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IT CULTURAL HERITAGE: PRESERVATION AND MAKING IT AVAILABLE AS SEEN FROM THE PERSPECTIVE OF THE MUSEUM OF THE HISTORY OF COMPUTERS AND IT IN KATOWICE

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The concept of cultural heritage has been continuously evolving, encompassing not only resources connected with people's every day life, previously opposed to so-called high art, but also those which were created in a recent past, i.e., some decades ago. The process of this encompassing, and thus bestowing a special importance on selected artefacts is referred to as heritagization. It can be applied to any manifestation of human creativity which a given social group wishes to consider as important for it. Then the group decides to assume it as an object of its identification and cares for its preservation; however, acts of this group may reach further: towards the interpretation and presentation of the extract of the past they have chosen to all society.¹

It was already in the 1990s that within IT-engineering and academic circle the idea was born to preserve for future generations the hardware and software which worked as important artefacts of historical, social, and educational value.² At that point they gradually became treated by museum curators of highly-developed countries as computing cultural heritage.³ As a result, computing museums have for some dozen years been a subject of academic reflection, this increasing the volume of experience facilitating organisation and running of such institutions. Currently, the number of physically existing computer and IT museums (excluding game museums) can be assessed at 70. The to-date analyses of such museums

have most commonly focused on museums located in Europe (e.g., Linköping⁴, Tampere⁵) and in the United States (e.g. Mountain View⁶, Boulder Creek⁷, Austin⁸).

In Poland such museums have not been studied, although their number has clearly grown over the last years. The *State Register of Museums* run by the Ministry of Culture, Cultural Heritage, and Sport, features three such institutions: the Museum of the History of Computers and IT in Katowice, the Warsaw Museum of Computers and Games, as well as the Museum of Computers and Consoles in Osielsko; the three are ranked with the 'under organisation' status. The Register has not included: the Museum of Games and Computers of the Past Era in Wrocław, the Museum of Personal Computers in Łódź, the Apple Museum Poland in Piaseczno, the Museum of Computers and Games in Pabianice, the Electronics Museum in Cracow, and the IT Museum at the Nicolaus Copernicus University in Toruń.

The key feature that these contemporarily created private computing museums have in common is that visitors have original artefacts available for direct interaction there.⁹ This has proven possible also thanks to the assumption made among the IT circles that old computers would be restored to being functional and operational, although there is a general awareness that most likely it will not be possible to maintain them in running order for centuries. However, by showing operating computer systems to society and making them available to the public such museums can best fulfil their educational and scientific mission.¹⁰

Authors of pioneer studies related to the preservation of computing cultural heritage have proposed tasks which an IT museum should fulfil:¹¹

- purchasing, collecting, renovating and restoring functionality of the exhibits;
- transfer of the data registered on old carriers (tapes, floppy disks) onto contemporary carriers and their safe archiving;
- securing spare parts, tools, devices, software, manuals, and documentation;
- registering interviews with individuals committed to the development and maintenance of old systems;
- educating museum staff;
- disseminating knowledge among society by publishing educational materials on computing heritage and its impact on socio-economic and cultural development;
- cooperating with associations of computing's history lovers, designers of old systems, computing industry, scientific and educational institutions.

What are the features that computing museum exhibits have in common? They are not presently manufactured and supported by their manufacturer; in many a case, the manufacturer no longer exists. Since their life cycle as market products ran its course about 20 years ago, they are available only in the second-hand market and among collector's items. For the entire majority of contemporary computer users they are of no use in the fulfilment of their current tasks owing to insufficient processing speed, too little memory, incompatibility with contemporary programs and peripheral devices. The overview of technology and IT museums worldwide shows that the production of computer electronic systems spans the period from the 1940s to

the early 21st century. What we come across there are also originals and replicas of mechanical and electromechanical calculating devices invented in the 19th century and in the first decades of the 20th century, e.g. Charles Babbage's difference engine and Konrad Zuse's Z3 computer.

Restoration of an old computer system involves material artefacts: the Central Processing Unit (CPU), peripheral devices, memory carriers, manuals, documentation; as well as intangible ones: the operational system together with the software and data. The challenge of its restoration results precisely from the dual character of artefacts without which the exhibit cannot become fully operational: entirely operational hardware combined with a compatible and efficient software. This functionality can be gained only thanks to the work of engineering staff able to start them up. Regrettably, the older the computing solution, the fewer competent individuals there are, since their designers quit, taking with them their expertise and experience. Presently, this challenge is becoming more acute even with respect to computers from the 1970s whose designers are over 70.

