THE PUBLIC LOOKS

AT

COMPUTER SERVICES

The Social Survey   Le Centre d'Etudes
Research Centre   Sociologiques

THE PUBLIC LOOKS

AT COMPUTER SERVICES

Proposal For:

DEPARTMENT OF COMMUNICATIONS

GOVERNMENT OF CANADA

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1. INTRODUCTION

Purpose Of The Study

The Department of Communications is interested in conducting a study
of the public to determine:

1. Public attitude towards computers in the light of their
   increasing use in a variety of fields and of the
   impending development of government policies concern-
   ing the computer industry.

2. Public receptivity to a desire for the possible services
   which might be provided by new computer/communications
   networks.

The Background Of Qualitative Research

To lead into this study, now proposed, and to develop hypotheses and
scope of public thinking, a number of group and depth interviews were
conducted in Toronto and Montreal. These have already been reported,
and have been heavily utilized in developing the plans -- particularly
the questionnaire -- for the present quantitative study proposal.

The Proposal

This current proposal suggests a quantitative study among 1,000 people
(men and women) in urban locations throughout Canada, covering the two
purposes described above.

Section 2 of the proposal discusses the sample of respondents.
Section 3 outlines the questionnaire. Section 4 discusses the
interviewing, Section 5 the tabulations, and Section 6 the report.
Timing and costs are outlined in Section 7, and the Appendix provides
a brief description of the team from SSRC that will work on this
project.

2. THE SAMPLE

The Universe

At least towards the start of an computer-home tie-up, the service
will be available only in larger communities. For that reason, the
universe of interest here, for this study, is Canadian cities of
50,000 and over. Both male and female household heads will be
questioned, but only one per household.

If desired, it will be possible to exclude, let's say the lowest
20% of the homes economically. If this were to be done, the argument
would be that this portion of the public would not have the finances
to be part of the computer linkage.

The Sampling Method

This will be a modified probability sample, in which every dwelling
unit in the defined universe has a known probability of being selected
in the sample.

Not everyone is home at the time a call is made. For this reason, there
is generally concern about the representativeness of the ones who <u>are</u>
at home.

SSRC does not recommend call-backs, because these are very expensive,
and don't add that amount of accuracy, in our opinion, for the dollars
spent. Instead, we recommend usage of the Politz-Simmons method of weighting

for not-at-homes. In brief, this means that if a person has been at home only one of the four evenings at the time you happen to call, you're only getting one-fourth of such people, and each such one should have a weight of four in your sample. Conversely, if a person tells you he has been at home all four nights during this time period, then you are getting 100% of such types, and this grouping should have a weight of just one.

We realize that some government agencies prefer the call-back system however, and therefore our price quotation gives costs for sampling handled in each of these manners.

The Number Of Calls

A total of 1,000 interviews will be completed. For all percentages reported on this base, the statistical error (at a two sigma level) will be 3.1%. This means that if 100 such surveys were undertaken simultaneously, and a figure from a particular one turned out to be 50%, in 95 of the 100, the figure would be within 3.1 percentage units of that, ranging from a possible low of 46.9% to a possible high of 53.1%.
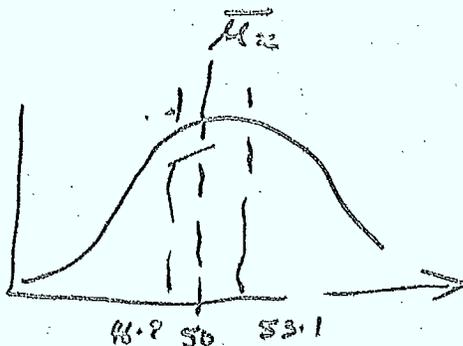
3. THE QUESTIONNAIRE

Areas Of Questioning

It has been decided, largely from review of the qualitative research previously reported, that the following areas are important to measure quantitatively:

1. Contact and familiarity with computers

2. Evaluation of the computer

3. Awareness of the possibility of in-home computer linkage

4. Reaction to computer services

5. Control of computer facilities

6. Will computer access be a status symbol

The Questionnaire Draft

A copy of the proposed questionnaire is attached. This seems to cover all of the agreed-upon subject areas. However, it _is_ to be regarded as a first draft, and SSRC welcomes input from the Department of Communications about any area of the questionnaire.

