product. The fundamental dilemma is that, because it takes a long time to develop a full-scale system, and an increasing amount to maintain it, investment often trails the product profitability life cycle. The diagram illustrates a five-year cycle.



De Novo product - in fact, it's not a product - just a few unusual deals. There is almost no systems spending. With no competition, margins climb steeply

The product is understood and exploited, profitability climbs steeply. Systems investment - often a 'simple system' begins

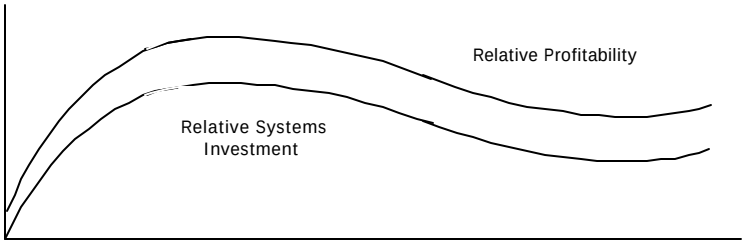
The market wakes up, competitors react. Pricing begins to erode, and risk quality increases. A big system is needed for a big product, and to contain growing clerical operational expenses

Volume (created by demand but also saught to offset declining margins) drives up operating expenses while the system is being developed. Competitive pressures continue. New product variants require system spec revisions

The system is completed, but it is technologically obsolescent. Maintenance costs rise as product variants are introduced to differentiate a commodity offering, and the staff, now commanding premium salaries, begin to leave

Thus, the institution has been trapped into investing and spending on a product with declining margins. Other, newer products can't get priority because this system is hogging resource

The conclusions from this proposition are that, ideally, one would want to move systems spending to an earlier stage of the product life cycle, where it can not only support the product but also contribute to the maintenance of profitability margins, by, for example, immunizing the product from expense driven volume growth and making product variants cheaper. The results of such an investment pattern are shown below.



The characteristics of such a system are that it can be developed very quickly, and that it is relatively inexpensive. Systems life cycles should exist within product profitability life cycles.

Another characteristic of such an investment pattern is that expenses should be as variable as possible. Fixed expenses and depreciation simply increase the cost of the tail and decrease margins in the out years. Similarly, business cases for systems and technology infrastructure often look less than compelling, because benefits are stretched into the future. A short term investment cycle within the market driven investment cycle both strengthens the economics and makes the plan more realistic. Variable expenses can be shut off, while fixed expenses cannot. Small expenses are easier to write off than big expenses.

The investment diagram on the previous page works against an institution's speed and efficiency around the feed back look. An investment pattern such as the one on this page helps the institution's ability to react.

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The strategic conclusions are: keep it small, keep it quick, and keep it variable.

IV. Proposition 3: IT Supports Businesses They Were Designed For, Not Ones That Exist

It is a truism that every business evolves, and that current business is a reflection of past developments (good and bad) plus current activities. Among the characteristics that shape current business, whether as enablers or disablers, are the systems and technical infrastructure that support the business. This year's systems were last year's development, and current development shapes next years capabilities.

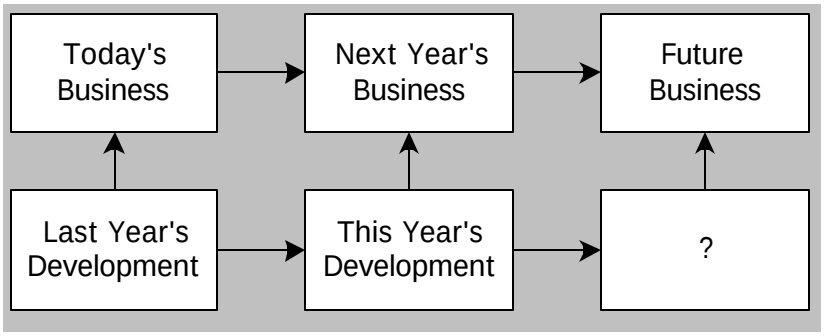
A number of conclusions follow.

- *First*, next year's systems are absolutely of no help to the business now. Correcting a deficiency over a period of 9 months, for example, means that the business will be disadvantaged for 9 months or 3 earnings reports.

- *Second*, development can only support future business activities if future business activities are fully understood. Thus, a 'systems strategy' requiring 18 months or more to implement will only succeed if the business strategy it supports can be fully articulated now, and that the business strategy must be executed as anticipated for the system to be of value.

- *Third*, and similarly, a system to support today's requirements may well be obsolescent before it is completed.

- *Fourth*, because market conditions and competitive actions change rapidly, business strategies are seldom static over strategic timeframes, and technology evolves rapidly, making strategic bets difficult. A strategy that has to 'freeze' business requirements while it is implemented is counter to the investment profile suggested in Proposition Two, and creates institutional market inefficiency in Proposition One.



It gets worse.

