Resilience

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Making the tough calls on growth

By Anand Rao

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CEOs have always faced difficult investment choices and potentially conflicting strategic agendas within their organisations. The emergence of new targets for growth in a rapidly changing global economy has heightened the strategic dilemmas. How can CEOs bring together all the different indicators and perspectives to judge the right way forward?

It's a familiar scene that's being played out in multinational companies across the globe: Organisations are casting their net wider in the pursuit of growth. The problem is that the strategic objectives and measures of success being promoted by the various arms of the company could be pushing in different directions.

The following scenario is taken from a financial services group, though much of it would be familiar to other industries. The Chief Strategy Officer has made a recommendation to her senior leadership team on which countries they should expand into, why and with what products. She is faced with opinions from a number of stakeholders, not all of which are consistent. The country managers from China, India and Brazil are pressing for the significant investments needed to turn the company from a small to major player in these markets. The emerging markets leader is arguing for investments in faster-growing but smaller markets like Turkey, Indonesia and Thailand. The product managers are insisting that growth in these markets should continue to be profitable and do not want their products to be loss leaders to build market share. The Chief Financial Officer wants the return on equity targets in these markets to be met within a five-year investment window. The Chief Risk Officer has cautioned the company to be wary of mounting political and sovereign default risks in particular countries. How does the Chief Strategy Officer square all these different perspectives, and how can she convince the senior leadership team that her recommendations are right?

Views on where to invest, the timescales for return and what criteria to use to judge performance vary according to whom you are speaking in the organisation. The underlying challenge is how to keep pace with the transformational technological developments that are facing every industry and how to deal with a more uncertain risk, regulatory and geopolitical landscape. The resulting decisions affect every aspect of the organisation, from marketing, sales and distribution to finance, operations, technology and talent management. Yet the evaluations are often based on inadequate and sometimes inaccurate data, with little or no appreciation for the sensitivity of the assumptions used to project growth and any potential weaknesses in the underlying analysis. Indeed, many decisions are being driven by rudimentary models or straightforward gut feelings, despite the complexities of what is involved in today's investments and the fine line between success and failure. Any resulting success is likely to owe more to luck than judgement. Any failure will see heads roll.

In this article, we look at how to create a more informed basis for decision making by using the latest developments in predictive and simulation modelling techniques. We describe a top-down approach that uses predictive modelling to compute a country attractiveness score, which allows executives to quickly

filter their focus down to a handful of countries for further exploration. Once the high-potential countries are identified, you can dive deeper into each of the markets to build a detailed bottom-up simulation model. This allows executives to visualise market growth and their own market share under changing social, technological, environmental, economic and political conditions in these selected countries. The decision-making considerations under these approaches are examined in light of the Chief Strategy Officer's dilemma described earlier.

Identifying target countries

With more than 190 countries to consider, the decisions on where to focus investments are clearly far from straightforward. While around a third can be quickly ruled out because of the relative size, maturity and growth of their economies, the remainder are likely to demand more involved evaluation criteria.

PwC has been working with a number of companies to help them develop country attractiveness scores for their particular organisation, which are based on three dynamics:

- **Country dynamics** that take into account the economy, politics, demographics, business environment and infrastructure
- **Industry dynamics** that take account of the market potential for different products, customer segments, competition, regulation and distribution
- **Corporate dynamics** that take into account market presence and performance, fit with strategy, fit with assets, risk appetite and corporate culture

The latest models cover more than 150 aspects of the market being evaluated to make sure they take account of the relevant factors and ensure the analysis reflects the particular vision, culture and strategic fit of the organisation. The main advantages of this approach over more traditional strategic evaluation techniques are:

- **Use of quantitative and qualitative data:** The approach uses key quantitative metrics where available, but can also use qualitative data such as political situation, infrastructure availability, regulatory outlook, etc.
- **Judging developments and their interdependencies:** Judging the market potential and possible barriers and interdependencies to gauge how attractive the country will be in the future
- **Use of external and internal data:** The approach uses a number of external sources of data for country and industry analysis and at the same time draws on internal data to capture the corporate dynamics

For the Chief Strategy Officer in our scenario, use of this type of predictive model allows her to work with all of the regional heads and the country managers to develop a comprehensive attractiveness score for each country. She can then take into account specific political and regulatory risks and adjust the weights assigned to different factors based on the investment criteria that the CFO has laid out. The Chief Strategy Officer is thus able to present a comprehensive rationale to the senior management team on the approach she took and recommend they focus on a particular set of countries around the world.

