



## **BACKGROUND**

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ConStat, Inc. is a full-service marketing research organization dedicated to supplying Product Managers, Marketing Strategists, Advertising Planning Groups and Corporate Research Departments with the highest quality primary research information. Our aim is to develop and deliver information needed by planners and marketers to make profitable business decisions.

ConStat delivers this information by adhering to three basic business principles:

### **COMMUNICATION**

Successful marketing begins with an understanding of the issues. ConStat takes the time to listen and learn your objectives and goals. We carefully blend our skills with yours to insure each research project delivers results that help you succeed.

### **EXPERIENCE**

When you select ConStat, you work with dedicated professionals. ConStat's senior staff is comprised of marketing and research professionals who have worked on both sides of the table – client and vendor.

### **COMMITMENT**

ConStat is dedicated to forming lasting business relationships. We accomplish this by maintaining the highest research standards, paying attention to details and treating your business as if it was our own. ConStat's staff will work with you to form a results-oriented team whose collective efforts will provide answers to your most difficult questions.



## RESEARCH SERVICES

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ConStat is a full service research organization with the experience and capabilities to meet your research needs. Whether you need ConStat to oversee all stages of the research process or just need field work, analysis, or questionnaire design, you can depend on ConStat to give that extra effort at all times.

### CONSULTATION

- Defining Project Objectives
- Developing a Research Approach (Methodology)
- Project and Research Management

### RESEARCH DESIGN

- Questionnaire Design
- Sampling Design
- Quantitative Surveys
- Qualitative Explorations

### FIELD WORK

- Telephone Interviewing
- Mail Interviews
- In-Depth Interviews
- Focus Group Moderation/Recruitment
- Editing and Coding
- Executive Interviews

### ANALYSIS

- Data Processing
- Statistical & Multivariate Analysis
- Detailed Reports
- Presentations



## **RESEARCH APPLICATIONS**

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ConStat has performed research services for a wide variety of industries and public organizations including Financial Services, Advertising, Telecommunications, High-Tech, Insurance, Hotel and Travel, Consumer Products and Print and Media Broadcasting. ConStat designs and conducts research studies in the following areas...

- Customer Satisfaction Studies & Measurements
- Corporate Image and Perception
- Market Segmentation
- Corporate & Product Positioning
- Demand Forecasting & Analysis
- Pricing Studies
- New Product Development & Testing
- Advertising Research Studies
- Sales Channels Development & Analysis
- Marketing Strategy
- Market Feasibility
- Media Research
- Employee Attitude Studies
- Readership Studies
- Public Opinion Polling
- Public Policy Analysis



## **STRATEGIC MARKETING MODELS**

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In addition to a wide array of standard methodologies, ConStat utilizes a number of leading-edge research approaches to address the unique strategic issues facing marketing managers in today's highly competitive business environments. Using advanced, multivariate research techniques, Strategic Marketing Models are developed that simulate customer behavior and reflect changes in the dynamic marketplace.

Once models are developed, what-if scenarios can be created and the marketing implications of any proposed action identified. The key advantage of Strategic Marketing Models rests in their ability to simulate market response and provide specific and actionable input for management decisions and strategic planning.

In responding to the specific strategic issues facing our clients, ConStat has developed numerous Strategic Marketing Models, including:

- **Segmentation and Target Marketing (Cluster Analysis)**
- **Image and Market Structure Analysis (Perceptual Mapping)**
- **Product Positioning (Preference Regression)**
- **Product and Service Design (Conjoint Analysis/Choice Modeling)**
- **Pricing Research (Price Sensitivity and Brand Equity)**
- **Customer Satisfaction and Service Quality (Satisfaction Formation Modeling)**



## INFORMATION TECHNOLOGY EXPERIENCE

With the advent of the "information revolution" and the on-going convergence of telecommunications and high technology, there has emerged a great need for companies within these industries to examine the dynamic marketplace and the ever-changing needs of their customers. ConStat has extensive experience and expertise in conducting research within this marketplace.