The difficulties encountered during the restoration of computer systems cover hardware and software. The hardware damage occurs in mechanical and electronic elements, as well as in plastic ones which can yellow and crack. When the genuine spare parts are not available, museum curators are forced to replace them with new solutions, this, however, decreases the authenticity of the exhibit, but enables to restore its functionality. Another possibility is to use 'donors', namely twin devices not giving hope for their functionality restoration, which then turn into a source of spare parts.

Electronic damage occurs first of all on the computer motherboard and expansion cards on which track conductivity can be broken, integrated circuits can burn, battery electrolyte can leak, capacitors can bulge.¹² Physical and chemical damage can also apply to data carriers: magnetic tapes, floppy disks, optical disks, and hard disks. Improper storage conditions (excessive temperature and humidity) as well as careless or excessive use and manufacturer's faults are the key factors shortening their life.¹³ Another category in challenges results from the progressing generational changes of the hardware and software between which compatibility has been systematically decreasing. This means that old software cannot be entered into and/or started on newer equipment, and *vice versa*.¹⁴

The profile of the Museum of the History of Computers and IT (MHKI)

The subject of the analysis is the Museum of the History of Computers and IT (MHKI), the largest in Poland institution concentrating on the preservation of computing heritage. The source material for the paper was collected during a study visit and as the effect of an interview conducted on 15 February 2019 with the Museum Director Krzysztof Chwałowski. The goal of the investigation was to study the numerous aspects of the institution's operations, with a particular focus on its innovatory formula. A penetrating analysis of the combination of the preservation function with the peculiar model of making the collection available, the sources for acquiring exhibits, as well as visitor profiling were conducted.

Interestingly, the initiative of creating MHKI came from private individuals who on 4 March 2015 founded the Association of Friends of the Museum of Computers for the purpose. The institution serving as a museum had existed even before: from 12 December 2012 housed at the College of Mechatronics in Katowice; however, on 25 October 2016, it was transferred to its current permanent display location at 2 Sejmu Śląskiego Square. MHKI does not own the property. It occupies a part of the building owned by the Katowice Commune and pays a reduced rent, this proclaimed with a resolution of the Municipal Council.

MHKI has the status of 'under organisation', which enables greater freedom in the selection and arrangement of exhibits. According to the Director, with such a status a museum is not obliged to have a fixed unchangeable permanent exhibition. The Charter valid in such a museum has a status of 'a Charter of museum under organisation', and this situation is valid until the launch of the permanent exhibition, when it is replaced with the ultimate Charter, thus completing the organisation stage.

The Museum's Charter foresees the following scope of responsibilities: collecting, preserving, cataloguing, describing, conserving, providing access to IT cultural heritage: computers, and other IT technology devices as well as software and technical documentation. It is in harmony with Art. 2 of the Act on Museums which additionally imposes the responsibility of educational activity on museums.

The Katowice MHKI is the largest-scale project of preserving IT Heritage in Poland, both as seen against institutions listed in the *Museum Register* and those found outside it. It is prominent with the highest display surface among computing museums (780 sq m), on which the largest number of exhibits is displayed (212 computers, consoles, and gaming machines) whose production range is the widest: from 1970 (Odra 1304) to 2006 (Apple iMac G5). The inventory boasts an impressive number of artefacts: ca 4.000, although over 90% of them are in storage and not available to visitors. The Museum also uses the facility at 1 Oddziałów Młodzieży Powstańczej Street, with a storage of saved equipment awaiting renovation and service rooms there.

