Simulated Test Marketing: Its Evolution and Current State in the Industry

by

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S.B. Physics, Massachusetts Institute of Technology, 1997

Submitted to the MIT Sloan School of Management in Partial Fulfillment of the Requirements for the Degree of

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Abstract

Simulated test markets are powerful tools that are used frequently to aid marketing managers in making a go/no-go decision before bringing a product to test market. Over the past twenty years, STMs have expanded beyond application in fast-moving consumer goods to industries such as financial services, pharmaceuticals, durables, and new technology. Today, the STM industry is fairly consolidated, with models that are in principal, very similar, whether they are based in purchase intent or share of preference. However, the major vendors discussed here are able to differentiate and position themselves through additional diagnostics and customized services. Advances in data collection and incremental refinements to STM models are presented in addition to challenges that the STM industry currently faces.

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Acknowledgments

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I sincerely thank the many people that I interviewed in order to write this thesis, as referenced at the end. These professionals are at the top of the field and happily agreed to take the time from their busy schedules to share their insights with me.

Finally, I must thank my husband Brian for his perspective and constant support for my need to learn and grow. Nine years ago when we began our lives together, I was stressed about completing an MIT thesis and finding the right career. It seems oddly familiar. Brian, thanks for being with me, Hungry, and the rest of our "friends" for the long haul.
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Introduction

The area of pre-test marketing, more commonly known today as simulated test marketing (STM) was pioneered in the 1970's by Glen Urban and Alvin Silk. Over the following decade, the methods would be refined and commercialized into several products. The methods were considerably cheaper and faster than traditional test markets. They have retained their reputation for being highly accurate for making a go/no-go decision for new consumer product launches, with several suppliers of STM techniques claiming an average accuracy within +/-10% of the actual forecast up to 90% of the time.

Over the past 20 years, the practice, major players, and methods have evolved. Today, the industry is highly consolidated. Most of the STM techniques are similar with validation rates that are highly effective. The major vendors are able to differentiate their services through customized models, the experience of senior researchers, and experimentation with the latest in research trends. Since the late 1980s, there has been sparse published academic research on the subject. This paper attempts to provide an update on the state-of-the-art for STM.

The significant vendors in the global STM market are briefly discussed as to what services they offer and the industries that they support. The STM models fall into two different categories: purchase intent, generally gauged on a five-point scale, and preference share, where trial is measured for a new product given a competitive set. Three of the major players in the STM market use models that were originally based on purchase intent: VNU BASES, TNS FYI, and Research International. Ipsos and
M/A/R/C use models that were originally based on share of preference. It is important to note that over the years, all of the STM vendors have incorporated aspects of both categories in order to hone their forecasting.

Then, recent developments in the STM field are reported and a summary of the challenges that lie ahead for STM is presented. Mini case studies are provided to illustrate the various applications of STM. Finally, key differentiators of the major models are highlighted and summarized in a chart.

Most of the research presented here is based on published work from the STM providers and literature that is commercially available [3,4], cited at the end of the paper. The findings from published research were updated and validated by personal conversations with researchers and executives in the STM field.
STM Providers

VNU BASES (Pre-Bases, Bases I, Bases II)

In 1998, ACNielsen purchased The Burke Institute and BASES, providing BASES with direct access to ACNielsen's vast sales information on product launches in the same category, and other technology. In 2001, VNU acquired ACNielsen, and now BASES is operated under VNU's Marketing Information, Advisory Services division.

In terms of market share, BASES is considered the leader, with about 50% of the global STM market, with a higher estimate within the U.S. Their expertise lies in fast-paced consumer goods. Additionally, BASES provides services in the consumer health care division, customizing services to evaluate new pharmaceutical product launches. In 2005, BASES began forecasting for other industries outside of CPG and pharmaceuticals, such as alcoholic beverages.

