



Purpose and Objectives

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

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

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. <u>SAN FRANCISCO</u> Thursday, September 29	Adept Consumer Testing <u>LOS ANGELES</u> 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

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.



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

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

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.*



Elements of the Conjoint:

Type of Company	Current Long Distance Company
	Other Telecommunications Company
Bundled Services	Local and Toll Service Only
	Local, Toll and Long Distance Service
Service Discount	0% off local telco costs
	5% off local telco costs
	15% off local telco costs
	25% off local telco costs
Impact on Telephone Number	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

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.



Sample Conjoint Question:

<ul style="list-style-type: none"> • Your current long distance company offers... • Local, toll and long distance service for... • 25% less than your current local telephone company on any lines that you switch and... • The telephone numbers <u>remain the same</u> on any lines that you switch. 					
<p>HOW WILLING WOULD YOU BE TO SWITCH ANY OF THESE LINES TO THIS COMPANY?</p>				<p>WHAT PERCENT WOULD YOU MOVE?</p>	
	<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

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

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.



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.



Methodology - Quantitative Phase

To determine the percentage of businesses and lines that would switch given a specific competitive scenario, the following conversion factors were assigned to the results of the conjoint analysis in an attempt to more closely estimate the actual "demand" under any specific scenario.

<u>Response</u>	<u>Category</u>	<u>Likelihood to Switch</u>
Very Willing	4	75%
Somewhat Willing	3	50%
Not Very Willing	2	25%
Not At All Willing	1	0%

Conversion factors such as these are commonly used to account for some tendencies frequently found in market research studies that lead to an inflated estimation of demand. Some of these tendencies include overstatement by respondents (who are more likely to agree to switch during the survey process than in reality), inertia in actually switching services and lower levels of awareness of competitive offerings (since all respondents were educated about the potential competition).

Research Limitations

While external factors such as awareness, inertia, advertising and related marketing efforts are likely to influence the decision to switch, those variables were not tested in this study. As with any market research study, additional forecasting and analysis is necessary to account for the impact of these variables.



Conclusions

Relative Value of Number Portability

- When making the decision regarding switching local and toll services to another company, in general businesses will consider pricing discounts more heavily than the ability to keep their telephone number. In fact, the barrier of having to switch telephone numbers can be overcome by reasonable discounting strategies. To capture businesses not likely to switch because of a number change, only a 12% discount is required. Based on current offers being made in the intraLATA toll arena, as well as normal “cost of entry” expectations, this level of discount does not seem to be an insurmountable barrier to potential alternate providers.
- From another perspective, in any given situation (i.e., combination of discounting, brand and service bundling), the addition of number portability only captures approximately 10% more of the business market. As an example, if a long distance company offers local services for 15% less than the current price, 25% of businesses will switch main lines without number portability compared to 36% who will switch with number portability. While any customer, when asked whether their telephone number is important to them, will seem resistant to switching numbers, the actual impact of switching a number is far less significant when all elements are evaluated simultaneously.
- As expected, having to change the number on “main” lines, or changing DID numbers, is more of an issue than changing “other” lines. A greater proportion of other lines would be switched if number portability is not enacted. However, when a number change is not required, the proportion of DID numbers and main lines switched approximates the proportion of other lines switched.

Alternatives to Number Portability

- Since number portability is not as influential as costs for local and toll services, it is highly possible that an environment can be created that requires a telephone number change if a business wishes to switch providers. In this case, any of the alternatives tested (e.g., announcement with transfer for two years) will result in approximately the same percent of businesses switching. Since the difference between offering the existing referral product (announcement for 1 year) and either extending the length of the announcement or adding automatic transfer capabilities does not significantly influence the likelihood to switch, changing the number referral process does not seem to be an efficient or cost-effective method for resolving the issue of an “equal playing field.” Given this finding, the true issue concerning businesses is whether they keep their telephone number or not; the specific technological solutions are relatively unimportant.



Conclusions

- Another viable alternative is for businesses to switch only “other” lines, not the “main” lines that are used for their primary contact number. In scenarios where a number change is required, the proportion of other lines switched was generally higher than the proportion of main lines, suggesting that businesses are willing to keep main lines with Pacific Bell while switching their other lines to an alternate local provider (even though they would not receive a discount for their main lines). However, when number portability is available, this differential disappears and the same proportion of main and other lines will be switched.
- Although not tested as an alternative, a third possibility that already exists is remote call forwarding for number retention, paid for by the customer. Approximately one-tenth of all businesses were currently using a number retention service, the majority of whom always plan to keep the service.