The Museum's priority is preserving Polish computing heritage from the 1960s–1980s, and this is what currently the institution's energy and financial means are mainly allocated to, which is best testified to by the 'Thanasis' operation, begun in 2017 and now completed, consisting in restoring full functionality to the Odra 1305 computer together with the peripheries. It is the only operating specimen of this type in Poland, and its CPU dates from 1985. MHKI is also the only owner of the Odra 1304 computer. The collection of Polish unique pieces from the 1970s closes with the SMC-10 and PRS-4 minicomputers, while the era of the 1980s is represented by the following microcomputers: ComPan 8, ComPan 16, MiSter Z80, Bosman 8, Elwro 800 Junior, Elwro 801 AT, Mazovia 1016 and others. The collapse of the Polish IT industry following the transformation and lifting of the COCOM (Coordinating Committee for Multilateral Export Control) restrictions in 1990, opened the domestic market to the import of modern technologies; at the Museum, this is testified to by IBM minicomputers, supercomputers, and servers from the 1990s (S/390, Z Series), DEC (VAX 4000), Fujitsu (M-1400), Cray (Y-MP) together with the accompanying peripheral devices (e.g. hard disk drives and tape libraries).

As for the collection of PCs and 8- and 16-bit home computers, it is already ample and representative enough to be considered to have been completed, and its worth is boosted by the fact that about 50 specimens representing these generations are available for interaction. They represent such brands as: Atari, Commodore, Sinclair, Timex, Amstrad-Schneider, Spectra video. The IBM computer line can be followed on the example of all the generations, starting with PC, through XT, AT, 386, 486, up to Pentium, as well as in the form of clones produced by foreign companies, such as Compaq, Atari, Commodore, Amstrad, Sinclair, Olivetti, Acer and the Polish leaders: Optimus and JTT Computer. A valuable completion of the collection of desktop computers is the presentation of early solutions of portable suitcase computers from the 1980s by Osborne, Compaq, IBM, Amstrad, Kaypro, and Commodore.

When trying to evaluate the importance of the amassed collection, we have to do it in three categories. The display of home computers, PCs and IBM PC-compatible computers from the 1980s and 90s in the form that is present at MHKI should be treated as a standard for the most important computing museum in the country. It also represents an expected standard among international museums, therefore in this respect the Museum's collection is not exceptional on an international scale. The display of foreign minicomputer, server, and supercomputer systems is incomparably less numerous and slightly accidental as for the type of devices, their application or producer, this resulting from their modest presence in the Polish market of the 1990s. Within this category foreign museums are evidently richer, thus MHKI's display presenting the most efficient structures from 25 years ago can be complementary and constitutes a kind of a counterpoint to desktop computers. The third category of collection that should be perceived as the most precious and unique is formed by computers from the 1970s and 80s produced in Poland, and serving as a testimony to the Polish computer industry. No other museum domestically and abroad can rival MHKI in this respect. This actually applies to all the IT museums worldwide which collect their domestic products; it is justifiable, since in the period spanning the 1950s–1990s the number of countries which had their own domestic IT industry and manufacturers was incomparably higher than today. Today people with passion for IT want to become acquainted with these structures regardless of their country of origin.

Overall, out of the total number of 212 exhibits shown at the Museum, 183 are desktop computers (61 of them are available for interaction), 13 are portable computers (4 available for interaction), 11 are arcade machines (4 available for interactions), and 5 are game consoles (4 available for interaction). In total, 34.4% of the items are available for interaction, with the remaining ones (units shown in display cabinets, switched off, defective, incomplete) treated as those not available for interaction to the public.

The Museum features three ways of displaying computing equipment. The items classified as available for interaction are set in one sequence on long tables by the walls or on table-islands in the middle of the room. The status of being available for interaction implies that the device has the CPU in working order and that it is together with its peripheries (keyboard, monitor, optionally: a mouse, joystick, gamepad,



1. Room dedicated to the Elwro Odra 1305 Computer from the 1970s; two square objects on the right are the central units: equivalents of contemporary microprocessors



2. Room dedicated to 8-bit home computers from the 1980s.

speakers) available at the station; that it is turned on and has a program running or a list of programs ready to be run by visitors. There is a chair at every station, since the process of becoming acquainted with the exhibit and interaction with a visitor on average takes between around a dozen to several dozen minutes. Another display format is showing exhibits in glazed showcases; these present more unique and valuable equipment, smaller in size, better preserved, most often in good working order, which is not displayed for interaction, however it can be demonstrated during special events. Another display format takes place in open spaces within which large-size exhibits, unavailable for interaction, are spread around quite randomly: workstations, minicomputers, servers, portable computers, libraries and tape memory rewinders, hard disk drives, monitors, and other peripheral equipment.