BASES offers a variety of services, three of which are directly relevant to STM. Pre-BASES focuses on concept development, which helps the client in determining which new product idea will have the greatest potential in the marketplace. Once an idea has passed the initial screen, BASES I and II focus on concept/product development.

Although BASES's strength has historically been in its forecast statistic and not diagnostics, the company is putting an emphasis on providing services to improve the marketing strategy, as seen with the introduction of the Market Plan Analyzer add-on in November 2005.
BASES was founded on purchase intent to forecast trial, with attitudinal scales and normative databases to forecast repeat. Lately, it has incorporated some share-based methods in the cases where it can incorporate conjoint analyses when predicting trial. It is the large number of product launches (over 60,000) that contribute to the BASES edge in the marketplace, with an accuracy level within 9% [11]. This average rate is achieved by the following rates:

+/- 25% of actual sales 95% of the time
+/- 20% of actual sales 91% of the time
+/- 15% of actual sales 80% of the time
+/- 10% of actual sales 62% of the time
+/- 5% of actual sales 37% of the time

BASES has conducted over 1,370 validation studies and provides them to clients free of charge [11].

Additionally, BASES uses an e-Panel in order to gather data from respondents. This method of data collection is one of the advances in STM. They have also partnered with P&G, becoming the sole licensee of Virtual Launch, a new system that uses virtual marketing materials and on-line "shopping trips" to better capture today's marketing environment.
TNS FYI (ForeSight, InSight, RePurchase)

TNS FYI is a specialty division of TNS NFO, which resulted from the merger of TNS and NFO WorldGroup in 2003. Although around 70% of their business lies in CPG, TNS FYI is differentiated by holding about an 80% global market share of pharmaceutical forecasting, due to its senior executives’ and consultants’ experience [18]. They have also provided forecasting for durables, high-tech, and financial services.

With an average base forecast error range of +/- 15% for concept and product data, comparable to other providers, TNS FYI has uniquely combined both individual and aggregate analyses in order to improve cannibalization analysis. By accounting for the level of commitment of individual consumers, TNS FYI has been able to reduce error estimates for cannibalization by 50%. This improvement is critical for forecasting results related to line extensions. Now, incremental sales for the brand can be forecasting, in addition to the base sales forecast for the line extension.

The TNS FYI model incorporates a bootstrap, data-mining approach in order to determine the key drivers of trial and repeat and avoid the problems associated with multicollinear correlations. The essence of the methodology is a Monte Carlo simulation. First, the respondents are weighted and then the re-weighted sample generates a new volume estimate. This is done multiple times to calibrate the set.

Like other providers, TNS FYI has focused on providing diagnostics to guide management on how to improve the marketing plan. By knowing exactly which factors
drive the overall forecast and by how much, management is able to take action on how to
improve the product in the case of a “no-go” outcome.

TNS also owns the 6th dimension USA on-line panel. It includes specially developed
segments and offers clients the option to create their own proprietary panel.

**Research International (MicroTest)**

Research International, a part of the Kantar Group, sells MicroTest. They have a
significant share of the global STM market, with less of a presence in the U.S. Like
BASES, MicroTest is a model of purchase intent and uses a database of over 30,000 test
cases.

MicroTest’s main focus is the forecast, but the company provides services that identify
potential barriers to entry and other diagnostics that improve the marketing plan.

A key differentiating factor of MicroTest is that it analyzes the behaviors of individual
customers and calibrates its forecasting models according to the level of “consumer
inertia” within a particular category. For instance, in a high risk category, a consumer
will be less likely to switch to a new product, so the forecast will be adjusted downwards.

By looking at consumer behavior individually, rather than in aggregate, MicroTest is able
to accurately forecast sales for new product launches, including those products in new
categories. Forecasting at the respondent level is a trend that others may follow, such as
BASES with Spectra. Even if forecasting cannot be done at the individual level, there is still value in forecasting at a segment level.

Research International has offices that specialize in industries outside of CPG, such as financial services, insurance, and travel.