Impact of Discounts

- As mentioned above, discounts offered on local and toll services have a greater impact on businesses' decisions to switch these services than the requirement to change their telephone number. In other words, the barrier of changing numbers can be “bought” by an appropriate discount.
- By increasing the discounts from 0% less to 25% less than they are currently paying for service from the local telephone company, the percent of businesses willing to switch main lines increases by about 25 percentage points. For example, given number portability and local, toll and long distance services offered by a business' incumbent long distance company, 21% of business would switch with no discount while 45% would switch with a 25% discount. This incremental increase of 24 points is substantially greater than the impact seen when number portability is added (which captures only 10% more of the market). Therefore, alternative providers with pricing flexibility will be able to compensate for no number portability by their pricing strategies.

Impact of Brand/Service Bundling

- The brand and the types of services offered (local, toll, long distance) do not have as much influence as the price of the service or the impact on the telephone number, suggesting that most potential alternative providers will have an equal baseline from which to start. Across the different brand/service bundling combinations, the overall variation in percent of businesses willing to switch main lines is less than 5%.



Conclusions

- Although not as influential as the discounts or impact on the telephone number, brand will still have an impact on a business' final selection of an alternative provider. When asked which company they would switch to for local services, businesses preferences mirrored the existing market share disposition in the existing long distance market. This suggests that some primary factors in selecting a long distance brand are also evaluated when selecting a local brand, such as awareness, reliability, customer service. In the focus groups, it was clear that any potential local access provider must provide a certain "threshold" level of these elements to even be considered. However, since these items are basic measures of brand strength, they exist whether or not a business has to change its telephone number, and therefore should not be factors in the decision to adopt number portability.
- There is an interaction between brand and service bundling. If an incumbent long distance company offers local, toll and long distance service, it will garner slightly more local/toll business than another telecommunications company making the same offer. On the other hand, if another telecommunications company offers only local and toll, its potential is the same as an incumbent long distance company. This finding reflects (1) a certain level of resistance for businesses to combine all of their services with an unfamiliar provider (i.e., "put all their eggs in one basket") or (2) a certain level of satisfaction with their existing long distance service and, therefore, a reluctance to switch long distance providers.
- Satisfaction with the current long distance company is important in whether that company will be considered for local and toll services. While the majority of AT&T long distance customers would also select AT&T for local and toll, almost half of MCI customers and other long distance company customers (not including Sprint) would also choose AT&T for local and toll services, implying a certain level of dissatisfaction with this carrier.

Differences between Types of Businesses

- Medium-sized businesses (with 25 - 99 lines) generally are most likely to switch for any discount (even no discount or only 5% less). However, they are also more impacted by the availability of number portability than other business sizes, as 17% more will switch if they don't have to change their telephone number.
- While less likely to switch for no discount at all, large businesses (100 lines or more) are most impacted by higher discounts (e.g., 59% will switch main lines if offered 25% less from their long distance company). Additionally, these businesses place the least value on their existing telephone number (only 8% more will switch with number portability).



Conclusions

- Other than those differences, the “value” of the telephone number (as determined by the difference between businesses who switch with or without a number change) does not differ much between different types of businesses. The availability of number portability does have a greater impact on businesses that have Centrex, as 16% more Centrex users will switch if they do not have to change their number versus only 11% more non-Centrex users. Similarly, businesses who primarily use an “other” long distance company (not AT&T, MCI or Sprint) place the least value on their number, as they are probably more price sensitive and more likely to switch services in general.

Other Influences on Willingness to Switch

- Compared to the primary influencers (discounts, impact on number and brand), other “incentives” or factors such as reimbursement for re-printing or company relocation will have only a minor effect on a businesses willingness to switch local telephone providers. However, as found in the focus groups, these types of incentives are considered after the impact on the telephone number and the overall reliability and service of the company making the offer are evaluated.
- Incentives such as reimbursement for re-printing or customized number change announcements are mostly attractive to small and medium-sized businesses. The effect of these incentives is still small – four out of ten businesses will be influenced by an offer of \$1,000 towards stationary costs and only one-fifth will be much more likely to switch if a customized announcement is offered.



Understanding of Potential Local Access Competition

When the focus group participants were first presented with the concept of local access and toll competition, there was some initial confusion. Most of the concerns raised regarded the potential impacts a service provider change would have on other aspects of their telecommunications arrangement. For example, there were questions about how Centrex would be administered if a customer switched from Pacific Bell. More rudimentary concerns were raised regarding repairs and maintenance on lines and whether or not a new provider would be capable of meeting their business' telecommunications system needs.

In addition, there was skepticism among some participants about whether or not "promised" savings would be realized over time. Because of the varying services a business may have with Pacific Bell, business customers demanded a more concise definition of which specific services would be discounted if they switched their local telephone company before they were willing to make a decision. Additionally, most participants felt it was confusing to have different discounting for local access versus toll services, and had difficulty separating their own local and toll charges. As a result, it became necessary to describe a discount as a percentage less than whatever a business pays their local telephone company now, rather than discounting specific aspects of local service. This important finding became the basis for the discount attributes in the quantitative study.