In fact, some definite help _is_ needed. We would appreciate it if the Department Of Communications would provide SSRC with a one or two short sentence description of each of the services covered in question 8. We think this is crucial so that each person approached in the survey will have a standard explanation of what the particular service is all about.

Most of the questions in the draft questionnaire -- which covers the next several pages of this report -- are self-explanatory. However, there are some that are worth a little commentary. Questions 8 (b), (c) and (d) cover the price that a person is willing to pay for the services he says he wants. It is not easy to ask a person for an estimate of price on this sort of thing. We suspect that some people will intentionally give a lower figure than they really believe, in the hope that pricing might be influenced by their reply. That is why, after we get their first price response, we find out whether they really believe it is a realistic price in their minds. And so if they give us a higher price in 8 (c) than they do in 8 (b), and then tell us that they are willing to pay this in 8 (d), we will take that higher price. If they say no they would not be willing to pay it, we will take the lower price. But questions 8 (b), (c) and (d) will be used to get a single price answer from each person for purposes of putting a table together. We will also, when we examine the results of this question, calculate the average price named per service.

While the questionnaire appears workable, one of the built-in features of the proposal is a test of a total of about thirty people, half of whom will be in the Toronto area, and half in the Montreal area.

This test will ensure that people understand the questions, and that the sequence of questions is one which flows smoothly. It is possible that minor changes may have to be made to the questionnaire as a result of this test, but the content of the questionnaire will not be changed.

COMPUTER QUESTIONNAIRE

1. (a) Today, almost everyone has heard of the computer. Do you, yourself, have any contact with a computer, or with products turned out by a computer, so far as you know?

   CONTACT ☐
   PRODUCTS ☐
   NO CONTACT ☐
   DON'T KNOW ☐

   (b) (IF CONTACT) Where do you have contact with a computer? (CHECK BUSINESS, IF THAT IS REPLY, OR WRITE IN OTHER RESPONSE)

   BUSINESS ☐
   OTHER _____

   (c) (IF PRODUCTS) What kind of products? (DO NOT READ LIST, CHECK WHICH, OR WRITE IN IF REPLY GIVEN IS NOT IN LIST)

   MAGAZINE SUBSCRIPTION ☐
   BILLS ☐
   BANK STATEMENT ☐
   DIRECT MAIL ADVERTISEMENTS ☐
   OTHER _____

2. (a) Are you, personally, employed outside your home? (IF NO, GO TO Q. 3.)

   EMPLOYED OUTSIDE HOME ☐
   NOT EMPLOYED OUTSIDE HOME ☐

   (b) So far as you know, does your employer have his own computer, or does he purchase computer time from an outside source?

   OWN COMPUTER ☐
   COMPUTER TIME FROM OUTSIDE SOURCE ☐
   NEITHER ☐

   (c) (IF OWN COMPUTER OR COMPUTER TIME) Do you, personally, have any contact with the computer personnel, or the product of the computer?

   YES ☐
   NO ☐

   (d) How do you like this contact? Do you enjoy it, not enjoy it, or do you feel neutral about it?

   ENJOY ☐
   NOT ENJOY ☐
   FEEL NEUTRAL ☐

   (e) Do you feel that your job is threatened by a computer?

   YES ☐
   NO ☐
   NOT SURE ☐

3. Some people think that in the long run, computers have advantages for mankind. Some do not. As I read each statement--some are favourable, some are unfavourable about computers--please tell me whether you agree with the statement or disagree.

