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INTRODUCTION AND DIFFUSION OF ELECTRONIC COMMERCE – WHAT IS SWITZERLAND'S POSITION IN THE INTERNATIONAL COMPARISON?

Report on the international research project
ECATT Electronic Commerce and Telework Trends

MANAGEMENT SUMMARY
GENERAL POPULATION SURVEY

presented by

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What is Switzerland's position today with regard to the diffusion, acceptance and usage of new workforms and business methods in the economy and society? How will businesses and consumers react to the E-Commerce challenge today and in the future?

One of the most extensive international surveys of the public and businesses so far gives well-founded scientific answers to these questions. A consortium of distinguished research institutes from 10 countries of the European Union (Denmark, Germany, Finland, France, Ireland, Italy, Netherlands, Spain, Sweden, UK) and Switzerland, carried out the research project ***ECATT99 Electronic Commerce and Telework Trends***. In it the world of work (telework) as well as the new (electronic) forms of commerce and business processes are studied. This study is therefore: officially designated as „Benchmarking New Ways of Working and New Forms of Business".

Switzerland is taking part for the first time in this international comparison which, in the European framework, has already been done (with regard to telework) 3 times since 1987. The benchmarking study is of particular interest to our country as, at an international level, it provides the opportunity to compare Switzerland with other countries and at a national level to compare the individual socio-demographic segments of the population and the sectors and regions of the economy with each other.

In Europe, within the framework of ECATT99, representative surveys of a total of about ***<u>8,100</u> private individuals*** in the population (General Population Survey), ***400*** of those from German and French Switzerland, as well as around ***<u>4,300</u> decision makers*** in businesses of all sectors (Decision Maker Survey), ***200*** from the whole of Switzerland, were carried out according to an internationally uniform and comparable methodology. Computer aided ***telephone interviews (CATI)*** were used as the research method. In addition, in a total of around 100 detailed case studies in businesses, the researchers documented examples of "best practice" with regard to E-Commerce and telework.

In Switzerland the survey and analyses were carried out by both partner organizations WI♦SO DR. SCHOCH + PARTNER WIRTSCHAFTS- UND SOZIALFORSCHUNG in Horgen/Zürich (General Population Survey) and the University of Applied Sciences (Fachhochschule Solothurn Nordwestschweiz FHSO; Decision-Maker Survey). WI♦SO is responsible for all the project's fieldwork in Switzerland.

The following institutions have taken part in the project under the chairmanship of the consultancy and research institute empirica (Bonn): Teledenmark (Denmark), University of Tampere (Finland), Institut de l'audiovisuel et des telecommunications en Europe (IDATE, France), Work Research Centre (Ireland), Overmars Organisatie Adviseurs (Netherlands), Swedish National Board for Industrial and Technology Development (NUTEK, Sweden). Desarrollo y Recursos S.L. (Spain). In addition, separate comparable data (Case Studies) was collected in the USA and in Japan to enable benchmarking with Europe.

In Switzerland, a non-member of the EU, research was not financed by the EU commission but by the private firms Arthur Andersen AG and UBS Card Center AG (WISO study segment) as well as by the Federal Office for Education and Science (FHSO study segment). We thank these organisations and institutions very much for their valuable support.

This report is limited to the ***General Population Survey on Electronic Commerce***[1] project section. A separate report will be prepared for the project section on ***Telework*** which will be available by the end of 2000[2].

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[1] The complete detailed research report on the ECATT General Population and Decision Maker Survey on Electronic Commerce has recently been published and can be ordered from us (see appendix), however, initially only in ***German*** with an English summary:

SCHOCH, Rolf & HARABI, Najib (2000): Introduction and Diffusion of Electronic Commerce – What is Switzerland's position in the international comparison? Report on the General Population and Decision Maker Survey 1999, 147 pages, 56 illustrations (colored graphics), 5 case studies on Electronic Commerce in Switzerland. Cost Fr. 700.00, USD 460.00

[2] Summarized Final Report by the project management for the European Commission on both parts of the project, Electronic Commerce and Telework, can be downloaded from the URL www.ecatt.com.

A short summary of the most important ***results*** of the representative survey on E-Commerce follows:

1. ***Switzerland is well advanced with regard to households' ownership and use of the necessary computer and telecommunications hardware and software as a technological prerequisite for access to the Internet.***

   At the end of 1999, 66% of all Swiss interviewed have a PC or other computer available in the home. A further 16% of all those interviewed have the intention of acquiring a computer over the next one or 2 years. It is therefore likely that by 2001 a total of around four fifths will be computers owners. Switzerland, together with Sweden, is at the top of the position table of the 10 partaking EU countries (EU average: 44%). From the viewpoint of households' IT-infrastructure, Switzerland has favorable conditions for the diffusion of the socio-technological innovation E-Commerce in the Business-to-Consumer area.

2. ***In the Swiss population, as also Europe-wide, the Internet enjoys a very high, almost 100% general awareness level in all socio-demographic population groups.***

   The public's information and knowledge level therefore also represents a favorable starting point for the application and success of E-Commerce.

3. ***With regard to effective use of the Internet and other online services –proportion of users in the total population – Switzerland lies in second position in Western Europe after Sweden***.