At MHKI only guided tours are possible: guides present the content of the display in an appropriate order, they outline the backdrop of the technological advancement on timeline, pointing to characteristics, possibilities and means of computer use. Following the presentation, visitors are given time to themselves and can freely move through the display, interacting with the exhibits. The total visit time of one organized group stands at 2–2.5 hours; individually the public are free to visit only on Saturdays.

The presence of a competent guide at the Museum is essential, since the display is clear only to computing enthusiasts; contrariwise, the majority of the public expect that computer technology is presented to them in a vivid and systemized way. After all, the purpose of the Museum is to

disseminate knowledge and stimulate a deeper reflection thanks to a personal contact with artefacts from the past. What is noticeable in the Museum is the lack of exhibits' descriptions (these present only for ca 12% of the items); neither are thematic sections described. The cause for it possibly to be found in limited staff, time, and financing, though on the other hand, it might result from a deeper motivation. Furthermore, the Museum website does not feature full descriptions of all the exhibits, since in the Museum founders' view a creation of an online equivalent of the real collection could diminish the turnout due to potential visitors having satisfied their curiosity through virtual contact.

Paradoxically, MHKI, despite being a technology-dedicated museum, does not provide such a degree of narration connected with sensual impacting as occurs in contemporarily created museums using advanced multimedia solutions. This peculiar conservatism of the arrangement manifested in the monotony of lined-up computers and showcases dominates in computer museums worldwide. It results from limited display space and modest financial means which are, first of all, allocated to the time-consuming and laborious process of restoring exhibits to working order.

The Act on Museums stipulates preservation of exhibits which are treated as an inviolable whole. Therefore, it is not possible to remove 'boring' programs or to format disks to install a new operational system. Although an option could be considered to create the most attractive set of programs and games most typical of its time for each computer, this is simply not done. The only source of software is the permanent memory content of the devices entered into the Museum's inventory. As a result, each computer features a different set of software: more or less exciting and extensive, differently attractive to visitors, in various language versions. The stations, however, do not present lists of programs, neither is the means of starting them provided, which mirrors the lack of labels accompanying the exhibits. As a result, visitor's interaction is limited to starting only one program, selected by the Museum, most often a game.



3. An example of a highly authentic interaction spot: Amstrad/Schneider CPC 464 home computer (produced from 1984) with a monochromatic GT 65 screen, DMP3000 dot matrix printer, 3 inch FDD, and a set of pirated games on tapes; instruction in English relevant for CPC 6128



4. Display not available for interaction dedicated to the Sinclair ZX Spectrum home computer produced as of 1982

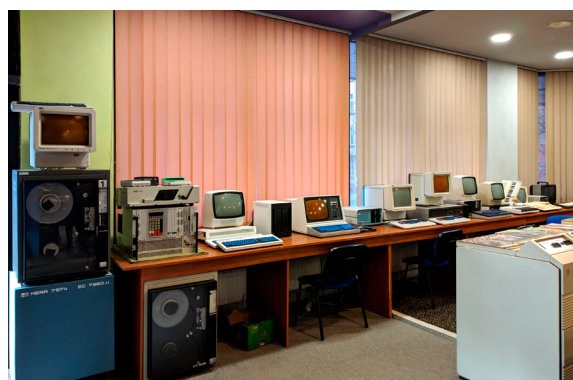
From among the goals that MHKI wants to programmatically reach the two: interactivity and authenticity get to the fore, since the displayed equipment is genuine paired with peripherals from the analogical period, i.e., CRT monitors, ball mice, joysticks, dot-matrix printers, floppy disk drives, tape recorders, cartridges, instruction manuals and books which visitors can become directly acquainted with. The Museum's founders are followers of an orthodox approach to equipment conservation. The effort to preserve authenticity consists in the fact that they aim at presenting exhibits in the state and configuration in which they were at the production post in their heyday, while at the same time preserving the traces marked by the passage of time, applying solutions and components typical of the era in which the system was created.