	AGREE	DISAGREE	NO OPINION
Computers will give us more leisure time	☐	☐	☐
Computers threaten family life	☐	☐	☐
Computers will mean a higher standard of living	☐	☐	☐
Computers will contribute to mental illness	☐	☐	☐
Computers mean that we can have a lot more fun at home	☐	☐	☐
Computers will cause unemployment	☐	☐	☐
Computers mean that we can have more fun away from home	☐	☐	☐
Computers threaten our personal privacy	☐	☐	☐
Computers will mean a healthier life	☐	☐	☐
Computers will take over our personal lives	☐	☐	☐
Computers will improve the quality of education	☐	☐	☐
Computers will make people think less	☐	☐	☐
Computers will make it easy for one to change his occupation	☐	☐	☐
Computers are just another appliance	☐	☐	☐

4. (a) In total, do you think the computer is a blessing or a curse to man?

    BLESSING ☐
    CURSE ☐
    MIXED ☐
    NEITHER ☐

   (b) Why do you say that? (PROBE) _____

   _____

5. In the long run, do you think that man will control the computer, or will the computer control man?

    MAN WILL CONTROL ☐
    COMPUTER WILL CONTROL ☐
    MIXTURE ☐
    NO OPINION ☐

6.   What is your total impression of the computer? Is it an intelligent machine-- a machine with a brain-- or is it simply an adding machine that can also store information?

<div style="text-align:center">

MACHINE WITH A BRAIN   ☐
ADDING MACHINE WITH STORAGE   ☐
NO OPINION   ☐
</div>

7.   (a)   Do you think that the individual family will ever have access to a computer in its home?

<div style="text-align:center">

YES   ☐
NO   ☐
NO OPINION   ☐
</div>

(b)   Have you ever heard of the idea that people may sometime have access to a computer in their home?

<div style="text-align:center">

YES   ☐
NO   ☐
</div>

8.   (a)   Actually, sometime in the next ten or fifteen years, it will be possible for you to have access to a computer in your home. This could offer you many different kinds of services. There would be a monthly charge for the computer, and it would depend on the number and types of services you choose to have.

I'd like to describe a number of these possible services, and see which one's you think you might want to have. Then I'm going to ask you to put a price on the whole thing, by telling me how much you'd be willing to pay monthly to have all of the services you select.

But let's start with each service. As I mention each one, I will hand you a card which describes it briefly. You can tell me whether yes, it is a service you definitely would want, or no, it is definitely a service you would not want. (IF RESPONDENT NOT SURE ABOUT A SERVICE, CHECK AS NOT WANTED)

	WOULD WANT	WOULD NOT WANT
ENTERTAINMENT		
Ticket reservation service	☐	☐
Large selection of movies seen on TV screen	☐	☐
Music and cultural events	☐	☐
RECREATION		
Recreational courses: gardening, pottery, sewing, etc.	☐	☐
Games with the computer	☐	☐
Computer graphics: drawing on the screen with the help of the computer	☐	☐
TRANSPORTATION		
Transit schedules	☐	☐
Reservations for plane, boat, train etc.	☐	☐
Travel advice: maps and routes	☐	☐
Traffic and road conditions	☐	☐

8. (a) continued

	WOULD WANT	WOULD NOT WANT
GENERAL INFORMATION		
Encylopaedia	☐	☐
Dictionary	☐	☐
Library catalogue	☐	☐
Selected sections of newspapers	☐	☐
Magazines or articles	☐	☐
List of recent publications on a particular subject	☐	☐
Book reviews	☐	☐
Sports scores	☐	☐
Weather report	☐	☐
Want ads	☐	☐
HOUSEHOLD		
Recipe file	☐	☐
Shopping list and menus	☐	☐
Address list	☐	☐
Christmas or other special lists	☐	☐
Meter reading	☐	☐
Product specifications	☐	☐
Catalogue of products with comparative prices	☐	☐
Teleshopping from home	☐	☐
Reports on consumer testing	☐	☐
Answering service	☐	☐
Home surveillance	☐	☐
Electronic mail	☐	☐
Household hints and home repair suggestions	☐	☐
WORK AT HOME		
Access to work files at home	☐	☐
Secretarial services	☐	☐
Closed circuit TV hookup with work	☐	☐
FINANCIAL SERVICES		
Banking from home	☐	☐
Automatic bill payment	☐	☐
Instant cash and loans	☐	☐
Stock quotations	☐	☐
Purchase and sale of securities	☐	☐
Market analysis	☐	☐
SOCIAL SERVICES		
Information on social services and agencies	☐	☐
Taxation information	☐	☐
Legal information	☐	☐
Advice on personal and family problems	☐	☐
MEDICAL SERVICE		
Diagnosis of illness	☐	☐
Emergency medical service	☐	☐
Crisis advice centre: alcohol, drugs, suicide, etc.	☐	☐