Critical to the success of any research project undertaken in this area is the ability to **identify** and **reach** the decision-makers who are responsible for purchasing or influencing the purchase of information technology products. Over the last several years, ConStat has successfully conducted over 200 research studies involving telecommunications, data communications, computers, networking and related information products and services.

Some specific technologies researched by ConStat include:

- ISDN
- LANs/WANs/MANs
- SMDS
- Chip Technology
- Wireless Data Communications
- T1 and Fractional T1
- 800 Services
- Key Systems, PBX and Centrex
- Personal Communication Services (PCS)
- Information Services
- FAX Mail
- Frame Relay
- Digital Cellular Technology
- Digital Data Services
- Long Distance Services
- CLASS Services
- Calling Cards
- Cellular Technology
- Voice Mail
- Bundled Network Products

Clients include:

- Intel
- Hewlett Packard
- Cellular One
- PacTel Cellular
- Sprint
- AT&T
- PC World
- Macworld
- PacTel Wireless Data Division
- Pacific Bell
  - Information Services Group
  - Data Communications Group
  - Network Engineering
  - Product Management
  - Marketing Strategy
  - PCS Group



## CLIENTS

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ConStat has conducted successful research projects with the following corporations and associations:

- Allstate Insurance
- American Academy of Ophthalmology
- American Hawaii Cruises
- AT&T
- BBDO/West
- Best Western International
- Cellular One
- Chiat / Day Advertising
- Coopers & Lybrand
- Dole Fresh Fruit
- R. H. Donnelly Publishing
- Foote Cone/Belding
- FCB Direct
- Hawaiian Pineapple Growers Association
- Hewlett Packard
- Hotel Information Systems
- Hyatt Hotels Corporation
- Intel Corporation
- J. Walter Thompson
- Jenny Craig Weight Loss
- KPMG Peat Marwick
- L. M. Berry Publishing
- Lodging Hospitality Magazine
- Macworld Magazine
- Marin Mountain Bikes
- Marriott Corporation
- Mountain View (California), City of
- National Yellow Pages Monitor
- Pacific Bell
- Pacific Bell Directory
- Pacific Telesis Group
- PacTel Cellular
- PacTel Corporation
- PC World Magazine
- Sierra Club
- Standard Rate & Data Service
- Sprint Telecommunications
- Supercuts
- US West Direct
- Wells Fargo Bank



## **RESEARCH FACILITIES**

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ConStat's corporate offices, interviewing center and focus group facility are centrally located in the heart of the San Francisco Financial District. Our offices include an executive conference room, a private working office for our clients and a beautiful view of the city and San Francisco Bay.

### **CENTRAL INTERVIEWING/RECRUITMENT CENTER (San Francisco)**

- 40 Telephone Interviewing Stations
- Full-time Field Director and Supervisors
- On and Off-site Monitoring Capabilities
- Full-time Interviewers
- PC-based Data Processing using A-Cross, SYSTAT and SPSS

### **CENTRAL INTERVIEWING CENTER (Los Angeles)**

- 75 CATI Interviewing Stations
- On and Off-site Monitoring Capabilities
- Full-time Interviewers
- Multilingual Staff
- Data Processing using Quantime

### **FOCUS GROUP FACILITY (San Francisco)**

- Executive, Conference-style Focus Group Room with Floor-to-Ceiling Mirror
- Client Office with Closed-Circuit Monitor
- Observation Room
- In-house Recruiting
- Full-time Recruiters
- Extensive Business-to-Business and Consumer Databases
- Professional Videotaping Capabilities



## **PROFESSIONAL STAFF**

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**ConStat has assembled an experienced and skilled staff of research professionals to conduct and oversee all aspects of the research process.**

**ConStat's organization is comprised of marketing and research professionals from both the client and supplier sectors of business. In addition to years of practical business research experience, most of ConStat's senior staff have advanced or technical degrees. This breadth of knowledge and experience enables ConStat to go beyond the functional aspects of research to insure your project delivers results that allow you to make sound business decisions.**

**ConStat has designed its organizational structure so that each person working on a research project – from Interviewer to Senior Project Manager – feels responsible for that project. We have gone to great efforts to attract and employ experienced, permanent managers in key operating positions such as editing, coding and data processing. ConStat believes that every stage of the research process is extremely important and must be properly managed.**