**Ipsos Novaction (Designor) & Vantis (Market Simulator)**

Ipsos bought Novaction and its Designor STM model in 2001 and Vantis with Market Simulator in 2002. Although Ipsos also bought the ESP model from NPD, it does not appear that ESP is currently being used. Novaction has a significant market share outside of the U.S. and Vantis has been a significant vendor in the U.S. for non-CPG forecasting, so each company benefits under Ipsos. Although Novaction has expertise in CPG, OTC, tech, durables, and financial services, they will now focus on CPG while Vantis’s expertise lies in financial and general services, entertainment, telecommunications, software, technology, consumer electronics, prescription pharmaceuticals, insurance and durables. Ipsos has over 7,000 observations with many in-market validations of their model.

Together, the company has over 30 years of experience with work in over 55 countries with over 50,000 product concepts in over 250 categories. Their forecasts for new brands are within the industry norm of 9% of actual sales, within 4% of total volume for restaged brands, and within 2% of annual volume for established brands. Restaged brands introduce either a significant product improvement, repositioning, or use case in an effort
to extend the life of the brand. As a benchmark, BASES also reports the same forecast statistic for restaged brands [28].

Novaction’s model, Designor, is an enhanced version of Assessor, the model discussed below which was once marketed internationally by Novaction. This method is meant to mirror real-world shopping scenarios and the test product is always evaluated relative to a competitive set. Like BASES, Novaction has different models for different stages of the development process. Early Designor selects the best concepts to pursue, Concept Designor improves the concept, and STM Designor (which uses a shelf) provides the most accurate read and in-depth diagnostics before launch. Unlike BASES, ForeSight and MicroTest, Designor is a convergent model, based on integrating behavioral and attitudinal models while taking into account the degree of domination, fragmentation, and loyalty in a market. Also, Designor is a self-calibrating model which does not require unique calibration by country or category. Ipsos has found that the relationship between a successful test product and the market leader is fairly stable across countries and categories enabling Designor to be employed in countries or categories where there has been no previous testing.

Designor incorporates Perceptor analysis, based on a factor regression of attributes across each respondent’s unique brand consideration set. This allows more accurate estimates of product differentiation and quality, as inputs to the model. Because these measures are based on an attribute battery across a competitive set, Ipsos is able to get more actionable
results for differentiation and quality rather than just traditional surveying based on direct questions about a test product.

Designor provides rich diagnostics (brand name recall, visibility on shelf, and differentiation, relevance, and value relative to competitors). These diagnostics are especially important when products do not meet objectives and improvements in positioning can be simulated as well as changes in spending, distribution, or pricing.

Vantis's Market Simulator is customizable for each product category and adjusts for consumer overstatement. Vantis has been combining discrete choice modeling with STMs in order to calibrate things such as price sensitivity, product feature optimization and product line configurations for when there is category overlap [24]. Most clients in the “non-CPG” space which Vantis covers are less interested in the typical STM “go/no-go” decision and more interested in how best to enter the market after spending significantly on product development. They have a global database that stores performance scores that aids in the accuracy of the forecast as well as provide diagnostics to improve the marketing plan.

M/A/R/C Research (Assessor)

M/A/R/C Research, a division of M/A/R/C Group which is a part of Omnicom, markets the Assessor family of products for STM. These products provide forecasting for concept and product development as well as diagnostics to improve the marketing plan. Assessor
has clients in financial services, CPG, tech, durables, and both prescription and non-prescription pharmaceuticals.

Assessor is also a convergent market-share model that does not rely on historical benchmarks in providing its forecasts. Instead, it uses the individual’s competitive set and product trade-offs in order to create a custom model, regardless of category. Like TNS FYI, Assessor is able to calibrate the consumer response. Thus, the model incorporates inertia of consumers within a particular category (e.g. less willingness to switch insurance, power suppliers). Factors such as this level of commitment, expected life of the product, purchase cycle, and peer comparisons allow Assessor to more accurately model the market response. For instance, Assessor factors in brand/product loyalty which is important in durables that have a five to ten year purchase cycle.

