

Experience, understand & share

At Gagarin we believe in the power of stories to unite, engage, inform and inspire audiences to learn and play. We create highly-interactive exhibits that allow people to experience and understand stories vividly, and share their insights with others.



Wild Reindeer Exhibition in Hardangervidda, Norway.



Breheimsenteret in Jostedal, Norway.

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About us

At Gagarin, Reykjavik, we create highly interactive media solutions that allow people to experience stories and events vividly, understand interesting creative content and to share their exciting new discoveries with others.

Our customers range from museums and companies to municipalities and institutions that utilize our dynamic solution in showrooms and visitor centers, at events and online.

With vast experience working with a multitude of the most recent media interfaces, devices and technology, Gagarin can meet just about any client's needs with its highly skilled and professional creative team.

Focusing on the aesthetics of interaction we strive to provoke a seamless narrative created in the distance

between man and technology. To achieve this we use tangibility as one of our main guiding techniques through our narratives we constantly search for unexpected ways to tell a story.

Our diverse and highly skilled team firmly believes that no technical challenge is too big for us and our creative designers, animators, programmers, and audio/visual specialists work closely together and with our clients in the design and production of exciting interactive media solutions.

At Gagarin we deliver total and unique solutions and we team up with specialists in history, art, geography, science, archaeology and various other fields to ensure that the correct expertise is applied to every project.

“Powerful stories teach us, persuade us, and define us - they connect us to ourselves and universal truths, transcending generations and cultures.”

Our primary goal is to take the complexity out of deploying rich, original, state of the art interactive media solutions and to provide total solutions that are cost effective and uniquely yours.

www.gagarin.is/about

Wild Reindeer Exhibition

1.



The project

When Gagarin was first asked to come up with interactive installations for an exhibition dealing with the wild reindeer, our immediate response was to ask whether the focus was not too narrow for such a large exhibition? However, after studying this phenomenal creature in more detail, we had to go back and ask for an even bigger space.

The 600 m² Wild Reindeer exhibition is located in the Hardangervidda National Park in Norway which hold the largest wild reindeer population in Europe.

Gagarin's goal was to design installations that would bring to life the scientific, historical and moral issues. In the end, thirteen interactive installations were produced.

We worked in close collaboration with the exhibition curator, Torbjørn Nielsen of Spekter AS, industrial designers Michael Blikdal and Gunnthora Gudmundsdottir, Rjukan Data Service which provided the IT hardware, and the project leader, Per Lykke.

2.



Where do the reindeer come from?

This installation reveals the history of the reindeer's migration across the world during the period 1,600,000 – 5,000 BP (Before Present), as it followed the ice rim into the North. Alongside this story, visitors can view the migration of other animals, such as the mammoth, the woolly rhino, the horse and more. They can also trace how human beings followed the reindeer into the north, settling in new areas.

Bella

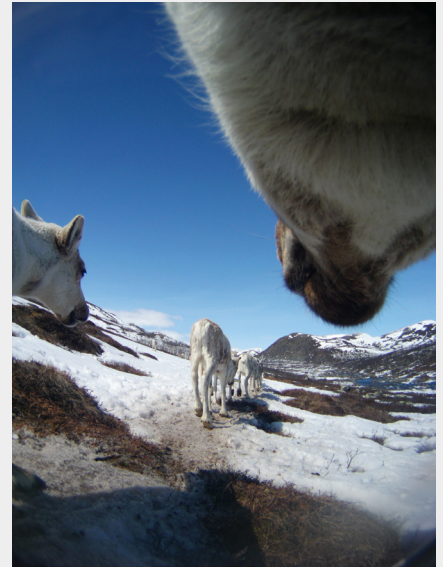
This installation shows reindeer migration from an unusual perspective: a reindeer called Bella wore a camera for a whole year taking close-up footage of the herd. On a large screen, users can “travel” with Bella through a year of life, from January to December, following her trail throughout the year, reading her “diary”, and looking at images and videos that Bella took along the way.

3.



“Visitors get to explore and experience, via tangible and unique solutions, the various historical, biological and social aspects involved in the existence of the reindeer, simultaneously learning about the various threats that are being imposed on their habitat - mostly by humans.”

4.



1. Wild Reindeer Exhibition

2. “Where do the reindeer come from?” - This installation reveals the history of the reindeer's migration across the world during the period 1,600,000 – 5,000 BP (Before Present), as it followed the ice rim into the North.

3-4. “Bella” - This installation shows reindeer migration from an unusual perspective: a reindeer called Bella wore a camera for a whole year,

Continued

Wild Reindeer Exhibition

1.



2.



1. “Red Lamp” - This installation is about the possible impact of human interventions in the area on the reindeer habitat.

2. The slider or bar represents time as the user drags it from left to right.

3. “Biological adjustments” - This installation reveals the biological aspects of the reindeer.

4. When selecting a topic of interest, an illustration of a given subject appears on the deer’s figure.

Red Lamp

What impact is human activity having on the reindeer living in the Hardangervidda National Park? In this interactive map of the park, visitors can modify visual elements representing roads, hydroelectric power stations, cottages and walking tracks as they were constructed over a century ago (1900-2000).