Gauging the risks and rewards

Having filtered the selection down to a dozen or so countries, more complex dynamics can come into play. For example, while countries like China and India may seem attractive because of their size, growth and opportunities for further market penetration, their regulatory and political environment could make it difficult to deliver a target return within a given time horizon. Your organisation may be required to invest for the long term to realise the anticipated returns. On the other hand, countries like Turkey may be much smaller but more attractive in the short term. Also, countries typically go through a tipping point when all the different political, economic and social factors come together to create the 'golden moment' for investment. There is a danger of entering markets too early and laying out a lot of cash without delivering an adequate return at the beginning and then making the wrong call by exiting just as the market is about to reach its 'golden moment'.

Faced with these dilemmas, simulation models can help senior executives to evaluate the growth potential of markets, how much market share they can achieve and the strategic actions and competitive responses that will determine their ability to meet their objectives. The pace of global developments demands models that are robust enough to consider different scenarios. They should also be able to look beyond straight-line development to anticipate rapid movements and deviations such as the tipping points for market take-off or the interactions where government policies, company policies and consumer attitudes all influence each other. In turn, they should be able to take account of the potential for delay in how people, companies and governments react to different situations. For example, by opening up a market and investing in it, a government can spur growth, but there is often a lag before the impact is felt.

The most advanced techniques use artificial intelligence to simulate the interplay between the strategic choices made by governments and corporations on the one hand and the economic developments, consumer behaviour, government policies and other key factors that influence them on the other. The results would allow your business to judge how governments, consumers and individual companies are likely to respond to a variety of interdependent developments and how this would affect the investment environment and likely returns for the organisation over time. The results would also allow your business to shape strategies and target investment more effectively by judging when, why and how consumers make individual purchasing decisions and how the actions of your organisation in areas such as marketing or product design influence such choices.

The main advantages of this multiple-simulation technique over more traditional market evaluations are:

- **Individual insights:** By analysing hundreds of thousands of individual consumers, their purchasing decisions can be simulated over long periods of time (i.e., 10-20 years) while accounting for their economic and behavioural evolution.
- **Emergent behaviour:** The technique captures the interactions between consumers, companies, governments and changes in the environment and the complex behavioural patterns that result from these exchanges ('emergent behaviour').
- **Calibrated model:** The simulation model can be repeated and updated (typically weekly, monthly or quarterly) to generate purchase and re-purchase decisions for multiple years. The simulated output is then calibrated with actual historical data to estimate the values of specific consumer parameters using optimisation techniques. You can then explore future consumer behaviour across different economic and social conditions.
- **Evaluating different scenarios:** The calibrated model is used to simulate consumer decisions through their lifetime. The simulation approach would also allow your business to run different scenarios by changing a set of input parameters at any point during the simulation run. Simulating different scenarios provides insights into the impact of a particular strategy or economic condition on the purchase behaviour of consumers.

In our scenario, the Chief Strategy Officer is able to use this simulated analysis to work with the country manager from Brazil to evaluate the potential returns from a major investment in a target sector, such as auto insurance, over various investment horizons. The Brazilian auto insurance simulation (see Figure 1) takes into account the historical and future growth of Brazil's GDP, increasing affluence, projections for vehicle numbers in the country, the road infrastructure and the strategies of existing players in the market. The model thus captures the dynamics of a growing economy and emerging middle class, which is leading to an increase in car sales and reducing prices for vehicles and associated insurance. At the same time, more cars put greater strains on the road network, which may dampen demand for cars and insurance. The model is also able to capture the stimulus to the market and economy overall of trade liberalisation in the early '90s. Using the Brazilian auto insurance model, the Chief Strategy Officer is able to evaluate the return on

