SPARKLE

case

D   RS Digital Incubator
for Museums

Who | Institutional Profile

Institution	Stiftung Neanderthal Museum
Location	Mettmann, Germany
Short Description	The Neanderthal Museum (NM) was opened in 1996 at the world-famous site where the first identified Neanderthal was found. The high standard of self-financing and visitor orientation is firmly embedded in the mission of the museum. The museum is an extracurricular place of learning and a particularly well-recognised national venue for an eventful excursion; it also functions as a place of specialist information on Neanderthal research and human evolution. The museum´s core topic, human evolution, highlights humanity as a diverse community that is subject to constant change. In order to do justice to this claim, the museum´s offerings range from layperson-level to scientific, and from analogue to digital.
Ownership	Foundation under public law (with the city of Mettmann as guarantor)
Size	Ca. 170,000 visitors a year

Approach to Digital	*Input by Rick Springer and Anna Riethus* *Part I* ***The Mystery of the Visitors' Motivation*** ***A reprint from the Reminiscences of R. M. Springer, late of the NM's Research Department*** The use of the digital has always been a matter of course in all departments of the NM and is constantly being adapted and expanded according to staffing and infrastructural possibilities. For larger projects within the framework of the digital transition, however, the NM is dependent on third-party funding. **Exhibition management** The concept of our media offerings in the exhibitions is to provide different media for different types of learners. The NM uses as many different formats as possible to address its target groups in as focused a way as possible: • Audio narratives as well as short informative films are available as part of the exhibits. • In 2021, the project NMsee created an inclusive museum experience for the blind and visually impaired via a mobile game and a corresponding infrastructure. • In 2023, the mobile game Eiszeitwelten/ Ice Age Worlds was launched, which was developed with participation of pupils to create low-threshold, playable stories relating to the exhibition's topics in the digital space and outside of the museum. **Communication & Marketing** Digital media are an integral part of our communication. The NM is represented online on Facebook, Twitter, YouTube, Instagram and with an online blog. The content focus is set differently in the various channels, e.g.: • blog: staff members from all departments provide insight into the museum's work; • Facebook: promotion of exhibitions and events; • Twitter: news from the world of science; • Instagram: attractive photos highlighting events and exhibitions.

Education

The museum's education program uses digital formats in various areas, e.g.:

- tablets available for school classes as part of workshops;
- GPS geocaching as a digital treasure hunt for various groups and families;
- live online workshops and guided tours.

Research

The development and expansion of databases and 3D databases has always been an important pillar of our externally funded research, including:

- the development of the NESPOS database;
- the development of the Digital Archive;
- the digitisation of collections such as DISAPALE and Sammlung Wendel.

Since 2020, in addition to archaeological research projects, the NM conducts third-party funded projects with a museological focus on the topics of inclusion, participation, diversity and visitor research. Also, a regular structure for audience surveys is to be established in order to best employ the financial and human resources in future. Increasing the range of the museum offerings and their quality in line with the requirements and wishes of the public is a goal for the upcoming months and years.

What | Case

Project Title	Digital Audience Analysis – Audience Segmentation Based on User Motivation
Timeframe	November 2022 - June 2023

Concept & Approach	*Part II* *A Digital Study in (all but) Scarlet* *Back in November 2020...*

It was one of those rainy Thursdays. The Covid-19 pandemic had the world and so also the Neanderthal Museum firmly in its grip. The new special exhibition had opened the previous week. Without any visitors. And there was no prospect of an imminent improvement.

15:31. An email from the management.
"Dear Team, I started an ideas list on our Design Thinking Mood Board: Making money during Corona.
I am certain you have many great Ideas. Please write them down. If you are working from your home office, please send us your contributions via E-Mail.
Let's do It!"

This email summarised in a few lines how non-publicly funded museums tried to resist the acute difficulties of the pandemic.

A Cold Case - October 2022
2 years later, living in the 'new normal' with Corona, visitor numbers have somewhat recovered. Like many other cultural institutions, however, the Neanderthal Museum has continued to face many questions: What remains of almost 3 years of pandemic? What impact did the many projects, communication campaigns and endeavors of museums and cultural institutions have? How is 'digital' integrated into our everyday work? And what do we actually know about the 'new' target group, which was only called the 'digital visitors' in the museum bubble? Basically: what drives our (digital) audience to visit us? Onsite and online?