**Pacific Bell**

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**Analysis of Potential Local  
Access Competition and  
Interconnection Issues**

**-- Business Market --**

**Final Report**

**Prepared for:**  
Pacific Bell  
San Ramon, CA

**Prepared by:**  
ConStat, Inc  
San Francisco, CA

May, 1995



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## Background

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Over the past several years, many changes and developments have been occurring in the telecommunications industry, from technological advances to regulatory changes. One of the most significant regulatory changes facing Pacific Bell is the advent of intraLATA and local competition. Although Pacific Bell has been the sole provider of local exchange telephone service in California since divestiture in the early 1980's, new regulations will soon allow other companies to provide intraLATA and local service to customers. The California Public Utilities Commission (CPUC) is currently drafting and reviewing several decisions on the regulatory structure required to enable open competition within the service area.

Pacific Bell's new competitors are likely to consist of Competitive Access Providers (CAPs), Interexchange Carriers (IECs), cable companies and other communications providers. However, these potential competitors have voiced concerns to the CPUC that Pacific Bell, as the current exclusive provider of local exchanges services, will have unfair advantages in this arena.

With the existing technology, customers will be required to change their telephone number if they choose to use a different provider for local exchange services. Given this, the new competitors claim that Pacific Bell will be able to retain an unfair portion of the market because customers will not want to change their telephone numbers. Although number portability (the ability to retain a telephone number regardless of the provider) would eliminate this problem, the technology is not as yet developed. However, there are several interim solutions that may allow customers to retain the same telephone number with a new service provider.

To better understand the issues involved with providing number portability, Pacific Bell wanted to explore the value of number retention (versus the ability to choose a preferred provider and specific incentives to switch providers) and determine the effectiveness of alternative number portability solutions among business customers. The Marketing Research Group at Pacific Bell asked ConStat, Inc. to develop a research study that would fully investigate the issues involved. The following report reviews the results of this study among Pacific Bell's business customers.



## **Purpose and Objectives**

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There were three major elements of this project that, of themselves, are individual areas of study with unique issues for exploration. These areas are: (1) the value of an existing telephone number to incumbent customers, (2) the relative influence of possible incentives to switch to a different provider relative to maintaining an existing telephone number, and (3) the effectiveness of different technological solutions to number portability. Although some of the specific objectives of this study were pertinent to Pacific Bell's market position if local telephone competition were to occur, this study was not designed to be a competitive analysis of the local telephone market after other access providers are allowed.

The specific objectives of this research, as they relate to the major areas of study, were as follows:

### Value of Specific Telephone Numbers:

- Determine the value businesses place on a specific telephone number(s) and identify the factors which create that value;
- Explore the problems and concerns that are perceived to be related to changing telephone numbers and how these problems contribute to the value of the number;
- Evaluate how many and which telephone numbers are critical to a company (e.g., is published with advertising, used as main inbound number, sales and support numbers, etc.);
- Determine how "telephone number value" differs based on certain business characteristics.

### Incentives to Switch to a Different Provider:

- Assess the likelihood of switching to a different provider given the current "playing field";
- Develop an inventory of incentives that are likely to influence business customers when deciding whether to switch local exchange services;
- Investigate the strength and influence of the specific incentives that might be offered by Pacific Bell or competing carriers;
- Determine whether these incentives, of themselves, outweigh the problems associated with changing telephone numbers.



## **Purpose and Objectives**

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### Different Technological Solutions to Number Portability:

- Explore customer suggestions for solutions to changing a number;
- Assess what characteristics the solutions must have and identify the "least common denominator" among the solutions;
- Evaluate reactions to the specific interim solutions to number portability;
- Determine the benefits and limitations of each solution and gauge its effectiveness in overcoming the problems associated with changing numbers.

### Interrelationships between these Elements:

- Evaluate what combination of incentives and/or solutions are necessary to overcome the cost of changing a telephone number;
- Determine to what extent different incentive/solution scenarios will encourage customers to change service providers;
- Explore how the likelihood of switching providers and telephone number varies by different business characteristics;
- Identify whether customers will only change some local services while maintaining their most frequently used numbers or make adjustments to their telecommunications systems to take advantage of competitive offers;
- Identify best and worst case scenarios, plus the impact of alternative strategies available to Pacific Bell.