As multiple decision makers are involved in the product purchase decision such as with pharmaceuticals that involve government agencies, managed care, physicians, and the patient, diffusion modeling has been incorporated into Assessor to look at how to build awareness and influence through the chain.

Assessor also uses permutations of the marketing mix to build trial curves to determine the percentage of audience that might purchase a new product. Assessor has also been doing work to evaluate the impact of word of mouth promotion on a new product. They look at what information early adopters need as opposed to the later adopters and
generate diagnostics on analyze how dependent people are on the initial movers by identifying a turning point of adoption. [2, 21]

**Aegis Copernicus (Discovery)**

Copernicus, a part of Aegis Group, markets Discovery for both CPG and pharmaceuticals in the U.S. and South America. At the end of 2005, Copernicus partnered with Taylormade in order to expand operations to the Middle East. Kevin Clancy, the CEO co-authored both of the business books on simulated test marketing and is considered an expert on the industry.

Discovery is a mathematical model much like the old LITMUS model. A simplified view of the STM model to generate sales and share can be shown as a product of the following inputs [4]:

- Size of Potential Market (People/Units)
- Total Brand Awareness (Function of Multiple Awareness States)
- Trial (% of consumers who will buy the product at least once given awareness and availability)
- Trial Volume
- Effective Distribution
- Repurchase Levels
- Repeat Volume
- Purchase Cycle for the New Entry
- Seasonality
- Category Growth/Decline

Discovery was the first STM model to take into account consumer memory decay, learning that regular messaging is important to the success of a new product. Discovery also was the first model to consider the interaction among advertising, promotion, sampling, and distribution – the four major drivers of awareness. Discovery will consider the set in aggregate and look for statistical dependences between pairs.

Furthermore, Copernicus offers Defensive Response Modeling Technology (DRM) that allows clients to see sensitivities to the forecast based on new entrants in the market, one of the sorely lacking areas of STM as cited by clients. Defensive strategy in STMs was introduced in the late 1980s and is based on a model of consumer response that assumes customers maximize their utility in a "per dollar" multi-attributed space [8, 9]. Copernicus appears to be the only current vendor that incorporates the complexity of defensive strategy. For example, in Discovery, the effect of share of voice, tied to advertising spend, adjusts the effect of gross rating points (GRPs).

**Aegis Synovate (MarkeTest)**

After Aegis bought Market Facts with its MarkeTest model, Synovate began marketing the MarkeTest model. MarkeTest has been a part of Synovate’s ProductQuest, and has
mainly been used to do concept forecasting for CPG, including products with seasonality considerations, such as toys and board games. They are looking to do more to include the product when conducting forecasts. Under Synovate’s strategy, MarkeTest will be used as a global tool, incorporating local expertise when forecasting.

**Other Providers**

MASMI Research is a new European-based company that offers STM and although companies such as GfK Custom Research and Market Tools do not offer STM as a service, they are using simulated test markets in their own research and forecasting. Similarly, large consumer goods companies will look at new initiatives’ financial risk before calling upon the services of STM providers.
How Has STM Changed Over the Past Two Decades?

As the models of STM have changed and converged, the industry as a whole has also shifted. Today, STM vendors do more concept screening and testing than before. The most notable changes are in the diversity of areas that STM serves, the method of data collection, and the sophistication of diagnostics returned.

STM Is Being Applied to New, Dynamic Industries

As the market for STM within CPG became saturated, the major players began applying their services to other industries such as services (e.g. financial, insurance), durables (e.g. automotives), pharmaceuticals and health care, and even areas such as alcoholic beverages, IT, publishing, telecommunications, and leisure.

Many of the industries, particularly prescription pharmaceuticals, require highly customized solutions. The technique that is used differs dramatically from that used with CPG, as the physician or pharmacist, not the end-consumer is the key decision maker in the purchase process. In addition, regulatory and health care payment environment must be factored into the model. These vary across countries, with different healthcare systems and direct-to-consumer advertising (only prevalent in the U.S. and New Zealand).