Rick Springer conducting the onsite survey in front of the Neanderthal Museum,
Stiftung Neanderthal Museum

Concept, idea & implementation – winter & spring 22/23
A few large museums and consultancy agencies had started to address these questions, in some cases long before the pandemic, and found differing solutions for their specific cases. The Neanderthal Museum, however, was largely lacking data, especially in regard to the motivation of its digital visitors. The need for a structured survey and analysis of the motivation of analogue and digital museum audiences was all the greater. With the help of the DOORS Digital Incubator for Museums funding programme, the pilot project 'Digital Audience Analysis - Segmentation based on Motivation' was launched at the Neanderthal Museum. For the period of the project, an in-house visitor research 'detective agency' was established with a half-time position for the project period from November 2022 - June 2023.

The case 'Digital Audience Analysis' was not going to be an easy one. Within a little more than half a year, the "detective" hired for the case had to deliver results. Not only did the case have to be closed by July 2023. Rather, it had to be clear who visited the Neanderthal Museum and its website and why. Time was passing swiftly, and the team needed a clear battle plan.

The following goals were defined for the project:
1. analysis of the museum website and digital offerings using existing data from tracking and booking systems;
2. online and onsite surveys to explore the motivation of the museum audience;
3. segmentation of the audience based on visit motivations.

The following Key Performance Indicators (KPIs) had to be achieved within the project period:

1. Review available data on the use of digital content and services and formulate hypotheses on the following questions:
- What motives drive visitors to visit the NM and Neandertal?
- What motives drive users to visit the NM website?
- Which of the digital offerings provided by the NM are used by visitors and non-visitors?

2. Segmentation of the NM's audience based on existing knowledge:
- 1-2 workshops with The Audience Agency on audience segmentation;
- 1 internal workshop with NM staff (including representatives from different departments);
- creation of at least 5 audience segments in terms of motivation.

3. Conducting onsite and online surveys
- development of a questionnaire asking about the motivation to visit the Neanderthal Museum, the Neandertal and the motives for using the NM's digital content and services (max. 20 items).

The onsite survey was to be conducted inside the NM, in the Neandertal (between playground, hiking trail, game reserve) and at a public place (Düsseldorf, Schadowstraße). It was to address at least one person for two days at each location and aimed at at least 150 responses.

The online survey was designed to be conducted via the NM website, newsletters (cooperating schools, Friends of the Museum, general) and social media channels (Facebook, Instagram, Twitter). It had to last at least two weeks (depending on feedback, extension to four weeks) and was aimed at at least 150 responses.

4. Evaluation of gathered data and dissemination of results implied
- presentation of the project at Ecsite 2023;
- summary and dissemination via e-publication.

June 2023...
The complicated case is almost closed, although there are still pieces of the puzzle missing. Fortunately, the gathered information has lifted the fog surrounding the motivation of the visitors. The work on this case has produced some successful outcomes.