## Methodology - Overview

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This research study was conducted in two phases, a qualitative phase in the form of focus groups, followed by a quantitative phase.

The initial focus groups provided an arena to examine the issues surrounding the study's objectives in depth (e.g., the concerns that are perceived to be related to changing telephone numbers). The qualitative phase also provided an opportunity to "flush out" the main issues related to switching a telephone number and to learn the terminology business customers use to describe telecommunications services.

The findings from the qualitative phase provided additional direction for the quantitative research. Specifically, the qualitative results were used to refine the survey design and ensure the research instrument addressed all issues salient to respondents in a language they would understand.

The specific methodologies for each phase are outlined on the following pages.



## Methodology - Qualitative Phase

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Phase I of this research study was conducted in the form of focus groups. A total of seven groups were conducted in Northern and Southern California to account for any geographical variations. Since the value of number portability was expected to differ by business size and other factors, the focus groups were conducted with participants from varying businesses sizes.

After discussions with the Clients at Pacific Bell, it was determined that the best segment definition to categorize business size was by employee size. Therefore, a small business was defined as a business having 1 to 10 employees, a medium business had 11 to 99 employees, and a large business had 100 or more employees. Two focus groups were conducted with each business segment, one in Los Angeles and one in San Francisco. In addition, one group was conducted among "Defectors" in San Francisco (customers who no longer use Pacific Bell for their intraLATA toll telephone services).

The focus groups were conducted according to the following matrix:

	ConStat, Inc. <b><u>SAN FRANCISCO</u></b> Thursday, September 29	Adept Consumer Testing <b><u>LOS ANGELES</u></b> Monday, October 3
Small Business (1-10 employees)	@ 12:00pm	@ 12:00pm
Medium Business (11-99 employees)	@ 7:30pm	@ 7:30pm
Large Business (100 or more employees)	@ 5:30pm	@ 5:30pm
Defectors	Monday, October 11 @ 6:00pm	

To qualify, participants had to be the business' telecommunications decision-maker. In addition, only businesses that used Pacific Bell for their local telephone services were recruited (except for the Defectors group).



## Methodology - Qualitative Phase

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To account for additional business variations which might impact a business' willingness to switch their number, a variety of business types were recruited based on the following characteristics:

- Number of office locations in California;
- Number of telephone lines;
- Monthly local telephone bill;
- Use voice mail, fax machines, modems and/or inbound 800 phone numbers;
- Use inbound 800 phone number as main business number;
- Advertise in the Yellow Pages Directory;
- Experienced a phone number or area code change and;
- Industry of operation.

Participants were recruited from ConStat's central interviewing facility in San Francisco on a random basis from available lists of businesses, and screened using a questionnaire developed by ConStat. To ensure no biases would result because of experience with or attitudes toward Pacific Bell, all focus groups were recruited and conducted without revealing to the participants who the Client was. Participants were incented to participate in these focus groups.

A moderator's guide was developed by ConStat with input and approval by the Clients. A copy of the Moderator's Guide and the screening questionnaire have been included in the Appendix of this report. All focus groups were moderated by William D. Deaton, Ph.D., a principal from ConStat.

### **Research Limitations:**

As with all qualitative research, results from this phase were exploratory in nature and were meant to provide directional information for the quantitative phase from a small, non-random sample of businesses customers. Qualitative results may not be representative of the entire customer base, and therefore, cannot be used to forecast demand or make projections about the population as a whole.



## Methodology - Quantitative Phase

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### Quantitative Research Approach:

Because the decision-making process that businesses face when evaluating telecommunications services is a trade-off between the various elements involved in the decision (e.g., keeping the number versus 15% savings), and because the elements are weighed simultaneously by the decision-makers, ConStat recommended a quantitative research approach that replicated this decision-making process as closely as possible.