The aspiration to combine authenticity of exhibits with their interactivity brings about the risk that the equipment's aesthetics deteriorates or that it is physically damaged by visitors, thus causing a waste of the effort invested in the renovation. The only means of solving this problem is to possess extra specimens of the identical model: not just in full working order which could replace the displayed one, but also faulty ones that play the role of spare part 'donors'. This is possible only thanks to the collectors' passion and the work conducted for the last 20 years by the Museum's founders who have amassed their sufficient collection. They used to buy the equipment whose owners were willing to get rid of, since its worth as potential artefacts of technological culture was not generally acknowledged. This allowed to avoid the escalation of the costs of amassing the collection resulting from a speculative increase in price of old computers, fashion, and decreasing supply. The launch of a museum was thus a consequence and crowning of their long-standing activity and of the desire to share their achievements and accomplishments. Those projects aiming at establishing computing museums right now and only starting to create their collection are running a high risk of failure.¹⁵

The major source of collecting exhibits are donations from legal persons, most frequently state-run enterprises and public institutions which modernize their IT resources. They represent different branches: railway, energy, mining, metallurgy, and are most frequently located in Upper Silesia. Within this category other entities can be found, too: hospitals, research institutes, universities, sports centres, recreation centres, and the army. They take credit for 30–40% of the donated equipment. An analogical contribution can be credited to foreign companies operating in Poland, which systematically replace their IT base, and instead of incurring disposal costs, they donate their computers to MHKI, who even come to pick up the equipment themselves with their own transportation. Donations from physical persons account for ca 25%. On two occasions in 2018 it was national museums (Museum of the AGH University of Science and Technology and Army Infantry Museum in Bydgoszcz) who deposited their Odra 1304 and 1305 computers and their respective peripheral devices with MHKI recognizing them as the only entity factually and infrastructurally prepared to renovate this type of exhibits. In 2016, the Museum of



5. Other artifacts made available for interaction: leading magazines published in Poland in the 1980s dedicated to IT and electronics: 'Bajtek', 'AudioVideo', 'mikroklan'; in the background the Mainframe Fujitsu M-1400 system from 1992 not available for interaction



6. Polish-manufactured professional and home computer systems from the 1980s: operational though not available for interaction and with no description

Power Industry in Łaziska Górne donated an SMS 10 computer produced in Poland in the 1970s.

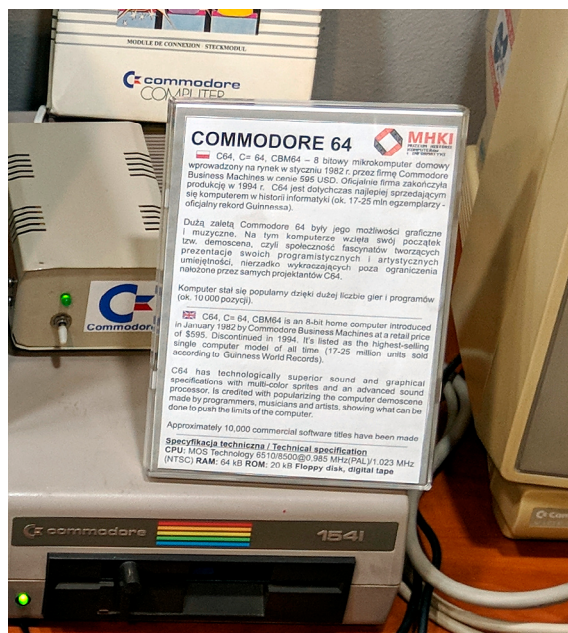
MHKI is a market entity, thus making the collection available to visitors is run on commercial basis. The majority of the public are organized groups of primary and secondary school students from Upper Silesia (2–3 groups daily on a working day), while the main motivator is entertainment provided by archaic, intriguing computer devices not found in everyday life. Another smaller group is made up of university students representing various departments: cultural studies, IT, computer design, game studies; they, in their turn, are attracted by the possibility of exploring the world of old technologies. The third group amounting to about 5% of the total turn out is composed of a group of retrocomputing lovers from Poland, Western Europe, and the USA, arriving at the Museum predominantly over the summer holidays. The latter's are mainly sentimental visits: the desire to restore the memories from the 1970s–1990s as well as to see and touch the devices they used to apply in the past. Thus the Museum depends on school groups and its turn out is impacted by the school timetable and weather conditions in the Silesian Voivodeship. The annual turnout stands at several thousand visitors, additionally boosted by 2.000–3.000 individuals flocking into the Museum on the Long Night of Museums.

The Museum's financial standing, similar to that of the majority of computing museums worldwide, affects its employment structure. Despite the fact that the staff number is high (52 individuals), the Museum does not offer them employment contracts, and only in several cases the staff have contracts of mandate. Thus, almost everybody involved in working for the Museum, is a volunteer, which is also typical of computing museums in other countries of the world.