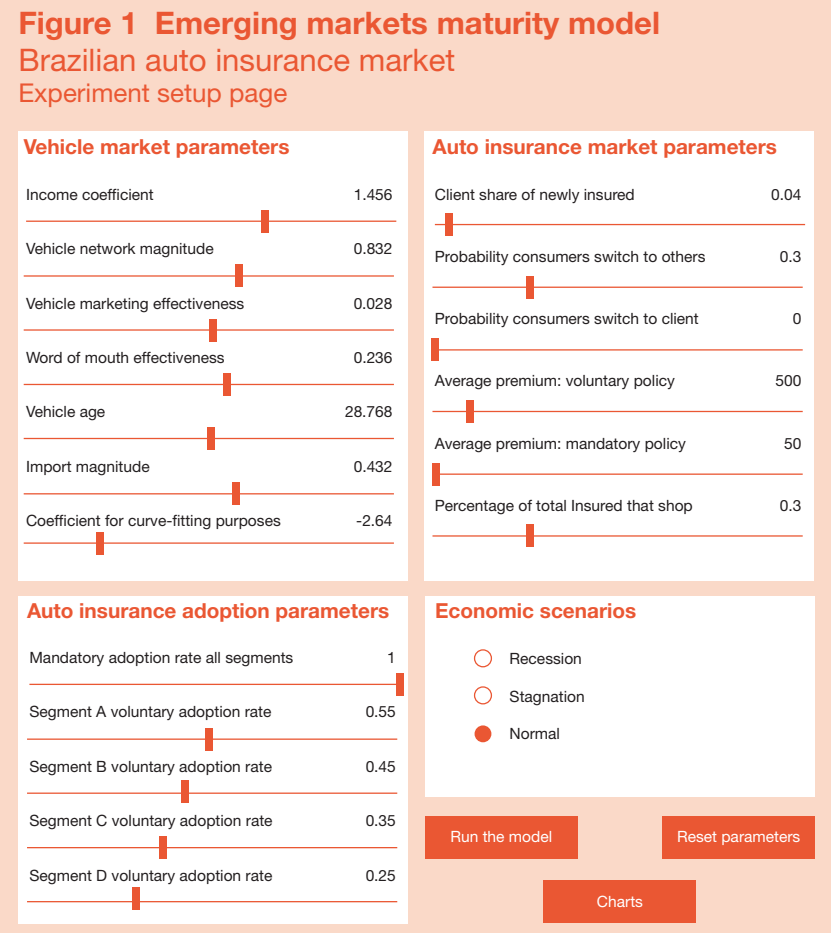
investment over 5-year, 10-year and 20-year periods under different economic conditions, as well as the strategic options for her firm and its competitors. This allows her to demonstrate to the senior leadership team the impact of their strategy in Brazil and also compare it with growth prospects in other countries.

Sharpening decision making

The latest developments in country assessment and strategy evaluation provide senior executives with a way to capture, analyse and reconcile multiple perspectives on what markets to focus on, how to grow, when to enter or exit and, finally, what the expected returns would be under different scenarios. As a result, they can make informed, assured and balanced decisions on their growth strategies, despite the uncertain and rapidly changing environments.

Marie Carr, David Gates, Nirav Bhagat, Marik Brockman, Mark Paich and Jamie Yoder also contributed to this article.

Figure 1 Emerging markets maturity model
Brazilian auto insurance market
Experiment setup page



Description of model components

Vehicle adoption

Modeled as a function of:

- Household income quintiles
- Vehicle prices
- Regulatory policy
- Transportation network magnitude*
- Advertising/Marketing effectiveness*
- Maximum vehicle saturation*

Motor insurance adoption

Modeled as a function of:

- Motor insurance adoption rates
- Vehicle age
- Average premium per product

Client share

Modeled as a function of:

- Share of new business captured
- Probability of competitors' policyholders switching to client on renewal by segment by product
- Expiration / Lapse / Reinstatement rates by segment

* Factors not considered in this model

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Author

Anand Rao
PwC US
anand.s.rao@us.pwc.com
+1 (617) 530 4691

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