The output in short
- digital audit of website, including visitor mapping and visit cycles
- in total 2,112 (!) responses to surveys (124 onsite; 1,988 online)
- in total 823 responses to surveys of non-visitors of the NM
- 3 consecutive segmentation workshops, including representatives from all departments
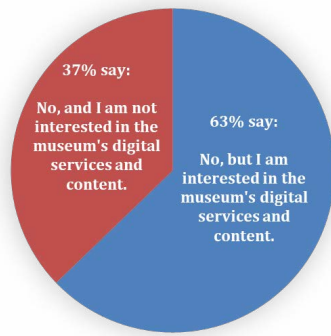- 8 segments for the NM's audience in regard to motivation
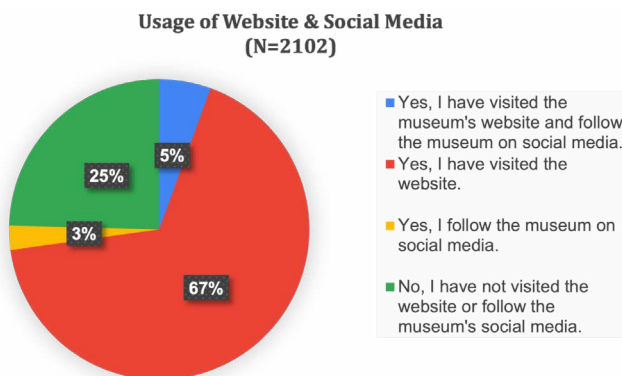
Usage of NM's website and social media channels, Stiftung Neanderthal Museum
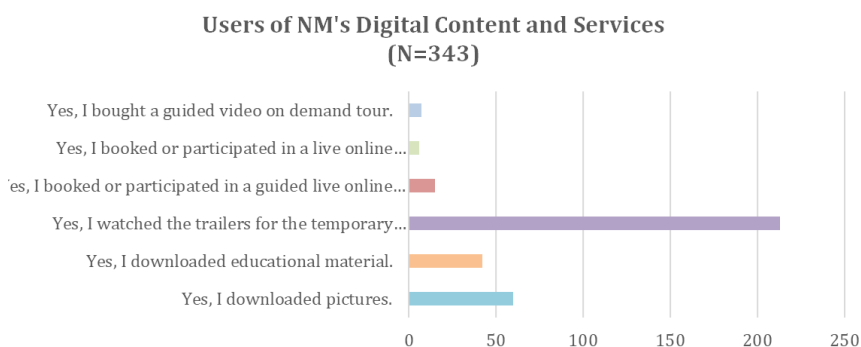
Usage of different digital content provided by the NM, Stiftung Neanderthal Museum

Interest in Digital Content & Services
(N=1723)

37% say:

No, and I am not interested in the museum's digital services and content.

63% say:

No, but I am interested in the museum's digital services and content.

Interest in digital content and services provided by the NM, Stiftung Neanderthal Museum

Benefits & Impact	*Part III*

Part III
The Science of drawing information from data

The work on the Digital Audience Analysis case has used existing and newly acquired data to create a basis for further research and for the general strategic direction of the museum in the digital realm.

Short-term impact
- Website
  Since the museum has its own servers, it was possible to work with representative data in the first place. Nevertheless, a digital audit of our actions was necessary to Illustrate that our website is not user-friendly in many respects, especially for users of mobile devices. The audit revealed that about 60% of all digital visitors access the website via smartphone. Tracking visit cycles and user journeys helped to determine which are the most popular and most visited subpages and which information is most relevant to our visitors. Specifically, these findings will flow into the medium-term development of a new website, which will be created under the motto 'mobile first'.
- Analysis of tracked data
  Concerning the data that is already passively collected on the use of the NM website, new methods have been found, as part of the project, to help us understand the visit motivation of digital visitors. For example, segments were created within the tracking software Matomo, which can automatically divide the digital audience into specific segments. Although the definition of these segments is still incomplete, the prototypes are already helping to retrieve information on specific audience segments, for example, which subpages are particularly helpful for teachers.

Long-term impact
- Digital Strategy
  For the NM and the Neandertal, but also for its visitors, the museum's website is the beacon in the digital realm. Therefore, the constant development of the website is essential for the NM and for the Neandertal. To this end, digital visitor research, as conducted within this project, will be repeated on an adapted scale annually. Existing motivation segments may be built upon. 5 segments in particular have proven to be especially relevant for the organisation.
  Learning and Personal Growth (34%)
  Fun and Entertainment (19%)
  Spending Time in Nature (15%)
  New Experiences (11%)
  Accessible Leisure and Quality Time (9%)

MAIN MOTIVATION FOR VISITING THE NM AND THE NEANDER VALLEY (VISITORS ONLY, N=1219)