8. (a) continued

	WOULD WANT	WOULD NOT WANT

EDUCATION

	WOULD WANT	WOULD NOT WANT
High school correspondence courses	☐	☐
University correspondence courses	☐	☐
Other adult education courses	☐	☐
Occupational retraining	☐	☐
Language courses	☐	☐
Tutorials and drills for school subjects	☐	☐

POLITICS

	WOULD WANT	WOULD NOT WANT
Voting on local issues	☐	☐
National referenda	☐	☐

(b) Now, let me tell you briefly what you have selected in the way of service. (READ OFF EACH ITEM CHOSEN). That is a total of (MENTION NUMBER) _____ of services. About how much monthly do you think you would be willing to pay for such services? (IF DON'T KNOW, ASK FOR A GUESS; TRY NOT TO ACCEPT A DON'T KNOW ANSWER)

$ _____
(ROUND OFF TO NEAREST WHOLE DOLLAR)

(c) Do you think this is a realistic price? What price do you think a computer source would have to charge you for these services to make it fair to them? (AGAIN, TRY NOT TO ACCEPT A DON'T KNOW REPLY)

$ _____
(ROUND OFF TO NEAREST WHOLE DOLLAR)

(d) (IF 8-c HIGHER THAN 8-b) Would you be willing to pay this price?

YES	☐
NO	☐
NOT SURE	☐

9. (a) If computer services of this sort were made available to people in Canada, which one of these do you think ought to provide and control this facility and its information? (HAND CARD OF CHOICES)

NATIONAL GOVERNMENT IN OTTAWA	☐
PROVINCIAL GOVERNMENT	☐
A SINGLE COMPANY, SUCH AS THE TELEPHONE COMPANY OR IBM	☐
A GROUP OF COMPANIES, SUCH AS TELEPHONE COMPANY AND IBM TOGETHER	☐
DOESN'T MATTER	☐
DON'T KNOW	☐

(b) (IF A SINGLE COMPANY OR A GROUP OF COMPANIES) Should this group be Canadian-owned and controlled, American-owned and controlled, or doesn't it matter to you?

CANADIAN	☐
AMERICAN	☐
DOESN'T MATTER	☐

(c) Why do you say that? (PROBE) _____
_____
_____

10. Suppose these home computer connections were to be offered tomorrow to people in some nearby community, but not right here. What kind of people would you think would be the first to get this service? As I read a list of terms, please tell me which one or ones most likely would describe such people.

WELL-TO-DO □
PEOPLE WHO LIKE NEW THINGS □
PEOPLE WHO WANT TO IMPRESS THEIR FRIENDS
                        AND NEIGHBOURS □
GADGET-MINDED □,
HOMEBODIES □
THOSE WHO ARE AWAY FROM HOME A LOT □

BASIC DATA

11. Would you say that the head of the household is a gadgeteer-- that is, he likes gadgets? If you would rate him high on this compared with other people, you'd score him 10 If you rated him lower than almost everyone else, you'd rate him a 1. If he was about average, you'd rate him 5 or 6. The other numbers are for in-between ratings. Now, where would you rate him as a gadgeteer from a low of 1, to a high of 10?

1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □ 10 □

12. Now, rate your family on the same sort of scale as to whether you tend to be first on the block to get something new, or last. A 10 means you're more likely than almost anyone to be first with something new, a 1 means you're less likely than almost anyone to be first with something new.