Although much has been done to apply STM techniques to new industries, there is still room for improvement. Cannibalization diagnostics and analyses for what drives trial
and repeat are some of the main weaknesses of STM that clients cite. Vendors have made improvements in this area and will continue to be made, as discussed in a later section.

The Internet Is the Main Channel for Data Collection

Perhaps the biggest change to STM has been the move to collect data via the Internet. This is true for the U.S. and parts of Europe, and efforts have been made to take the practice to other parts of the world. Originally, the most popular way to collect data was in centralized locations or the mall. The Internet has been a replacement channel to collect data for concept and post-usage evaluation, given its cost effectiveness and the increasingly time-constrained lifestyle of consumers. It works well for CPG, and BASES and TNS FYI both readily employ this method for data collection.

TNS FYI is known for its Internet research panels. As a result of a merger with NFO and then TNS, FYI has access to two million households, 400,000 of which are in the European market and 100,000 in the minor European market. The sheer size of the panels ensures that smaller incidence categories can be researched and that respondents are not re-used frequently. In its validation tests, FYI observed that there were respondent differences between those tests conducted on-line vs. in-person, such as regarding purchase intent. Therefore, calibrations were made, and after hundreds of tests later, the quality of on-line responses as similar to the ones that would be received in-person.
BASES maintains an e-Panel, which launched in 1999. Since then, it is used for 90% of BASES studies in the U.S. and Canada, and its popularity is continuing to grow in European countries. The large size of the panel (on the order of tens of thousands per country) means reduced overlap in respondents and efficient targeting. BASES claims identical accuracy of using the e-Panel when compared to its other data collection methods, after using several test correlations and demographic comparisons.

Copernicus has also taken to doing more STM studies via the Internet, as well as Synovate, which has access to over one million panelists in the U.S. M/A/R/C Research has conducted many surveys via the Internet and has also developed techniques based in psychology, to keep respondents engaged through survey completion.

Despite this advancement, not everything can be done over the Internet. Although both BASES and TNS FYI claim identical forecast accuracy for using Internet panels versus traditional samples, STM vendors realize that certain cases still require centralization locations, mall-intercept, and phone interviews. Studies that require extensive surveys, qualitative research, and process control can greatly benefit from intercept data collection [12]. Industries such as prescription pharmaceuticals oftentimes require physician input. Still, the move of data collection via the Internet has lowered the overall cost of STM, making it more attractive to clients before going to a test market.
The Internet still holds opportunities for STM vendors to innovate and use it for purposes other than data collection. STMs will have to adapt as new services evolve over the Internet.

**Diagnostics and Key Driver Analyses Have Improved**

Although the underlying principles of STM models have not significantly changed, as they are founded either in purchase intent or convergent, share-based models, there have been advancements in the complexity and richness of information that they offer. R&D dollars are typically allocated by STM vendors in order to improve statistics outside of the base Year 1 forecast. STM clients realize that the base statistic presented by STM providers is not a key point of differentiation when choosing one service over another.

Part of the industry’s improvement to the base forecast is attributed to customizing experiments to more accurately model what the shopping experience is like. For instance, some STM clients have products where it is believed that in-store promotions are a valuable part of the purchase decision. Most models now allow clients to incorporate a variety of in-store executions in the marketing plan.

STMs are also using new methods of estimation such as hierarchical Bayes and other methods beyond standard regression. Vendors such as Vantis will incorporate discrete choice into its models when forecasting for durables. Although this method of using discrete choice can be subject to certain biases with repeated exposures, Vantis is
developing corrections for such overstatement. Finally, defensive strategy techniques
may be demanded by clients as more vendors incorporate it into their analyses.
What Challenges Lie Ahead for STM?