It also was apparent that a certain amount of education and clarification was necessary for the participants to understand how local access competition would affect their business. When a new competitor enters the market, it is likely that they would educate potential customers about the local telecommunications environment and explain the impact of switching providers so as to simplify their sale. As a result, the quantitative survey was designed to simulate a "competitive pitch" as closely as possible by clearly defining the present local telecommunications environment, describe CPUC changes, and minimize confusion by delineating those telecommunications services that would be unaffected by switching providers.



Willingness to Change Number

Several issues regarding a business' willingness to switch its main phone number were raised by the participants or uncovered during the groups. Most importantly, a business' willingness to switch seemed most strongly related to the discount offered. Some participants expressed a minimum discount for even considering switching although others would switch for no discount (either to "get away" from Pacific Bell or consolidate all services with their long distance company). For example, large businesses tended to want a higher discount (more than 10%) before they would evaluate an offer to switch, but seemed more likely to switch for a higher discount than smaller businesses. In general, the higher the discount offered, the more participants would be willing to switch their local service provider.

Secondly, how the potential competitive scenario was presented to participants had a significant impact on their willingness to switch. If a specific phone number was positioned as critically important to the success of their business, participants became more resistant to switching providers and a phone number's perceived value was inflated. On the other hand, if the importance of the number was not initially discussed and a "competitive pitch" was presented to participants, the impact of switching a number was significantly reduced. This finding suggests that an alternative local access provider could overcome a substantial portion of the resistance to change a number purely by positioning the change correctly. When local telephone competition occurs, new market entrants are certain to develop marketing strategies that would minimize the perceived barriers to switching. Consequently, the quantitative study was designed to replicate the likely "pitch" as much as possible.

Furthermore, when participants realized they could keep their main line with their local telephone company and switch all other lines, the likelihood of businesses to switch providers increased. While a main line may have the business' published phone number, this line is primarily used for inbound traffic so a discount on that line is not as critical. Therefore, the increased willingness of businesses to switch their outbound traffic lines -or their "other" lines- to a new provider was an important finding. Any viable competitor who suggests this approach (i.e., to switch only "other" lines) seems likely to win at least a portion, if not all, of the "other" lines. As a result, the quantitative study was designed to capture a business' willingness to switch each type of line and the percent of each type switched.



Detailed Findings - Qualitative Phase

Finally, some business participants even volunteered methods for circumventing a main number change. Businesses that had moved or had experienced a recent area code change mentioned the use of Remote Call Forwarding (RCF) which, in effect, allows their published main number to remain unchanged to callers. Meanwhile other businesses had migrated to an inbound 800 number as their main business number so as to insulate their customers from future number or area code changes.

Influences on Willingness to Change Local Access Provider

When asked to suggest an incentive that would motivate them to switch local access providers, respondents immediately mentioned a discount off of their service. However, to ensure that all possible options were explored and then to narrow the field of incentives to be evaluated in the quantitative phase, an inventory of potential incentives and/or number change mitigators were evaluated in the qualitative phase. The list of incentives tested are shown below. While a pool of respondents emerged who would accept any offer to switch from Pacific Bell, another group emerged that could not be enticed into switching with any incentive.

Influence on Willingness to Change Access Provider

Incentive/Mitigator	High	Medium	Low
• Discount on local/toll service	✓		
• Service Provider:			
Long Distance Company	✓		
Other Telecommunications Company	✓		
Cable TV Provider			✓
• Announcement of Number Change	✓		
• Announcement and Automatic Transfer		✓	
• Duration of Announcement/Transfer		✓	
• Ability to customize announcement		✓	
• Ability to keep same prefix			✓
• Reimbursement for new stationary costs (\$500-\$1,000)		✓	
• Free 800 number for 6 months			✓
• Discount on Yellow Pages advertising		✓	
• Ability to change only a portion of lines	✓		



Detailed Findings - Qualitative Phase

In between these two poles, the reactions were varied and were primarily driven by a participant's business size or the quantity and type of lines under consideration (e.g., main lines or "other" lines).

Among the focus group participants, several of the incentives had a relatively high influence on a business' willingness to switch. These included the discount or savings on local/toll service and the type of service provider. The service provider was particularly important to some participants, and there was generally a strong resistance to switch to an "unknown" brand. In fact, some customers would not consider switching unless the telecommunications company could be assured to offer the same level of customer service, service quality, and brand familiarity that they currently have. In addition, some participants were unwilling to switch all their telecommunications service (e.g., local, toll and long distance) to any carrier and wanted the opportunity to "trial" a portion of their lines before committing completely.

A cable television company as telecommunications provider held universal disfavor among almost all business participants and was identified as an inappropriate provider of local and toll services for these customers.