This approach is called full-profile conjoint analysis. By using an experimental design (a well-known method of systematically varying the decision-making elements), this technique manipulates the decision-making elements into numerous combinations, creating incentive/solution scenarios, and exposes each respondent to a number of these scenarios. After asking respondents how willing they would be to switch local exchange carriers under each scenario, the "value" of each element in the trade-off decision was determined via the conjoint analysis (a regression technique commonly used in market research applications). Using this technique, the impact of different scenarios on Pacific Bell customers can be identified.

To further increase the validity and reliability of the data, ConStat administered the conjoint approach via a "defection analysis." A defection analysis approach is based on fundamental decision-making theory that assumes that decisions about making changes from the status quo (e.g., a decision to replace a current product or service) are easier for a decision-maker to visualize in their minds than decisions about a hypothetical or potential situation (e.g., evaluating the "value" of their number). As a result, the decision that is measured in the simulated (i.e., research) situation that uses this approach will more closely resemble the decision that would actually be made.



## Methodology - Quantitative Phase

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### Sampling Design:

To conduct the quantitative phase, a telephone-mail methodology was used. With this methodology, potential respondents were first recruited by telephone for participation in the study, and then sent a mail questionnaire for the administration of the conjoint analysis.

To ensure adequate representation of business segments, potential respondents were recruited from a sample stratified by business size. The sample used for this study was purchased from Dun & Bradstreet, and was pre-screened to include only Pacific Bell prefixes.

By design, ConStat recruited a quota of each business segment so that each segment would account for approximately one-third of the completed interviews. The actual number of recruited participants and completed interviews is shown below:

<u>Business Segment</u>	<u>Number of Recruited Participants</u>	<u>Number of Completed Interviews</u>	<u>Response Rate</u>
Small Business (1 to 9 employees)	401	179	44.6%
Medium Business (10 to 99 employees)	407	170	41.8%
Large Business (100 or more employees)	<u>400</u>	<u>170</u>	<u>42.5%</u>
TOTAL	1,208	519	43.0%

Additionally, it was determined in the qualitative phase that businesses with DID numbers were another segment with unique considerations. As a result, a separate questionnaire booklet was developed for businesses with DID numbers to capture additional DID information, and potential recruits were screened for DID numbers. No recruitment quota was set for businesses with DID numbers.

Participants recruited for this study were the persons most responsible for decisions regarding local exchange telephone services for a company's California locations. Potential participants were eliminated from the recruitment if they worked for a telecommunications service provider or a marketing research and consulting firm, or if the participant used GTE exclusively for local telephone services. All participants were recruited randomly from the purchased sample. In addition, this recruit was conducted "blind," that is without knowledge of the company sponsoring the survey.



## Methodology - Quantitative Phase

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### Questionnaire Design and Development:

The recruitment screener and the mail questionnaires were designed and developed by ConStat, with input and final approval from the Clients at Pacific Bell. Copies of all materials are included in the Appendix of this report.

Because of the complexity of the issues at hand, the design of the questionnaire was of critical importance and merits some explanation here. A close review of the qualitative findings led to the following design decisions.

During the qualitative phase, it became apparent that customers would need to know whether specific telecommunications services would be affected if they were to switch local telephone provider. Consequently, the questionnaire included the following explanation of the affects of local access competition so all survey respondents would have the same, basic understanding of local access competition and any uncertainties would be clarified.

### Explanation of Local Access Competition:

#### *If you switched to a different local telephone company...*

- *The new company would...*
  - *Provide your local and toll service, including line charges and local, zone and toll call charges.*
  - *Provide any other local or line services that you are currently receiving from your local telephone company, such as Custom Calling Features or Centrex.*
  - *Provide any new lines you need or make any changes in your service.*
  - *Handle any problems or repairs, including wiring currently handled by your current local telephone company.*
  - *Bill you directly. You would no longer receive a bill from your current local telephone company.*
- *No additional equipment (such as dialers) would be necessary.*
- *Yellow Pages advertising would continue to be provided by the company who provides it now (e.g., Pacific Bell Directory, Donnelly Yellow Pages). This company would bill you directly.*
- *You would not incur any costs for switching your telephone service.*



