Editorial: The decline of forecasting?
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Editorial

The decline of forecasting?

Forecasting of the future has become less reliable in both business and political environments. A number of major corporations have recently dissolved their traditional economic and econometric departments and professionals. The cost of forecasting have skyrocketed while its precision and reliability have either stagnated or declined.

The cause is quite obvious and mostly irreversible: the ever decreasing sample size of the corporate "market". While it is fairly easy to predict behavior of statistically large mass markets, with the rapidly narrowing market niches, small groups and individual customers and consumers, reliable predicting has become virtually impossible.

Tom Peters's famous "Markets don't buy anything, individuals do" refers to the same trend that has become a curse of forecasters: they can predict what ten thousand people will do, but not what one person might. From a corporate viewpoint, markets will never become mass markets again and thus the days of statistical forecasting are inevitably numbered. Familiar chapters on statistical forecasting, econometrics, "exponential smoothing" and economic forecasting are rapidly disappearing from the more up-to-date MBA textbooks.

Instead of forecasting the future states of nature (and their probabilities of occurrence), companies are opting towards increasing their flexibility and responsiveness in order to cover *all possible* states of nature, regardless their probabilities. Planning is finally becoming the *true planning*, based not on forecasts and predictions but on creating an ever-widening portfolio of response capabilities. Planning for the future is no more based on educated guesses – which can obviously fail – but on being prepared for all and any circumstance.

Even if the state of "total preparedness" is still an ideal state for most companies, far from being reliably and timely achieved, the direction of improvement has been set and the competitive race has begun.

This powerful shift implies, at least in business and management, that also the era of symbolic information is virtually over. In corporate thinking about their customers, it increasingly matters less "what they say, they'll do" and matters more "what they actually do".

There are two significant forms of information and communication: *information* as a symbolic description of action, and *in-formation* as the action itself. Both forms do "inform" and both forms communicate important messages – the latter form is now increasing in its importance, fitting into the era of knowledge as action and its coordination.

There is a significant and irreducible difference between saying "I'll knock your teeth out" and actually knocking somebody's teeth out. Action itself cannot be approximated or replaced by its symbolic description.

What matters most is what consumers do, not what they say they will or would do on assorted polls or questionnaires. Consumers have a complete freedom to say as they please and to do as they please; they do not have to do what they say or say what they do; they can change their minds, preferences and reasoning as many times as they want and they do not have to explain it; they do not have to be transitive or consistent in their preferences.

The reason for the growing discrepancy between saying and doing or description and action is quite simple and fundamental: while all and any decision making has to take place in a given context and under specific circumstances, any symbolic inquiry or description of intent has to be – by definition – context free. It is a miracle that the two modes sometimes match, especially when the mass, statistically behaving markets are shrinking so rapidly and their forecasting becomes an astute guesswork or educated guessing.

However, the worst "hit" area of forecasting is not consumer forecasting but so-called *economic forecasting*, a part of econometrics. Early in 1996, *The New York Times* ran a story "Economic Forecasting Is Just a Sideshow Now", documenting the virtually free fall of forecasting and (economic) forecasters.

For example, IBM – which counted more than two dozen in-house economists in the early 1970s – no longer employs a single professional to estimate key

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numbers like interest rates, capital spending and inflation. Similarly GE: no in-house economist.

IBM used to employ twenty six Ph.D.s and near Ph.D.s to run its own macro model. Big forecasting firms like Wharton Econometrics (long ago renamed WEFA) and Data Resources (renamed DRI/McGraw-Hill) provided expensive retail services to companies that could not afford IBM's wholesale route. IBM could not either and in 1980s it retired its entire forecasting staff.

Dozens of other big corporations have either slashed or eliminated their forecasting staffs. These cutbacks are clearly not a question of money. Modern corporations of the 1990s are giving a short shrift to economic forecasting and focusing instead on reducing their exposure to risk (strategic flexibility, technology, responsiveness and – mainly – mass customization).

When *The New York Times* published the forecasts of GDP in comparison with the reality of the 1971 through 1995 period, the data source (Federal Reserve Bank of Boston, the people who say: "Forecasts do a lot better than Ouija boards") refused to disclose the identity of the five forecasters involved. Not only is forecasting off the mark and unneeded, but now also institutionally and politically embarrassing?

The inexorable decline started when The President's Council of Economic Advisers's forecast for 1974 overestimated economic growth by a whopping three percentage points and underestimated inflation by the same figure. Nobody explained, nobody apologized – and so it has ended.

Even Citibank has virtually abandoned its in-house forecasting in favor of risk management. Even this bank, after McGraw-Hill the very "hotbed" of forecasting, now matches liabilities against assets in ways intended to protect the bottom line *no matter what* happens to interest rates.