Smaller Markets Require More Customization and Granularity [24]

As mass-marketing becomes less effective and marketing efforts are geared towards individuals, across many different types of media, STMs will have to adapt. Vendors are already developing new ways to look at:

- Smaller consumer markets and segments (e.g. forecasting at the respondent and SKU level)
- Different marketing plans, depending on the individual (e.g. evaluate sensitivities to different promotions and ads)
- Forecast data in more granular time periods (e.g. weekly as opposed to quarterly or yearly in order to aid with inventory planning and control)
- Incorporate larger samples in order to achieve the correct target

An Alternative Perspective – Improve New Product Success Rate

Despite improvements in data collection and a move towards customized solutions that look at individual respondents, the new product success rate is still at best less than 20% within the first three years of product launch. By definition, the failure rate for new products is the percentage of a firm's new products that make it to full market commercialization, but which fail to achieve the objectives set for them [29]. Spectra/BASES reported that in 2000, about 30,000 new consumer products were introduced in the U.S., with a failure rate of 93% [10]. More frequently cited studies indicate that there is a 95% new product failure rate in the U.S. [6] and up to a 90%
failure rate within two years in Europe [1]. This statistic has remained in the same range, and has in fact, somewhat risen since the advent of STM. Why?

The low new product success rate does not necessarily mean that the approach of STM is wrong. The failure of new products to meet plan expectations can be a result of unplanned competitive reaction, the reward structure for marketing managers, and other economic and organizational conditions. However, marketing professionals should also question the over-reliance on normative databases that constrain responses and stifle innovation in the STM market.

Companies such as VNU have merged efforts of Spectra’s Launch Targeter product with ACNielsen BASES to target national and regional markets in order to maximize promotion and distribution efforts for new product launches.

The low new product success rate also leaves open the possibility for companies and consultants to try a different approach to new product development, incorporating user design where customers are involved in all stages of the development process. Dahan and von Hippel are strong advocates of user design as it allows manufacturers to focus on need-driven features [5, 20]. Irons, Wang, and Xin have created a methodology that uses conjoint-type modeling by a wide sample of consumers and creates indices and preference measures during the process [14].
**New Tools Required for Simulating Awareness**

As changing technology creates new ways to build awareness with customers, STMs must be able to properly simulate the shopping experience. For instance, are videos good enough when simulating word-of-mouth (WOM) effects? Do Internet panels and kiosks properly measure how consumers subscribe to particular advertisements (“podcasting”).

Also, as the line between concepts and advertisements become blurred, STM vendors must continually work to provide meaningful diagnostics so that marketing managers know when to focus on the plan's strategy versus execution. Concept statements which used to be more functional rather than emotional now incorporate more emotion, sometimes even utilizing video.

**Forecasting Awareness and Buzz Marketing Is Valuable**

Research is just beginning the area of testing for the effects of buzz-marketing and vendors agree that it is a worthwhile effort. BASES conducted a study in to identify and separate Early Adopters from Late Adopters within the Homescan panel [23]. The study showed that they were able to accurately identify within who Early Adopters were – heavy category buyers who are likely to experiment with brands. The attitudinal questions in the study also revealed that the identified Early Adopters were more likely to tell their friends and family about new products they were discovered, and were self-reported to be influential in others’ purchase decisions.
Although work has been done by many of the STM vendors to assess the kind of impact that word-of-mouth has for a particular product, nothing has been done to determine what factors drive this type of buzz marketing. Other STM suppliers maintain that just identifying Early Adopters is not enough – instead, they advocate targeting the most profitable customers, not the first adopters. Measuring awareness has been an increasingly difficult problem as media advertising changes how consumers get product information.
How Are STMs Being Used? Mini Case Studies

Prescription Pharmaceuticals [25]

After five years of holding almost the complete market for the area, a pharmaceutical manufacturer was facing a flood of competition against its drug to treat erectile dysfunction (ED), a new therapeutic area for the U.S. ED is an area which was flooded with direct-to-consumer advertising, despite the embarrassing message which pharmaceutical manufacturers sought to neutralize.