## Methodology - Quantitative Phase

### Elements of the Conjoint:

<b>Type of Company</b> .....	Current Long Distance Company
	Other Telecommunications Company
<b>Bundled Services</b> .....	Local and Toll Service Only
	Local, Toll and Long Distance Service
<b>Service Discount</b> .....	0% off local telco costs
	5% off local telco costs
	15% off local telco costs
	25% off local telco costs
<b>Impact on Telephone Number</b> .....	Number remains the same
	Announcement <i>only</i> for 1 year
	Announcement <i>only</i> for 2 years
	Announcement <i>and</i> Transfer for 1 year
	Announcement <i>and</i> Transfer for 2 years

The elements tested in the conjoint scenarios are shown above. To decrease burden on the respondent and ensure that the importance of the most critical items was not clouded by other variables, only the elements that were identified as most influential during the qualitative research were included in the conjoint design.

In the qualitative phase, the brand of the telecommunications provider was seen as an important criterion for a business' willingness to switch. For a business customer to consider switching, a telecommunications provider must provide a minimum level of service quality, customer service and brand familiarity. Since several of the likely market entrants were relatively unknown to the majority of business customers (e.g., MFS, ExpressTel), measuring these specific brands would only reflect a level of awareness, which is not relevant to the objectives of this study. Additionally, since new entrants to the local telephone market will develop marketing strategies to educate the market about their brand, it was determined that including specific brands would not accurately account for potential market dynamics of these new market entrants. However, the incumbency effect of the current long distance company appeared substantial enough to be included as a "brand" element. As a result, choices for a telecommunications provider were either a customer's current long distance company, or another telecommunications company.



## Methodology - Quantitative Phase

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Because a "single point of contact" had an effect on willingness to switch during the focus groups, two levels of telecommunications services were offered - local and toll service only, or local, toll and long distance services. When presented in the conjoint scenarios, only those options which were realistically feasible were presented. For example, scenarios that would offer "local and toll services only" from the customer's current long distance company presented a contradiction since long distance services were already provided. Consequently, the current long distance company was always presented as offering local, toll and long distance services.

Several discounts on local telephone service were used in the conjoint scenarios. In all cases, the discounts were described as a specific percent less than all current local telephone company costs. It was discovered in the qualitative phase that customers had difficulties identifying toll charges separate from local access charges. Additionally, it seemed likely that potential competitors would offer a simpler, "overall" discount rather than discount local access and toll charges separately. Finally, business respondents were instructed that they would only receive a savings on the lines that they switch, in the case that only a portion of all their lines would be moved to a different provider.

To ensure that many possible alternatives to number portability were tested, several different possible impacts on the phone number were presented as a consequence of a business switching its local provider. One of these options was that the number "remains the same." Number retention was presented to the customer as a unique option, regardless of the technological endeavors behind it. As discovered in the qualitative phase, customers did not distinguish between remote call forwarding, interim number portability or full number portability as long as their number remained the same. The other options presented in the scenarios - the referral announcement or the referral announcement and transfer - all accompanied a number change. It was assumed that, minimally, Pacific Bell would provide an announcement for 1 year as it does today.

All of the elements used in the conjoint scenarios were explained fully to the respondents in a "Dictionary of Terms" which accompanied each mailed survey. Please refer to the Appendix of this report for a copy of this booklet.



## Methodology - Quantitative Phase

### Sample Conjoint Question:

<ul style="list-style-type: none"> <li>• Your current long distance company offers...</li> <li>• Local, toll and long distance service for...</li> <li>• 25% less than your current local telephone company on any lines that you switch and...</li> <li>• The telephone numbers <u>remain the same</u> on any lines that you switch.</li> </ul>					
HOW WILLING WOULD YOU BE TO SWITCH ANY OF THESE LINES TO THIS COMPANY?				WHAT PERCENT WOULD YOU MOVE?	
	<u>Very</u>	<u>Somewhat</u>	<u>Not very</u>	<u>Not at all</u>	_____ %
Main/published lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
Other lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
DID lines/numbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %

After determining the elements to be tested in the conjoint analysis, an experimental design was used that exposed respondents to the attributes by systematically developing potential competitive “scenarios.” Using the elements described on the previous pages, respondents were presented with 25 different scenarios, an example of which is shown above. The 25 specific scenarios used in this study can be found in the questionnaire at the Appendix of this report.

