

Application Areas of Knowledge Management Instruments in Museums

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Abstract: Nowadays, museums are facing changing expectations and influences. Financial restrictions, the creation of digital archives as well as increasing competition through the leisure industry demand efficient and sustainable action. In the article the museum is looked upon as a knowledge system, and selected activities are analysed from a knowledge management perspective.

Key Words: museums, knowledge organization, knowledge management instruments

Categories: H.0, H.1, H.3, H.3.7, H.5.1, H.5.3

1 Introduction

The International Council of Museums [ICOM 2001] defines the following distinguishing features for museums: "A museum is a non-profit making, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of people and their environment."

In the new millennium, museums have to dynamically adapt to their environment on account of their normative mission. Especially in times of global knowledge explosion, museums ought to fulfill the task of education of society. This can be achieved by serving as a discussion platform for the information society. The privatisation of museums, which is currently happening in Europe, leads to institutional autonomy but demands economic viability. The increasing number of alternative leisure facilities results in changing visitor expectations, which are a further challenge.

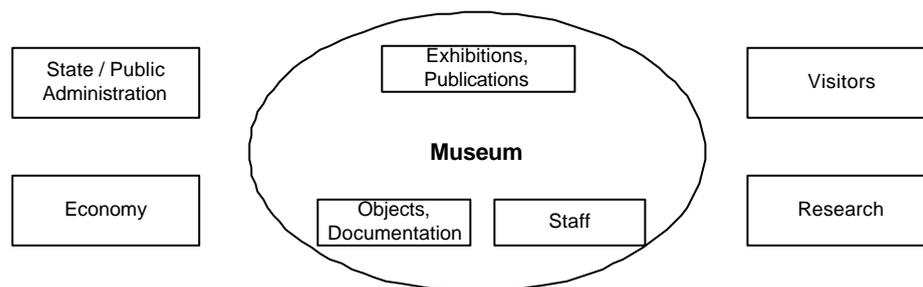


Figure 1: Museums are facing changing expectations

2 Knowledge Environments

From a knowledge management perspective, the elements presented in figure 1 can be identified as participating in knowledge processes.

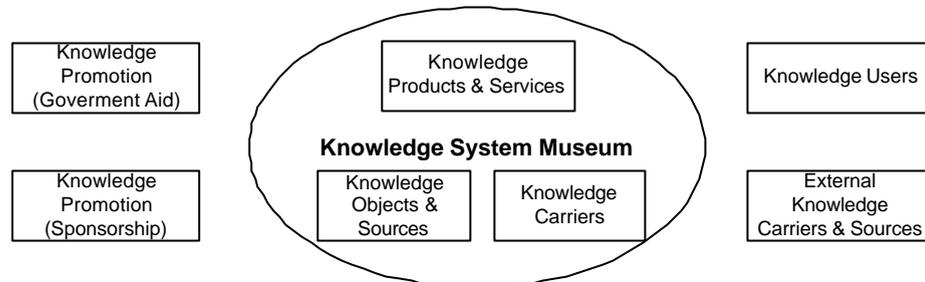


Figure 2: Knowledge Environments

2.1 Knowledge System "Museum"

In the knowledge system "museum", *knowledge carriers* create *knowledge products and services* by processing *knowledge objects and sources*.

2.1.1 Knowledge Objects and Sources

The following knowledge sources are directly available to museum work: the *object*, *field research*, the screening of relevant *literature* and the *documentation units* based on results gained.

2.1.2 Knowledge Carriers

All of the museum staff form the group of knowledge carriers: *heads of department*, *curators/scientific researchers*, *preservationists*, *museum paedagogues*, *public relations and marketing experts*, *administrators*.

2.1.3 Knowledge Products and Services

Knowledge products and services cover activities such as *exhibitions*, *discussions*, *presentations*, *visitor guidance*, *workshops for the public*, *expertises*, *conferences*, *merchandising articles*, *Internet presence* etc.

2.2 Knowledge Users

The group of knowledge users consists of various kinds of visitors: *individuals*, *tourists*, *experts*, *collectors* and *school groups*.

2.3 External Knowledge Carriers and Sources

Cooperation Partners/Affiliates (other museums, universities, libraries, archives), *exhibition designers* (architects, multimedia producers), *museum consultants* are externally available knowledge providers.

