Virtual Informatics Museum

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INTRODUCTION

The only virtual informatics museum (VIM) existing in Portugal was conceived over personal memoirs and a long investigation and research work.

The first publication by VIM was done over the first trimester of 1997 in Terravista, a site created by the Ministry of Science and Technology (Ministério da Ciência e Tecnologia - MCT). On its first version, available in the Terravista Project, the contents were not chronologically ordered. This option motivated some criticism by users demanding this chronological order which led to a subdivision in two sections of the VIM contents:

- Pre history to informatics: starting chronologically with Foz Coa pictures (18.000 B.C.) and ending with the description and photographs of ABC (Atanasoff-Berry Computer) built in Iowa University by John Vincent Atanasoff and Clifford Berry between 1939 and 1942.
- Virtual informatics (computer science) museum: beginning with ENIAC public presentation, February 1, 1946 and ending with description and photos of SE/30 Macintosh computer made available by Apple computers in 1989.

Both sections offered substantial resources in the shape of text, digital photos and links appealing to recurrent visits, investigations and researches.

The site Terravista, created by the MCT, was sold and is now a private company denominated TER-RAVISTA, SA.

Those public memoirs of VIM were lost although it may be possible to reconstruct them from backup copies.

The VIM had as main purpose to help Management and Economics students of Évora University, teaching them how to use a data communication net and sites to search for documentation and texts beyond Libraries and Manuals.

The entrance "gate" to VIM had to be electronic and both a computer and an "account" in the data communication net would serve as a ticket and mean of transport. The student should obtain an account in an ISP (Internet service provider) and connect his or her computer to the net.

In Portugal, in 1997, the main ISP was Portugal Telecom, which sold Netpac, a box containing an installation manual and three diskettes of 3"1/2 one of which had the 2.0 version of Netscape Browser.

The student should also have a modem (provided by Portugal Telecom) and a fixed phone contract. This system was costly once the user had to pay in a monthly basis the contract of the fixed phone and the use of the line (reduced to a local call cost in some places). Furthermore the speed of data transmission was very slow—about 9600 bps—and if one used the phone line for conversation the data communications would be unavailable and vice-versa.

In order to overcome these restrictions, on July 4, 1997, the VIM became hosted by a server of Évora University and it became available via RCCN—Rede da Comunicação Científica Nacional (National Scientific Communication Net) which was the most recent communication net of the Portuguese Universities until then and could reach a transmission speed of 96 Kbps.

Students and professors of Évora University could access VIM through the University LAN (local area network) and its use within the campus was free of costs.

Obviously, the external access (from a geographical place other than the campus) to VIM had to be done through Telepac or another ISP. However within different Universities the access was made via RCCN.

On July 7, 1997, the national newspaper, Expresso, reported in its XXI section the VIM and also in July 1997 there were already links to VIM in Altavista Browser, in the University of Manchester (UK) site, in the University of Glasgow (UK) site and in the Portuguese browser "aeiou."

In the beginning of 1998, it started to be used a free statistical system provided by Webalyser to com-

pute de use of VIM. In the end of 1998 the average of monthly accesses to VIM in the University of Évora was 143 and the average of monthly accesses to "Pre history" was 114.

Fifty-three percent of the total accesses were from Portugal, 24 percent were from unknown origins, 7 percent from commercial places in the USA and 7 percent were from Brazil.

Since October 1998, Webalyser System began to be used also in the VIM site in the server of Minho University.

As the conceiver and designer of VIM moved to the information system department (ISD) of the University of Minho, the execution of the project VIM was also transferred from the server of Évora University to the server in University of Minho.

The purpose of VIM expanded to the students licensing in information management and engineering in the University of Minho, teaching them how to use a data communication net and sites to search for documentation and texts beyond Libraries and Manuals, as well as support the development of capacities of Multimedia students and graduates who were taking masters in information systems classes at the same university.

As a result the VIM design was changed now including graphical animation of some pictures, new themes like the 1st Informatics National Meeting (Leiria, 1997), the First Portuguese Congress in Informatics (Lisbon, 1980), new links, the possibility of on-line reading of PDF (portable document format) books, the possibility of watching online videos using a "streaming" system as well as several exhibitions inside and outside campus namely in polytechnic institutes, professional schools, high schools, government organizations and civil associations.

In the beginning of 2003, it was applied to the VIM site of Minho University another statistical and counting system providing more accurate data than Webalyser.

This new system, Nedstatbasic, which was recently nominated Webstats4U, provides data concluding that the VIM internationalized mostly through Portuguese and Spanish Idiom accesses.

From November 1998 until now, the quantitative of accesses to VIM totaled 145,684 with a monthly average of 1,694 and a monthly average growth of 5 percent.

Approximately 51.8 percent of the accesses are from South America, 43.5 percent are from Europe and 1.4

percent are from North America..

Fifty percent are from Brazil, 41.7 percent are from Portugal, 1.3 percent from Uruguai, 1.3 percent from the USA, 0.5 percent from Spain and 0.5 percent from Mexico.

91.5 percent have origin in countries where Portuguese or Spanish are spoken, 1.6 percent were English in spoken and 0.3 percent where French is spoken.

BACKGROUND

After the official commemoration of the 50 years of the public presentation (Goldstine, 1993) of ENIAC (electronic numeral integrator and computer), one of the first electronic computers built by Man, whose public presentation took place at Penn's University Houston Hall on February 1, 1946. There was a boom in records referring to the construction and manipulation of those subsystems all over the world. These records have been obtained mainly through virtual Museums built over electronic repositories accessed via Internet. As examples we may find the VLmp (virtual library museum page) (Bowen, 1995), created in 1994 by Jonathan Bowen at Oxford University and later moved to the Museophile site by ICOM (International Council of Museum); the reconstruction of computers (Napper, 1998; Sale, 1993; University of Cambridge, 1999), magazine articles as "Qui a invente l'ordinateur" (Les Chaier de Science et Vie, 1996), books like "Roteiro Prático da Internet" (Magalhães, 1995), "A History of Manchester Computers" (Lavington, 1998), "A Computer called Leo" (FERRY, 2003), Recommendations of International Entities as IFIP (international federation for information processing) (IFIP TC3/TC9, 1998), the integration of physical memoirs in already existing Museums such as "The Museum of Science & Industry in Manchester," where we can find a replica of baby machine (The Museum of Science & Industry in Manchester, 1998) and projects for museums devoted to this theme.

Countries with a museological tradition, as the United Kingdom or France, integrate the memories of computational subsystems in already existing museums.

Some European universities or connected institutions seek for building memories' repositories containing subsystems from several origins. Most repositories belong to virtual museum gender.

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