Using these same 25 scenarios, two questionnaire booklets were developed. To remove bias, the questionnaire booklets presented the scenarios in different orders. For businesses with DID numbers, additional questions pertaining to DID numbers were added.

After each scenario was presented, respondents were asked to indicate their willingness to switch different types of lines. As discovered in the qualitative phase, business customers were more likely to switch lines other than their main, published line, as these “other” lines tend to be more insulated from the potential number change problems. Additionally, the impact on DID numbers was identified as another “type of line” to be measured.



## Methodology - Quantitative Phase

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To describe the types of lines respondents were evaluating, the following definitions were used in the questionnaire:

**Main lines:** Telephone lines (other than 800 numbers) whose numbers:

- *appear on printed materials or in advertisements, such as letterhead, TV/radio/print advertising, brochures, Yellow Pages, etc.*
- *are frequently called to contact your company.*
- *might include your fax number(s).*
- *most companies have one or two main/published numbers.*

**Other lines:** Any other telephone lines or trunks whose numbers are not published or listed. These lines are not usually dialed directly. They include:

- *any other lines that are not the main/published lines to your company.*
- *lines that are "roll-over" or "trailing" lines that are used to receive additional inbound calls to your main number or for outbound calling.*
- *lines that are used for outbound calling only, as well as DID trunks.*

**DID Lines:** DID Numbers are a product offered by local telephone companies for PBX users only. If you have DID numbers, you purchase a block of telephone numbers (usually 100 numbers per block) that are used for dialing to specific people or extensions directly, without going through an attendant or receptionist.

The "willingness" of a business to switch was determined to be the best terminology that would gauge the total potential market given a specific scenario. A four-point scale was used to gauge a business' willingness to switch to eliminate the middle ground response available on a 5-point scale and simplify the complexity to respondents.

In addition to capturing a business' willingness to switch specific types of lines, the survey also asked what percent of each type of line would be switched for each scenario. As discovered in the qualitative phase, some business customers would prefer to switch only a portion of their lines (e.g., voice only), while others were willing to switch just one type of line. By collecting additional data about the amount of lines a business would switch, the conjoint could then quantify the amount of lines Pacific Bell could expect to lose under certain circumstances.



## **Methodology - Quantitative Phase**

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The questionnaires used for this study were thoroughly pre-tested via in-person interviews prior to the actual survey mailing. Pre-tests were conducted among qualified potential respondents, and were stratified by business size to allow for possible variation. A total of 8 customers participated in the pre-test interviews.



## Methodology - Quantitative Phase

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### Data Collection, Tabulation, and Analysis:

All telephone interviewing for recruiting and questionnaire mail-out was done at ConStat's central interviewing center by interviewers and staff experienced in telecommunications research projects. The recruitment of participants for the mail survey occurred from October 24, 1994 through November 23, 1994. Approximately 10% of all telephone interviews for each interviewer were monitored.

To ensure that every respondent had an equal chance of being interviewed and recruited, up to and including four attempts were made to complete an interview before the listing was considered "unusable."

After agreeing to participate in the mail survey, all cooperating recruits were sent a survey packet containing a cover letter, main questionnaire, a SASE return envelope, and a \$2 incentive to stimulate returns.

All completed mail questionnaires that were returned to ConStat by December 19 were edited for internal consistency and logic and entered into ConStat's data processing system for analysis and cross-tabulation.

Results from this study have been weighted to reflect the actual distribution of business sizes as provided by Dun and Bradstreet:

Small Business	82.4%
Medium Business	15.9%
Large Business	<u>1.7%</u>
	100%

Data tables were prepared by ConStat that detail the results from each question asked in this study. Complete copies of data tables, both weighted and unweighted, were produced and delivered to Pacific Bell.

The conjoint analysis was conducted using the same weighting scheme and a spreadsheet was designed to provide the estimated outcomes under specific scenarios.