Corporate America's faith in computer-model economic forecasting, already eroded by its failure to signal the stagflation of the late 1970s or the economic turnaround of the early 1980s, has been further shaken by recent research into the complexities of the buying habits of households and businesses. Rather than pouring numbers into computers, companies are using financial derivatives to hedge against price and interest rate fluctuations, minimizing inventories via just-in-time systems, employing temporary workers and expanding mass customization of their products and services.

So-called "models" of the economy – series of statistically estimated equations that describe the determinants of consumption and investment – were first brought forth in the 1930s. From Klein to Forrester (most of the forecasting models use statistical techniques of the 1950s!), they raised a considerable promise, but were unable to live up to it. Their failure is not so much a failure of mathematics or statistics, but a result of a rather rapid fading into obscurity and irrelevancy. Why if I become effectively flexible, able to respond cheaply and quickly to "no matter what" – knowing the what rather precisely becomes unnecessary. So the decline of forecasting is more like a passing of horse buggies and horse whips: it is not needed anymore.

Of course, forecasting would be helpful in principle if it could predict big turnarounds and shocks, unexpected changes and out-of-the ordinary ups and downs. If it would not treat significant changes as "aberrations" and "outliers" and keep predicting averages, normal situations and "things as usual" – SNAFU might work in the military, but not in econometrics and economic forecasting. DRI/McGraw-Hill can forecast "virtually unchanged revenue – right on the nose", provided there is no change. Also timing of events is not forecasting's forte, yet in business and economics it is all in the timing.

The declining role of forecasting will, of course, also affect traditional corporate planning and strategic planning quite significantly. Instead of forming goals based on predicting the future environment, and then mobilizing the ways and resources for reaching them, the process of strategy formation is being reversed. First, one enhances current processes and resources into core competencies and then formulates the goals for their most effective utilization and further enhancement. Instead of the (goals $\rightarrow$ ways $\rightarrow$ resources) dogma of forecasting-based strategy, modern flexible corporations are using the (resources $\rightarrow$ ways $\rightarrow$ goals) pattern of strategy formation, rooted firmly in organizational abilities, competencies and knowledge.

It is interesting that our argument on the decline of forecasting has very little to do with its precision, reliability or costs. Improving forecasting will not help. The key fact is that when companies stop relying on forecasting, they are forced to redesign their processes and activities in order to reduce the time and increase flexibility. On the other hand, companies that increase their dependency on forecasting – through investing in it and improving it – become even more strongly bonded to their traditional, inflexible and costly ways and means. Global competition and its customers fa-

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vor the former and make things so much more difficult for the latter.

Among the recent general doldrums and declining sales in personal computer business, three companies are doing exceedingly well: Compaq, Dell Computer Corporation and Gateway 2000. Why? They chucked forecasting, market directly to customers and – most importantly – deliver their products built to order, i.e., mass customized. If you produce for the shelves, you must forecast; if you produce for the customer, you do not have to – he will tell you.

Compaq Computer Corporation also disappointed the forecasters who predicted it would become No. 1 in the personal computer industry by 1996. Compaq has passed IBM during the first half of 1994.

In the personal computer business, shifting to a build-to-order system reduces how much companies have to depend on market forecasts. Errant market forecasts have been the bugbear of the PC industry. In a business with six-month product cycles, market forecasting amounts to trying to hit a fast-moving target of customer demand twice a year for desktops, notebooks and servers. Even Compaq has been a victim of faulty market forecasts: in 1995 there were failures with a laser printer and pen-based computer, forcing Compaq to take a $10 million charge against earnings.

Not any more. Compaq does not want to be beholden to astute guesswork. The company will stop relying on forecasts and switch mainly to three-person assembly cells that will produce *only* what customers order. A computer maker of today must be able to configure to customer order, not just put a machine on the shelf and hope that a customer buys it.

The need for forecasting is undoubtedly a function of the time difference between an event and our ability to respond to it, between the time a need is expressed or perceived and the time it can be satisfied. As this "lead time to satisfaction" gets shorter, our reliance on forecasting events grows weaker. Competing for the compression of the "lead time to satisfaction" is intensifying and the achievements are often starting to border on the "instantaneous".

If I can instantaneously satisfy my need for food every time I feel hungry, then my need to predict the periods and occurrences of hunger is very small. If it takes me two hours to prepare or get food every time I feel hungry, my need for planning, predicting and forecasting such events becomes crucial. If your lead time to react, to produce or to deliver is substantial, you have only two options: forecast or compress the time. It is the second strategy that modern businesses are increasingly pursuing.

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