In the case of narrative museums guides are of key importance. At the moment of this research being performed, nine individuals – volunteers provided guiding services. Half of them were enthusiasts of the topic for whom the very contact with historic technologies, participation in their preservation and in events connected with games and computing history suffices as reward. They prepare new museum classes and travel with expositions to national and international exhibitions. Together with the founders, they take care of the collection through renovation, conservation, and repair, restoring the exhibits to working order, as well as through cataloguing and increasing the collection volume, working out and creating new displays. It is the volunteering of designers, service technicians, and operators of computer systems created in the 1970s–1980s that is of major importance for Museum's rescue operations.

The volunteering guides find this a precious opportunity to practice interpersonal relations and phrasing messages addressed to a group visitor, particularly children, teenagers, and foreigners. These individuals do not require any technological training, but only need to have an ability to express themselves at ease and to establish lively communication with a group. The requirement of expressiveness, sequencing, and contextuality, bordering on heritage interpretation, is assigned top priority. The goal is to avoid the monotonous reciting of technical specification at each station.

The remaining guides need to be trained in their technological competences and knowledge of the exhibits, which is a laborious and time-consuming process. Since



7. Example of a bilingual description of the exhibit showing the most popular worldwide Commodore 64 home computer produced as of 1982



8. Console and home computer games published in the 1980s and 90s, attracting Museum's public's major segment: children and school students

(All photos: – M. Pstrocka-Rak, G. Rak)

they are not experts in the topic and have responded to the Museum's vacancy offer, MHKI employs them with contracts of mandate. Covering the theoretical and practical programme, the training is free of charge and concludes with a theoretical exam in rudiments of computing and of the exhibition, as well as a practical one consisting in giving a guided tour of the exhibition. After a successful exam, the Museum issues a certificate valid for two years entitling its holder to serve as a guide to Museum groups. Candidates are expected to express themselves with ease, boast experience of having worked with children and teenagers, have immaculate manners, be interested in technology, and to be willing to work at different times, including weekends.

As can be seen the operations of MHKI are based mainly on voluntary work and passion of the committed individuals, however, it would be interesting to know if their efforts are noticed and assisted by the external environment. The general answer to this is positive, and the greatest portion of good will is demonstrated by the Municipality who have decided to provide the Museum with some premises, allowing to adapt them for its purposes, and lowering the rent. Other supporting entities are private companies who contribute to a degree to the current upkeep of the Museum through sponsoring contracts. From among 10 such companies, eight represent IT industry, seven represent domestic capital, six of which are located in Upper Silesia. Only one of them is a global company. The assistance provided by companies and physical persons intensifies on the Long Night of Museums.

Interestingly, the companies which sponsor the Museum are in their majority managed by individuals born in the 1950s–1970s, having studied at technical departments at Upper Silesia universities in the 1970s–1990s. Their most likely motivation for supporting the Museum may have been on the one hand the appreciation of a unique initiative that the region can take pride in, thematic coincidence of the Museum profile and the company's scope of activity, and the urgency to preserve artefacts of the Polish computing industry which had once constituted an integral part of the cultural resources of this industrialized region. On the other hand, a sentimental attitude to the devices they used at universities, and later when launching their careers, may be a plausible reason, too.

What is the position of MHKI as seen against other private domestic institutions which bear the word 'museum' in their name, while focusing their thematic interest on computer systems? Importantly, the majority of them neither fulfil the requirements provided for in Art. 1 of the Act on Museums, nor run the full repertory of actions described in world literature. They actually are service facilities, focused on profits, charging for an opportunity to play a computer game on an old computer or console, in this way monetizing the fashion for retrocomputing. Their display is usually created with about a dozen or several dozen computers and consoles from the 1980s–1990s, made available for interaction. Their owners do not seem to reveal aspiration to systematically and consistently complement and extend their collections in harmony with definite presumptions, to make efforts to restore exhibits to full working order, to run educational and research activities, to train museum staff, to register and publish materials connected with the history of computer technologies, to establish cooperation with the circles grouping designers of old systems. As seen against this backdrop, on the national arena four institutions, fully deserving the 'museum' term, stand out: the discussed Museum of the History of Computers and IT in Katowice, the Museum of Games and Computers of the Past Era in Wrocław (MGiKME), the Museum of Personal Computers in Łódź (MKO), and the Apple Museum Poland (AMP) in Piaseczno.