An STM supplier employed defensive response modeling to predict real world output to these new entrants in the market. The client knew that one of the other players in the market was planning a new DTC campaign for daily dosage – something that had not been done before for ED treatments. The client was the market leader and was wondering, given this information if running DTC campaigns would greatly impact incremental prescriptions at all. If so, were they better off running branded campaigns or generic campaigns?

The STM vendor anticipated and created mock ads for the competition and executed both branded and unbranded campaigns. The launches were simulated in a competitive context for different audiences: diagnosed sufferers receiving treatment, diagnosed sufferers not receiving treatment, and undiagnosed sufferers. Based on the results from the simulations, the client chose to continue its DTC advertising with a branded campaign and retained its market share.
Telecommunications [26]

An STM vendor was asked to determine the penetration and revenue potential for a new type of digital wireless service over a five-year period. They were also asked to project market share and look at secondary factors that would impact interest in this new service.

The vendor used a lengthy, traditional 12-page survey through mail, interviewing both cellular and non-cellular owners. They then measured both short-term and long-term conversion rates for various marketplace scenarios and employed discrete choice methodology to measure consumer preferences.

The results of the study showed that the return on investment for the new service had a much longer timeline than the original business plan assumed and that building a national network was a critical factor due to potential business users. The study also showed that consumers were more confused about the different between product platforms than originally anticipated.

Therefore, the client implemented a successful aggressive roll-out plan, targeting local markets in order to gain market share. Given the STM diagnostics, the client positioned the new service by pointing out strengths in service quality and value in the monthly fee.
Conclusion

Simulated test markets still remain a valuable tool for new product development. The industry has seen much convergence in the dominant players' models and has incrementally improved diagnostics output and statistics. STMs are now being used in almost every category imaginable – CPG, pharmaceuticals, financial services, durables and new technology.

As consumer shopping behavior changes with regards to new media and lifestyle, STMs will evolve to forecast consumers on a more granular level as they strive to model real-world scenarios. Given the importance of new product success to a business, we hope these advances, coupled with techniques such as user design, will contribute to a better new product success rate.
# Appendix - Comparison Chart of STM Provider Differences