2.4 Knowledge Promotion through Government Aid

Until a few years ago public authorities provided a financially profound basement for the preservation of cultural heritage. The situation of museums owned by the Austrian state changed after they had been hived off from public administration. Nowadays, new challenges such as the conception of interactive multimedia presentations and the systematic digitisation of object and source inventories demand for a greater budget. The current financial support by the Austrian government – referred to as the billion for museums – is far from sufficient.

2.5 Knowledge Promotion through Private Sponsorship

The autonomy of museums demands for a coherent marketing concept. The search for potential *sponsors*, the establishment of contacts with *media corporations*, the *setup* of cooperations with *private businesses* for research and development projects foster an up-to-date productive work.

3 Museum Activities and Knowledge Implications

Selected museum activities which are concerned with knowledge creation and transfer are illustrated in the following table. The table is divided into five columns: task, its purpose, knowledge carriers and resources involved, results and possible support by knowledge management instruments.

| Task | Purpose | involved knowledge carriers | consulted knowledge resources | result | knowledge management support |
|-----------------------------------|--|--------------------------------------|------------------------------------|--|--|
| shaping of organisational culture | knowledge sharing in order to foster team spirit and individual competency | whole staff | "neural network" | functional knowledge organisation (explication, transfer, comm., integration, learning, storage) | trainers, coaches, mentors |
| recruitment | expansion of the organisational knowledge base | administration, scientific personnel | publications, online job databases | employee entry | expert directory (yellow pages), communities of practice, job agencies |
| project team formation | Group formation according to personal qualifications and social competency | administration, scientific personnel | résumé, various publications | project planning and realisation | competencies matrix, knowledge cartography, personality profiles |

| Task | Purpose | involved knowledge carriers | consulted knowledge resources | result | knowledge management support |
|---|---|--|--|--|--|
| meeting | knowledge transparency, strategy development | scientific personnel | written notes, electronic presentations | minutes | knowledge transfer meeting |
| conference | knowledge transfer | internal and external knowledge carriers | written notes, electronic presentations | establishments of personal contacts, contribution to scientific progress | knowledge transfer meeting |
| creation and participation in knowledge platforms | electronic knowledge transfer | internal and external knowledge carriers (esp. establ. communities of practice) | electronic documents, online databases | contribution to scientific progress | content management, groupware |
| field research | discovery and exploration of original knowledge (re)sources | internal and external knowledge carriers (esp. research colleagues) | objects, documentation units, written and electronic documents | hypotheses verification | knowledge transfer meeting |
| object documentation | registration and scientific examination of objects | scientific personnel | objects, literature, research results | documentation units | (object) database, classification system (eg. thesaurus) |
| application for public investment | money | ministries, scientific personnel, public relations and marketing, administration | business reports, esp. preservation and mediation of cultural heritage | financial grant | knowledge networks (cultural institutes) |
| sponsor acquisition | money | sponsors, public relations and marketing | business reports, esp. visitor statistics, advertising space | cooperation contracts, financial grants, advertising media | statistics software, ERP system, presentation software |
| exhibition conception | creation of a pool of objects with accompanying context information | scientific personnel | documentation units, electronic documents | information architecture for exhibition | knowledge transfer meeting, content management system |
| exhibition prototyping | proof of concept coherence | scientific personnel, external exhibition designers | documentation units, electronic documents, plan of exhibition area | prototype / model | visualisation software (CAD, rendering) |

| task | purpose | involved knowledge carriers | consulted knowledge resources | result | knowledge management support |
|---|---|---|---|--|---|
| exhibition realisation | implementation of concept / prototype | museum staff, external exhibition designers, sponsors, media partners, scientific and business cooperation partners | calls for tender, documentation units, plan of exhibition area, object positioning, show -case layout | exhibition | project management, workflow management |
| visitor retention and acquisition | formation of "friends of the museum" | visitors, public relations and marketing | newsletter, annual ticket | regular customers, foundation of a society of friends of the museum, financial grant, patrons | customer relationship management |
| workshop | lively knowledge provision to visitors | museum paedagogues, visitors | exhibition (esp.interactive installations) | creative experimenting | learning laboratory |
| conception of digital edutainment platforms | electronic provision of knowledge and exchange of ideas | museum paedagogues, multimedia designers | electronic documents created by scientific personnel, software requirements specification, prototype | interactive platform (with e-learning content - computer based training - and communication functions) | content management-system, multimedia authoring tools |

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