MGiKME can be defined as an entity run in the most modern, dynamic and pro-market way, effectively attracting new visitors, firstly individual ones (families with children, tourists), this possible thanks to the capacity to identify their

expectations.¹⁶ The pro-market attitude is accompanied in their case by a substantial capital: basis made up of exhibits, passion, knowledge, and experience, which the founders want to share with the public, both within the Museum itself and in social media (YouTube, Facebook). Out of 195 exhibits, 27%, mainly consoles and arcade machines, are available for interaction. As a result, MGikME gets the highest rating by TripAdvisor users among the Wrocław museums.¹⁷

MKO, in its turn, is an example of a museum specializing in IBM PC – compatible computers, of factual standing at the highest possible level, however organizationally and commercially of the weakest position. This resulting from the fact that the founder consciously renounced profit, making the display available for interaction free of charge, and this happening only several times a year, exclusively in the spring-summer season. Out of the 49 meticulously prepared exhibits, as many as 93% are available for interaction. This is an example of a project of a hobbyist, implemented with much dedication, workload, and expertise, enjoying high popularity, regrettably, mainly with the locals.

AMP represents a similar ideological concept as far as commitment is concerned, since it was established only with the efforts and financial resources of an Apple lover. Initially located in its founder's home, it has been in operation since 2017; as of 2019 a new seat for the Museum has been prepared, which has currently suspended the Museum's operations. It boasts about 1.400 hardware and software exhibits, in their vast majority having undergone renovation and in working order; they represent the whole array of the company output from the 1970s to the present. Interactive visiting used to be possible upon an individual appointment, while the founder served as the guide free of charge. The goals of this Museum's operations fully harmonise with the provisions of the Act on Museums and stipulations present in literature. Once the new seat has been opened, it will undoubtedly become a museum of more than just domestic impact.

To sum up, the major strength of MHKI is that it owns a large basis of equipment and programs built up over a dozen or so years' work of its founders. Moreover, the Director perceives the chance resulting from the context of a historical-political location and collection range in relation to the interest of museums from Western Europe and the USA in computers produced on this side of the Iron Curtain. This is well testified to by the 2015 Conference titled 'High Tech behind the Iron Curtain' held together with the Katowice branch of the Institute of National Remembrance (IPN) and under the patronage of the Institute for the History of Science of the Polish Academy of Sciences.

Therefore, running MHKI provides opportunities for contacts with museums and research units open to cooperation, to holding exhibitions together, and to the exchange of devices and experience. The majority of computing museums worldwide share lack of patronage or financing from the central or local-level authorities, relying on volunteers and building collections thanks to donations and founders' private purchases. At the same time, the greatest danger to the Museum results from the lack of ownership title to its seat. This fact may potentially imply destabilizing consequences: termination of the lease contract, increase of rent and utility costs, alteration of

the use the building, its thorough renovation, or sale. A certain danger can also be identified in the fact that the Museum depends to a great degree on one segment of the

public: children and teenagers living in the region, at the same time neglecting the segment of individual visitors (tourists): Polish and international ones.

Abstract: It is the biggest museum of IT technologies in Poland: Museum of the History of Computers and IT in Katowice (MHKI) that the paper is dedicated to. The trend to create this kind of museums has been observed in technologically-advanced countries for over 20 years. It is connected with the shift in perceiving technological accessories of a daily life, which have been gradually incorporated into the circle of cultural heritage, and subsequently covered with institutional protection. Founders of such museums generally rank among private entities and private individuals motivated by their passion to preserve and popularize technological heritage among the present and future generations.

What IT museums worldwide have in common is the rarely encountered in classical museology model of allowing visitors a direct interaction with the exhibits. At the same time, these museums are market operators, which, apart from culture-forming activity, forces them to achieve their autonomy and financial stability first of all owing to the visitor turnout and partnership contracts with outside entities: companies and the media. All these issues were the topic of an extensive interview with MHKI's Director which provides the material for the paper. The acquired information may serve as a source of knowledge and inspiration for potential founders of other IT heritage museums to be established in Poland.

Keywords: Museum of the History of Computers and IT (MHKI), technology museum, IT museum, cultural heritage, IT heritage.

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