Another "incentive" of high importance was the ability for a business to switch only a portion of their lines to an alternative provider. As described previously, respondents were more likely to switch their "other" lines versus their main lines, especially when offered a discount.

Of moderate importance to business customers were the announcement of number change, an announcement with transfer, and the duration of the announcement or transfer. At a minimum, Pacific Bell was expected to offer an announcement, if the number changed, as they do now. While the opportunity to customize an announcement was attractive to some small businesses, large and medium-sized businesses did not perceive any value in it. The announcement with transfer held some appeal, yet several participants were skeptical that customers would record the new number if they were automatically transferred. As for the duration of the announcement, some participants felt that one year was acceptable as they were likely to have notified their customers by then. Yet other participants stated they would want an announcement or an announcement with transfer for a longer duration.



Detailed Findings - Qualitative Phase

The offer to reimburse stationery costs of \$500-\$1,000 held some interest among smaller businesses. However, among large businesses, the offer had limited influence because of the small proportion of costs this amount would cover.

While discounts on Yellow Pages advertisements was appealing to those participants who had Yellow Page advertisements, there was significant doubt that real cost savings would be realized given the size of their Yellow Pages expenditures. Most of these participants would need to know what specific type of discount would be offered before they could judge its influence on their decision.

Maintaining a number prefix would provide little incentive for a business, as they would still incur the costs associated with a telephone number change. Participants with DID numbers said that they would rather have the last 4 digits of the number remain the same, rather than the prefix, so at least internal communications would be relatively unaffected by the changes.

Also of limited influence was the offer of a free 800 number for 6 months. This incentive was somewhat appealing until businesses realized the advertising costs involved with broadcasting a transitional and temporary number, which would be the same as advertising a new number.

While other incentives and marketing tactics could be used by actual entrants into the local telephone market, it would have been impossible to test all potential incentives and/or mitigators to a phone number change. Regardless, the evaluation of marketing strategies to mitigate a phone number change was not an objective of this research study. From the discussion surrounding these incentives, the major issues were determined and included in the quantitative phase, specifically, the discount on local/toll service, the service provider and type of services offered, the type of number change announcement and the ability to switch only a portion of lines.



Detailed Findings - Quantitative Phase

The following section covers the findings from the second, quantitative phase of the research, and is categorized as follows:

- Current Telecommunications Environment
- Impact of Elements on Willingness to Switch Providers
 - Technological Solutions
 - “Brand” and Service Bundling
 - Discounts
- Trade-off Between Service Discount and Number Portability
- Value of Number Portability (by Business Characteristics)
- Impact of Other Elements on Likelihood to Switch Providers
- Preferred Provider for Local Access

In certain sections, the results have been broken out by business size - either number of employees or number of lines. The following two pages provide a brief summary of the telecommunications environment among the survey respondents.



Current Telecommunications Environment

	<u>Total</u>	<u>Small Businesses</u>	<u>Medium Businesses</u>	<u>Large Businesses</u>
Average Number of Lines and Trunks	14.3	5.5	36.2	231.7
Average Number of Main Lines	3.0	1.8	7.1	22.5
Average Number of Other Lines	11.2	3.7	29.3	208.4
Average Total Monthly Bill	\$966	\$362	\$2,780	\$13,098
Average Long Distance Bill	\$563	\$265	\$943	\$12,546
<u>Incidence of Specific Telecom Products:</u>				
Single line phone/1 MB's	65%	69%	48%	54%
Centrex	14%	12%	23%	38%
PBX	12%	10%	17%	55%
Key System/KSU	12%	10%	21%	28%
Voice mail	16%	14%	21%	64%
T-1's	10%	10%	11%	51%
Least Cost Routing	10%	8%	19%	51%
DID Numbers	1%	--	2%	34%
800 Numbers	24%	21%	34%	62%
Number of locations	2.6	1.6	6.3	17.7
<u>Telecom Decision-making (if 2+ locations)</u>				
Centralized	53%	42%	70%	54%
Decentralized	38%	47%	21%	40%
	(n=172)	(n=19)*	(n=56)	(n=97)
Use telecommunications consultant	11%	10%	14%	29%
Yellow Pages advertiser	68%	68%	69%	63%
<u>Stationery re-print cycle</u>				
Every 6 months	8%	8%	9%	17%
Every 6 months - 1 year	17%	15%	27%	24%
Every 1-2 years	25%	24%	30%	24%
Every 2-3 years	15%	16%	10%	11%
Every 3 years or more	23%	24%	21%	21%
Likely to move in next 2 years	21%	21%	18%	14%
Percent of Business Population	100%	82%	16%	2%
(unweighted n)	(n=519)	(n=179)	(n=170)	(n=170)

*Small sample size; use caution when projecting results