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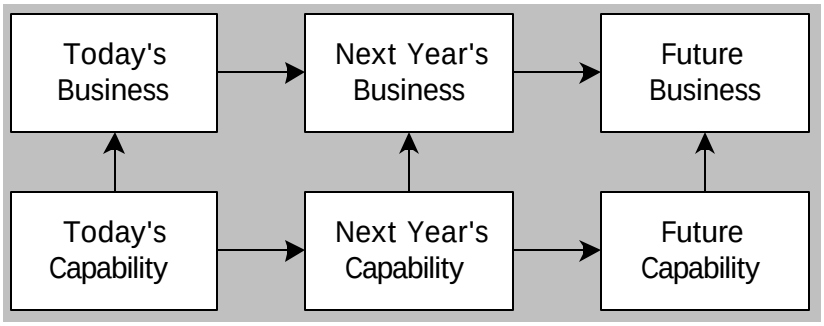
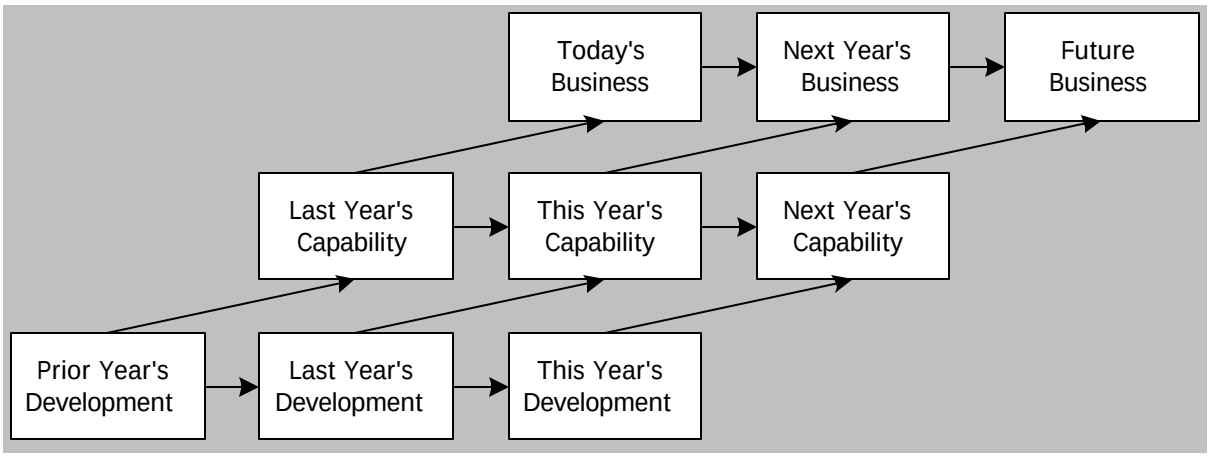
Systems are basic determinants of capability for financial institutions, with enormous influence over performance in the market. If systems capabilities do not match today's market needs, then the institution is forced to operate with yesterday's resources and capabilities, against market conditions that have already changed, thus producing a 'time warp' that places the institution at a disadvantage.

This phenomenon does not arise because business managers and CIO's are foolish. It arises because the real time nature of the market, as previously described, means that they can predict tomorrow's requirements only with some uncertainty. As long as the time to develop and deploy systems and operational capabilities is significantly more protracted than the rate at which the market evolves, institutions will be disadvantaged.



In addition, the more complex the undertaking, the greater the difficulty in catching up. For example, an institutional merger requires enormous effort that can absorb all available resources for significant periods of time. While the ultimate results might be highly advantageous, time, effort, money, and management attention is focused absorbing and rationalizing the present, as opposed to building for the future.



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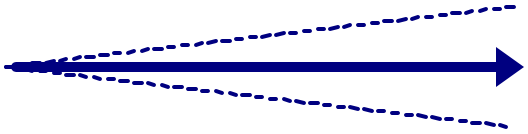
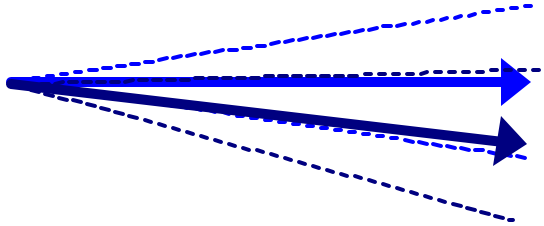
V. Proposition IV: Reality Rarely matches Strategic Goals

As illustrated in the simple diagrams, most strategies usually assume a specific direction toward a desirable goal, within some range of probable outcomes. Investments are made to optimize the business along the strategic direction.

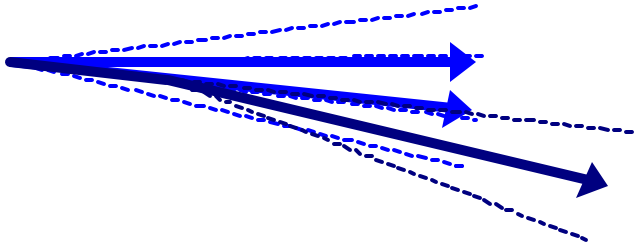


However, reality usually diverges from the most likely strategic direction anticipated, perhaps not by much, but enough to exclude some of the original range of outcomes, and introduce new possibilities. If a strategic commitment has been made against a highly specific capability, some of that commitment will be wasted, and other new possibilities are not covered.



As time moves forward, such a pattern continues to evolve, so that business reality is progressively less close to the original expectation.

In order to minimize the potential wastage involved, it is necessary to constantly re-measure realty (i.e., recalibrate the strategic direction from a new starting point) and reestablish a new strategic direction.



VI. Conclusion: The Need For Speed

One can only drive as fast as the reactions of the reaction time of the driver and the vehicle permit. To drive faster will result in disaster. In a race, to drive slowly is to lose. Therefore, to have a chance of winning, one must have reaction times that are as fast as one's competitors.

Everything points toward the desirability of being able to build systems *fast*. That almost certainly means that systems must be smaller, less expensive, and more specific than systems in the past. In general, the problem facing large institutions is not the high cost of systems, but how long they take. Institutions will lose the value of systems that can do many things, but they will gain the advantage of systems that can do a few things today. As long as the time to build a major system exceeds the pace at which business evolves, there will be a tension between business needs and systems solutions, which is not easily resolved.

Speed is not a win/win strategy, because speed produces a shorter useful system life, spaghetti architectures, and puts reliability and quality at risk. But the ability to react quickly is both the best defense and the best offense as the pace of market evolution quickens.

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