   53% of the Swiss population have used the Internet at least once, around 46% have used it during the last month or the last 3 months. However, Internet use is spread very unevenly over the individual socio-demographic population sub-groups. Users are as before mainly young men of higher education and professional status in urban surroundings.

4. ***Access to and actual use of electronic mail are widespread in Switzerland. 40% of all those interviewed have received or sent at least one electronic message in the past month***.

   In the international comparison Switzerland shares first position with Sweden (EU average in 1999: 18%). In Switzerland, over the next one to 2 years, a considerable growth in Email use is anticipated. By 2001 existing and additional new users using an Email service will amount to around three quarters of the population.

5. ***In spite of the high awareness level of the Internet, so far its use for online shopping is not very widespread in Switzerland***.

   The most frequent commercial uses of the Internet are sourcing and evaluation of information – but less frequently actual purchase of goods or services. In Switzerland today, as in the whole of Europe, the Internet and other online services are principally used to swiftly and effortlessly gather general information on suppliers, offers, shopping opportunities and conditions, and less often to place orders. Furthermore, there is a marked preference for the provision of free information.

6. ***Where purchases have already been made these most often concern the typical "E-Commerce products", i.e.: 1. books, brochures or magazines (1999, 16% of all interviewees), 2. computer software, CD-ROM or other computer accessories (12%), 3. travel, hotel accommodation (12%), and tickets for sporting events, cinema etc (10%).***

   In comparison these percentages are around 3 to 4 times as high as the total of regular and occasional users in the weighted EU10-average. In the next positions, after some considerable gap, follow music, CDs, videos (8%), and electric/electronic equipment (7%), grocery and consumer goods, wine (4%), clothing, textiles, shoes (4%), online magazines or online news services, or other chargeable online services (4%).

7. ***In the area of Internet banking today around 11% of all interviewees have attempted to receive information from their bank or carry out payments by giving credit card or account numbers.***

   Almost the same amount (10%) has instructed their bank to make a transfer. This is around twice as many as the EU10 average. In the coming 2 years a significant growth of around one fifth can be expected in these two areas.

8. ***For the near future there is a considerable but by no means « explosive » growth potential in commerce-related use of the Internet or other online service.***

   Between one fifth to two thirds of the current „not yet user" segment, equivalent to an additional 10-44% of all interviewees, depending on application area and product class, are considering becoming active users over the next one to 2 years. The applications mentioned most often are again, sourcing of information (regarding tickets, prices, suppliers, travel, hotels, banks) and not ordering. In the future actual purchases will become more important than so far but they will still not be in the forefront. In respect of the year 2001 the uses most mentioned are ordering of tickets for cinema or sporting events, travel or hotel accommodation bookings.

9. ***From the public's viewpoint the advantages of electronic shopping are mainly easier and faster shopping, less time and less effort needed as well as the larger and more varied ranges on offer.***

   These are the potential features supporting diffusion of electronic commerce. However, financial savings are seldom expected.

10. ***According to consumer opinion the barriers which still hinder or delay the further diffusion of E-Commerce today are mainly lack of security or increased risk, disadvantages of virtual shopping without physical contact to the product*, *and little benefit over conventional shopping.***

Compared to the population of the 10 EU countries, the public in Switzerland is considerably more critical where security problems are concerned. Little or insufficient technological equipment of users also creates a barrier. In contrast, little or insufficient user knowledge and costs are of comparatively lower importance. However, almost three fifths do not acknowledge the necessity or the benefit of online shopping in principle and therefore do not have any reason to change their behavior.

11. ***In Switzerland new and unconventional payment methods for online shopping meet with skepticism***.

Only a quarter of the population would accept the transfer of credit card or account number, of "cyber cash" or of another special Internet currency in order to pay for online-purchases. In contrast two fifths of all interviewees would be prepared to accept payment with the conventional and generally low risk cash on delivery method.

12. ***Further diffusion and actual breakthrough of E-Commerce in the Business-to-Consumer area*** requires amongst other things that the Internet in general and online shopping in particular become more "secure" and "beneficial" from the potential users' point of view and that their reservations in these respective areas are broken down.

Summary

Technological conditions and prerequisites for diffusion of the "Electronic Commerce" innovation in the Swiss population are favorable.

Ownership and usage of the necessary IT-infrastructure in households as well as access to the Internet as a prerequisite for participation in electronic commerce are already widespread. In this regard, Switzerland today is at the top of the 10 most important EU countries. However, this latent market potential is not yet exhausted. In fact, further diffusion is hindered and delayed by unresolved security problems and consumers' considerations of risk and benefits.

Conclusions for Suppliers

For all businesses which offer their products or services via the electronic commerce channel in the Internet or wish to do so in the future, it is important to actively utilize the favorable starting position and market potential for Electronic Commerce. As a result of the findings of the population survey, they have to reduce the existing risks and consumers' insecurities on the one hand – e.g. data protection, loss of money and risk of fraud.

On the other hand they should demonstrate the relative economic, social and psychological advantages of virtual shopping and banking on the Internet through persuasive reasoning. The same obviously applies to suppliers of technological infrastructure and of know-how in the new economy – i.e. computer manufacturers, telecommunications and software businesses, providers, consultants, and other suppliers of related products and services.

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