1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □ 10 □

13. SEX: (DO NOT ASK)   MALE   □
                                FEMALE   □

14. What age group should I check you in: Under 20 years?   □
                                               20 to 29 years?   □
                                               30 to 39 years?   □
                                               40 to 49 years?   □
                                               50 to 59 years?   □
                                               60 years and over? □

15. Approximately what is your total family income?

                              Under $5,000   □
                              $5,000 to $7,499   □
                              $7,500 to $9,999   □
                              $10,000 to $11,999   □
                              Over $12,000   □

16. What is the occupation of the head of the household?

_____ IN _____
         (TYPE OF JOB)   (TYPE OF COMPANY)

17. How many children, under 17, are there in your family? _____

18. Type of Dwelling (OBSERVE, DO NOT ASK)
                                    Apartment   □
                                    Duplex or semi-detached □
                                    Single family house   □
19. Community Size
                                    50,000 to 100,000   □
                                    100,000 to 500,000   □
                                    over 500,000   □

4. THE INTERVIEWING

SSRC Interviewing Generally

As you know, SSRC is a wholly owned subsidiary of Canadian Facts.
Therefore it is not too surprising that SSRC makes use of the full
field facilities of Canadian Facts.

These full facilities are comprehensive and of high quality. There is
a nation-wide field staff of 1,200-odd part-time investigators.

This is a highly selected group. Before anyone becomes an interviewer
for Canadian Facts, she must pass a work sample test. That is, she
takes on an actual assignment (one not used commercially) and must perform
to minimum standards before she is put on the staff. She then receives
a very broad, general and thorough training. She is also specifically
trained for each study.

There is thorough quality control, too. In all of the cities to be
included in the Department Of Communications' study, there is a local
supervisor, who is in day to day touch with the investigator. The work
of each investigator is rated on each project. Each questionnaire is
carefully checked for its internal consistency.

A total of 10% of the work of each invetigator on each study is verified
for honesty. This is not because we expect to find dishonesty -- we
rarely do. But it simply is a quality control tool -- one of many -- which
is designed to keep the investigator on her toes.

With this kind of a field staff, and this kind of a field program, it is not surprising that we do not want to have to retrain our interviewers after they have worked for some other research organization. As a result, everyone of our field workers must sign a contract that she will not work for any other research house. Now we don't argue that this means we have a 100% exclusive field staff; of course it doesn't. But it does mean that we try, and that may, perhaps, mean that we have about 70 to 90% of the people on our staff working exclusively for us. It is literally true, however, that if we learn that any of our workers have done work for another firm, we will dismiss them.

Field Work On This Study

All field work for this particular study will be scheduled for weekday evenings, and weekends. The purpose is two-fold. First, we want to be sure to locate a proper sample of men. Most of whom are not at home during weekdays. The second is that we want to have a proper sample of working women. If either of these two groups were under-represented in the sample, the results would very likely be unrepresentative.

5. THE TABULATIONS

In-House Computer

SSRC, through the facilities of Canadian Facts, has available an in-house computer. This turns out finished survey tables, including the alphabetic as well as numeric data.

This may not seem like an important point to a prospective client. Actually, it is.

Its major advantage is the assurance of quality that it provides. A beautifully printed computer table can hide a lot of flaws, errors. But not at SSRC. We know about the quality of in-put going into that computer, we know the people who are running the computer, and therefore we know that the output is dependable.

Another advantage is that time schedules are met. We control the computer; it is not scheduled by an outside computer house.

The Tabulations

For each question, of course, a set of totals will be shown. However, there will be a large number of factors by which the results for any question can be broken. These include:

1. City size

2. Sex

3. Age

4. Socio-economic or income level

5. Familiarity with the computer

6. Attitude towards the computer

7. Occupation of the household head

8. Gadgeteering inclination

9. Orientation to the new

10. Presence of children in the home

11. Type of dwelling

What we mean, is that the results of any question may be shown, for example, separately for men and for women. This is one factor that has been used in breaking, then.

In our pricing, we have assumed that up to a maximum of three break factors will be applied per question. The Department of Communications and SSRC will have to determine what these factors will be for each question.

There are four factors in the above list which require a bit of explanation. One of these is familiarity with the computer. In this case, we are going to take the replies of a single individual to questions 1 and 2, and give each person an index of familiarity with the computer.

In the item which we called "attitude towards the computer" we are going to give each person's response as a scale value for question 3.