<table>
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<th>Company</th>
<th>Industry</th>
<th>Data collection</th>
<th>Diagnostics</th>
<th>Forecast</th>
<th>Model</th>
<th>Positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>VNU BASES</td>
<td>Mainly CPG (dominates in the US), but also some services and durables</td>
<td>e-Panel, centralized location</td>
<td>Target analysis, cannibalization analysis through chip allocation. Some price sensitivity testing</td>
<td>Yr1 sales, 4-week sales for all concepts; repurchase intent; Overall Yr2 sales</td>
<td>Purchase intent for trial; attitudinal scales and normative databases for repeat</td>
<td>Brand name, forecast, and databases</td>
</tr>
<tr>
<td>TNS FYI</td>
<td>DTC prescription pharma (leader), CPG, financial services, durables</td>
<td>Internet - online samples; calibrated b/c different responses for purchase intent from mall respondents.</td>
<td>New methods for cannibalization and key driver analysis</td>
<td>Yr1 sales, trial, repeat</td>
<td>Based on purchase intent, but will use rating scales for concept testing.</td>
<td>Diagnostics using new methods, expertise within pharmaceutical industry</td>
</tr>
<tr>
<td>Ipsos Novaction (Designor)</td>
<td>Now geared more towards CPG, OTC focus</td>
<td>Centralized locations, mall, phone</td>
<td>Brand recall, shelf visibility and competitive comparison. Sensitivity analyses</td>
<td>Yr1 sales</td>
<td>convergent model, based on competitive set</td>
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<tr>
<td>Ipsos Vantis (Market Simulator)</td>
<td>financial services, durables, and other non-CPG focus</td>
<td>On-line concept testing. Mall or centralized response locations for durables and services that cannot be done on-line</td>
<td>Custom - evaluates price, competitive forecasts, depending on purchase cycle</td>
<td>Yr1 sales, customizes forecasts, depending on purchase cycle</td>
<td>concept testing, with some experimentation with shelf set for reorder of parts</td>
<td>Adjusts for consumer overstatement with discrete choice; represents buy/sell process, including for B2B and is adjusted across categories</td>
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<tr>
<td>Research International (MicroTest)</td>
<td>services (financial, air travel, entertainment) and pharma (product with mid-late stage development)</td>
<td>Respondent data collection vs. aggregate. Intercept.</td>
<td>Provides diagnostics to improve marketing plan: target market, price sensitivity, position, cannibalization</td>
<td>Yr1 &amp; Yr2 sales, share, and incidence; Quarterly sales forecasts for launch year; Uses priced competitive set</td>
<td>Purchase intent forecasting at concept level with in-home placement.</td>
<td>Respondent level forecasting; calibrates level of customer inertia within each category; strong non-US presence</td>
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<thead>
<tr>
<th>Company</th>
<th>Industry</th>
<th>Data collection</th>
<th>Diagnostics</th>
<th>Forecast</th>
<th>Model</th>
<th>Positioning</th>
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<tbody>
<tr>
<td>M/A/R/C Group (Assessor)</td>
<td>Move towards financial services, pharma, still in CPG, pharma - customizable</td>
<td>Online surveys. Web Intelligent Technology that uses web, centralized locations, mall, phone.</td>
<td>price sensitivity; competitive response; looks at cannibalization when forecasting for line extension</td>
<td>Yr1 sales and share; trial, 1st and 2nd repeat forecast</td>
<td>concept exposure with product placement. Uses diffusion modeling for high tech products because need to generate longer-term forecasts.</td>
<td>Based on competitive set; highly customizable; strong forecast and diagnostics</td>
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<td>Copernicus CPG, DTC, financial services, durables - focuses on evaluating/improving in-market performance (Discovery)</td>
<td>Online data collection (consumer, B2B, physicians); otherwise centralized locations for store mockup</td>
<td>provides info &amp; recommendations re: target market, positioning, media, pricing, etc - all to improve marketing plan (and financial plan through sensitivities)</td>
<td>Yr1-Yr3: sales, consumer awareness, trial and repeat, profitability, each month</td>
<td>combination of various models, but includes additional in-home use periods for &quot;wear-in/wear-out&quot; phenomena</td>
<td>Takes into account consumer memory decay and new entrants. Incorporates interaction of awareness drivers. Employs defensive response modeling.</td>
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<tr>
<td>Synovate CPG (new toys, board games, magazine concepts) but now focusing on product, too (MarkeTest)</td>
<td>On-line consumer panel. ION system in malls (multimedia kiosk)</td>
<td>Cannibalization analysis; target market for line extensions, re-staged products</td>
<td>Yr1 trial &amp; sales; awareness, trial and repeat units</td>
<td>purchase intent; always priced, but not necessarily competitive set. Uses attitudinal model for repurchase</td>
<td>Measures product performance on product attributes; also uses local professionals to take into account local culture and market when forecasting</td>
<td></td>
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</tbody>
</table>
References

2. Barrentine, A. (2006, Feb 5). Personal interview with Amy Barrentine, General Manager, Central Division and Senior Vice President, Analytic Group, M/A/R/C Research, Irving, TX.
15. Markowitz, L. (2006 Mar 27). Personal interview with Lee Markowitz, SVP and Chief Research Officer, Ipsos Insight, Cincinnati, OH.
17. Shekhdar, R. (2006 Feb 8). Personal interview with Bob Shekhdar, independent consultant, former Vice President of Ipsos-NPD. CT.
27. Perry, S. (2006 Apr 13). Personal interview with Steve Perry, Senior Partner, Ipsos Novaction. CT.