

Understanding the Future

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A Practical Guide to Designing and Developing Context Specific Segmented Forecasts and Models for Technology Markets

Forecast Producers and Users

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Daniel Research Group

Chapter 2 – Forecasts Producers and Users

The capacity to imagine alternative futures is uniquely human, and arguably the most powerful evolutionary trait we have. Its survival advantage is overwhelming. We make decisions based on understanding not one, but several probable futures and make choices that maximize the probability that the most favorable outcome will occur, or unfavorable ones will be avoided.

Technology market models and forecasts are used by a variety of organizations, businesses and institutions to support four generally types of decisions:

- 1. Strategic and Tactical Business Decisions
- 2. Purchasing Decisions
- 3. Policy and Legislative Decisions
- 4. Advise, Support and Service Decisions

Business Decisions

Technology vendors are by far the largest consumers of technology forecasts. Whether the objective is finding and exploiting opportunities, marshaling and allocating resources, or shaping products and services, vendors invest in the process necessary to produce forecasts because they believe it will enable them to make better decisions. Market models and forecasts are particularly valuable because of the strategic nature of the decisions they affect. Forecasts and market model influence decisions about:

- ✓ **Investments** Mergers, Acquisitions, Divestitures, Equity and Debt Allocations
- ✓ Business Relationships Alliances, Partnerships, Channel Partners
- ✓ Resource Allocation Research & Development, Sales & Marketing, Manufacturing & Distribution
- ✓ **Products & Services** Specifications, Attributes and Characteristics
- ✓ Marketing Entry, Exit, Positioning, Pricing, Message Content, Media Choices

Forecasts are also used to support the business decisions of those firms supplying the raw materials, parts, labor, and intellectual capital to the vendors. Many primary vendors outsource the production and in some cases even the design and development of their products to other firms. At the other end of the supply chain, firms that are in the distribution channel including distributors, systems integrators and value added reseller (VARs) also require forecasts to support their business decisions.



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All of these firms also require capital. The providers of that capital whether it is equity or debt rely on forecasts to make their investment or lending decisions. Funding and capital providers include the Angels and Venture Capitalist who invest in the entrepreneurs and their innovative vision, the banks and other lending institutions that provide short term seasonal, working capital and bridge loans, and the institutions and individuals who invest in the equity and public debt of these firms. All require forecasts to support their investment decisions.

Buying Decisions

Forecasts are also used by purchasers of technology products and services to help them evaluate risk and reward in make their buying decisions. New technology enables competitive advantage for business, yet poses a risk if the promised advantage is not achieved. Forecasts from valid and trustworthy sources help to define and quantify the risk as well as the utility of the benefits.

Likewise, at the consumer level, individuals seek out information regarding new technologies including projections of market penetration. Much of the consumer market for new technology products and services is centered in the convergence of entertainment, communications, and processing. One of the key attributes of this market is network externality. Simply, this means that the value of the product or service to any one user increases as the number of other users increase. Therefore, an estimate of the future number of users is highly influential in the buying decisions process.

Policy Decisions

Government agencies and institutions that set policy and legislate in the commercial sector require forecasts to make their decisions. These decisions are wide and varied ranging from drafting legislation and rules regarding allocation of bandwidth by the FCC, to anti-trust decisions by the Department of Justice.



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Advisors and Services Providers

Technology providers, and users are supported by a number of other types of organizations and firms providing advice and services that require market forecasts and models. These include:

- ✓ Management and Marketing Consultants who provide strategic and tactical business advice.
- ✓ Advertising Agencies and Public Relations Firms who make media choices and craft messages for their clients.
- ✓ Industry Associations & Media who provide market level data, information, and knowledge.
- ✓ **Standards Committees** who make decisions about technology standards that influence the development of future products and services.
- ✓ **Investment Advisors** who offer advice and opinion regarding investment opportunity and risk about firms in the technology sector.
- ✓ **IT Consultants** who offer advice to, and in some case decide on what technology product and service their clients will purchase.
- ✓ Academia who often act as consultants to government making policy and legislative decisions as well as providing consulting services to technology vendors making strategic and tactical business decisions.
- ✓ Market Research Firms who provide data, information and knowledge to technology suppliers, consumers and government.



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Forecast Producers

Many government agencies produce technology market forecasts to support policy, rulemaking, and legislative decisions. Academia is also a source of technology market forecasts supporting its consulting activities. In addition academics have taken the lead in developing most of major theoretical advancements over the past half century in this field, specifically as it pertains to technology adoption models. While all technology vendors produce their own internal forecasts for setting goals, planning and budgeting, the largest producers of independent technology forecasts are the approximately 1,000 technology market research firms around the world. For many of them, this is their primary business.

Technology market research firms design, develop, and deliver forecast to clients packaged in reports, on-line, presentations and events as part of annual subscription services. These forecasts tend to be at the technology or product category level with some technology/product, demographic, firmographic, economic or geographic segmentation. Occasionally these forecasts will be at the competitor or brand level. The intent of these forecasts is to provide descriptive and predictive data and information to a wide range of clients. Many of the market research firms are also engaged by clients to design and develop custom Context Specific Segmented models and forecasts.

Technology market forecasts and models are often dependent on forecasts of economic, demographic, and sociological trends and events beyond the domain of the technology markets themselves. When necessary these forecast will be obtained from government agencies and institutions, academic departments and research firms covering specific sectors of the economy.

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Daniel Research Group offers consulting and market research services to clients whose products and services are technology based or enabled. The primary focus is on providing results, solutions, consulting and training to clients that have strategic and tactical decisions that require Forecast, Segmentation, Market Share, and other market modeling requirements These engagements are supported with the full range of traditional market research data gathering and analysis services, including quantitative and qualitative surveys, focus groups, demographic and firmographic data acquisition and analysis, as well as input from technology and industry experts. While our emphasis is on delivering data and actionable recommendations, we often design and develop custom models and modeling tools for client use as well as providing training in these areas.

Stephen J. Daniel - President

Mr. Daniel's three decades in the Information Technology Industry has given him a unique blend of Market and Technology experience coupled with a deep understanding of Market Research Methodology. His primary strength is in understanding the decision making context within which the results of his research will be applied. This is manifested by his ability to design and execute studies that precisely meet client objectives on schedule at reasonable costs.



After receiving his BS in Finance in 1970 from Northeastern University, Mr. Daniel earned an MBA in Quantitative Analysis from New York University in 1974. He is a member of the American Statistical Association, The Market Research Association of America, the American Marketing Association and the Qualitative Research Association of America.

Daniel Research Group is a market research firm specializing in the design, development and application of market models and forecasts for clients in the technology sector including supplier, investors, and other market research firms. For more information contact Steve@DanielRG.com or visit www.DanielResearchGroup.com.