We will allow a plus one value to any answer which is favourable towards the computer, and a minus 1 value for any answer which is unfavourable.

The gadgeteering interest of the head of the household will be measured by question 11. Now if you look at question 11 for a moment, you may feel that all the answers will be towards one side of the range. Even if this happens to be ture, it doesn't matter. It will be our purpose to divide the responses here into the top half and the bottom half, regardless of the value at which this occurs, so that we will end up with one half of our sample where we will arbitrarily say the person is gadget minded, the other half where we will arbitrarily say that he is not. We will do just the same sort of thing towards his orientation to the new, which is in question 12.

6. THE REPORT

Organization

Essentially, the report will have three major sections (plus one which describes method): highlights, discussion, and detailed tables of results.

The highlights will be exactly that; this will be a review of the major findings from the study. The discussion of results will be a more detailed discussion, reporting some of the greater detail. The tables of results in detail will be just that, giving these question by question.

Type Of Writing Style

The writing in an SSRC report is direct and straight forward. Long sentences and words are not used where short ones can do. There is no jargon, no gobbledegook.

Simply put, the reports are as direct as we can make them!

7. TIMING AND COSTS

Costs

For this study as outlined using the Politz-Simmons method
in place of call-backs, costs are $18,000. With three call-backs
instead, the price is $23,600.

Timing

From the date of authorization and receipt of materials, or
questionnaire approval, which ever is latest, it is estimated
that we will need thirteen and a half to seventeen and a half
weeks to deliver our report.

This does not allow time for any further questionnaire input
from the Department of Communications following our testing of the
questionnaire.

APPENDIX

A. THE TEAM TO WORK ON THIS PROJECT

The two people from SSRC to work on this project will be Dr. A.B. Blankenship, and Dr. A.C. Welch.

A one page summary of the background of each man is provided, to assist you in arriving at the judgement as to whether to assign this study to SSRC.
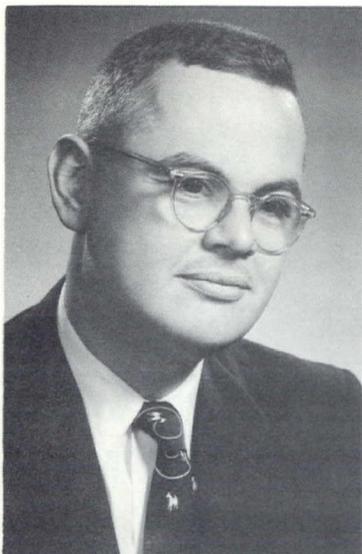
A. B. BLANKENSHIP, Ph. D.

Dr. Blankenship is a Vice-President and Director of Canadian Facts Co. Limited. He has been with the firm for three years.

In total Dr. Blankenship has had some thirty years of experience in marketing research, with leading North American advertising agencies, research firms, and an advertiser. His experience includes the gamut of all kinds of research studies, and for all varieties of research clients, both in Canada and the United States.

He is author or co-author of five books in marketing and marketing research. He has had numerous articles published in scientific publications.

Dr. Blankenship has been a member of the editorial staff of the Journal Of Marketing since the early 1950's. He is a Fellow Of The American Psychological Association, a member of the Professional Marketing Research Society (Toronto), a member of the Market Research Council (New York), a member of the Market Research Society (England), a member of the American Marketing Association, and a diplomate of the American Board Of Psychology.

His Ph.D. is in psychology, from Columbia University.

A. C. WELCH, Ph.D.

Dr. Welch is a Senior Project Director of Canadian
Facts Co. Limited, where he has been associated for the
past eight years.

He has had a long experience in marketing research in
North America, in such varied positions as Marketing
Director of Knox-Reeves Advertising (Minneapolis),
Chief of the Special Surveys Branch, War Production
(Washington) and Research Director of Campbell-Mithun
Advertising (Minneapolis).

His Ph.D. is from the University of Minnesota, in
psychology. Since his association with Canadian Facts,
he also has been Special Lecturer in Marketing Research
at the Graduate School of Business, University of Toronto.

THE SOCIAL SURVEY RESEARCH CENTRE.
--The public looks at computer services

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