- Recharge and relaxation 5%
- Fun and entertainment 19%
- New experiences 11%
- Accessible leisure and quality time 9%
- Social contact and sense of home 5%
- Learning and Personal Growth 34%
- Professional exchange and research 2%
- Spending time in nature 15%
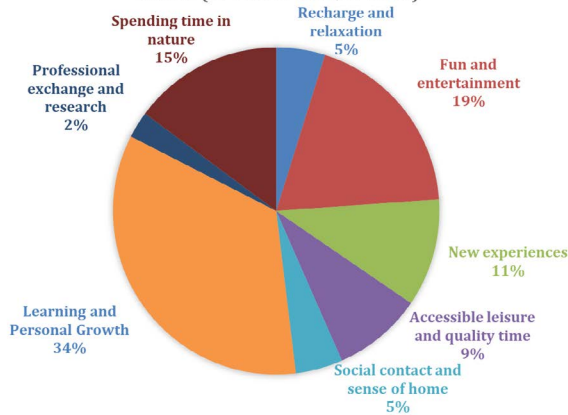
Main motivations from visitors of the NM or the Neander valley, Stiftung Neanderthal Museum

Digital literacy

The knowledge gained through the DOORS project was shared within the team through workshops and joint meetings and served to increase digital competence within the entire institution, but especially within the research department and the marketing and communication department.

Limits & Drawbacks

Part IV
The Hound of Dataville

The work on the Digital Audience Analysis case has used existing and newly acquired data to create a basis for further research and for the general strategic direction of the museum in the digital realm.

Short-term impact

Within its short timeframe, the project had the task of revealing which motives are decisive for an analogue and digital visit to the NM on the basis of available and newly collected data. The results should therefore always be seen in the context of the framework conditions that were available to the project management:

- project period for segmentation, data collection and analysis (January - June 2023);
- 1/2 FTE for project management and communication.

For the execution and the quality management of the project, the greatest challenge was time. Especially for the preparation and reflection of the different project steps, time was scarce, even though we did follow a strict work plan. With additional time (and budget) the implementation of the surveys and the evaluation could have helped to create an even clearer image of our audience and the reasons that keep them from using our digital offers.

Since within this project, we have explored only the surface of what is possible in terms of user data, there are some challenges to be mentioned that affect all institutions that do not employ their own data analysts:

- In most cases, an overwhelming amount of data is available and it has to be decided which data is relevant for the respective institution.
- Data (especially tracking data) is collected with the aim of knowing as much as possible about users. The relevant software was developed to recognise and, if possible, guide users' actions to buy certain products.
- Data can represent many things. Therefore, the research question must be unambiguous.

It is important to point out the difficulty of working with data in cultural organisations. Its very abundance makes it easy to get lost in it. In most cases, data is collected for a specific reason. It is never completely objective and so inevitably subject to contextual interpretation.

	These being challenges faced by almost every cultural Institution, the project will serve as fertile ground from which new digital endeavors can flourish.
Future Prospects	*Part V* ***The Memoirs of an Audience Researcher*** **Digital audience analysis** Digital Audience Research helps us to get to know the people behind the screen. The fact that the image of our users derives partially from stereotypes and assumed knowledge has been shown to us not only by analysing our website and our user data, but also by the onsite and online surveys. In particular, sending out digital questionnaires via existing channels turned out to be highly efficient. The results revised our assumptions considerably in some cases. The NM thus intends to make more use of this in future. **Segmentation** The segmentation approach helped us think differently about our onsite and online visitors. Not thinking in simple demographic groups defined by age, gender and income helped us find visitor groups that otherwise stay under the radar. When we talk about motivation, we immediately think more complexly: what about single parents, neurodiverse people or families with two same-sex parents? Beyond identifying potential new target groups, this method has significantly broadened our view of our audience.
Key Take-Aways	*Part VI* ***The Final Problem*** The biggest take-away is that there is a great need for data analysts and digital project managers in the museum sector - in the short and especially in the long term. If museums wish to reach out and engage with their digital audience, knowing what drives the people to their website is the foundation for all future endeavours. Knowledge alone of the performance of a webpage in terms of visitor numbers and online ticket purchases will leave a museum unequipped for the digital future. The Case 'Digital Audience Analysis' is by no means closed for the NM. In fact, investigations will continue, carried out by the research department. The DOORS Digital Incubator for Museums, has helped the NM to achieve greater, more comprehensive digital competency. Hopefully, more museums will manage this in future, too.
Involved Parties	- Neanderthal Museum (project team) - <u>Fondazione Fitzcarraldo</u>, Alessandra Gariboldi (mentorship) - <u>The Audience Agency</u>, Adam Koszary and Jonathan Goodacre (consultancy)