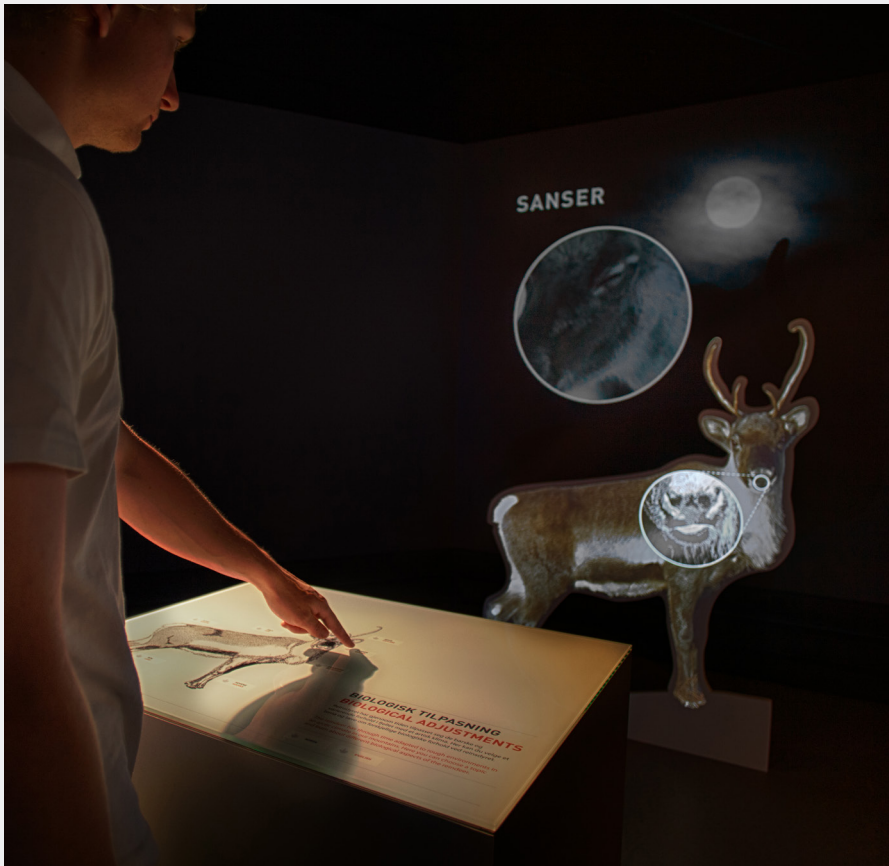
The projection of these elements can be individually modified, as each is represented by a touchscreen slider at the front of the installation. The slider or bar represents time and as the user

“Control and manage one hundred years of human impact in real-time. Observe how our behaviour has threatened the reindeer of the Hardangervidda.”

drags it from left to right, the map is projected into the future.

A visitor can therefore investigate, make comparisons and explore the effects that each element has on the habitat and behaviour of the reindeer. This provides them with an overall picture of how human intrusion is threatening the living space and existence of these animals.

3.



“Under the whole project Gagarin fulfilled their obligations with great seriousness, creativity, and always with great spirit in their work.”

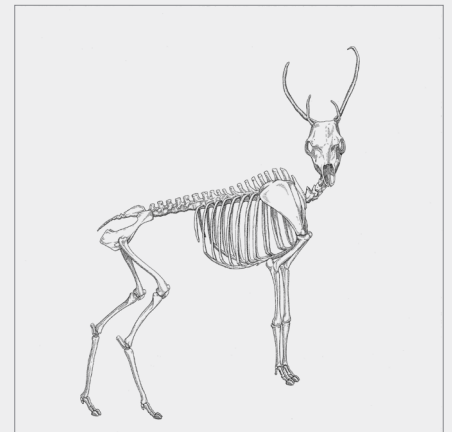
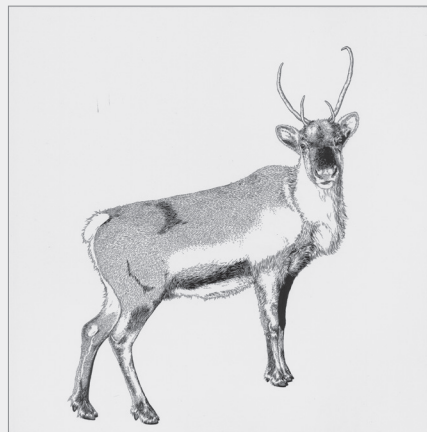
Per Lykke, Wild Reindeer Exhibition.

Biological adjustments

This interactive installation offers the visitor a chance to learn more about the biology of the wild reindeer. When the visitor selects a topic on the stand, animated text and illustrations appear on the corresponding reindeer figure.

The choice of topics include food/nutrition, fur, nose, muzzle and tongue, bone and blood, hooves, horns, and the natural ability of the reindeer to avoid other animals.

4.



Continued

Wild Reindeer Exhibition

1.



Life in the Herd

Here the natural behaviour and characteristics of a herd are visualised using an animation whereby each dot represents a reindeer. The herd follows the user's finger across the touchscreen and the visitor is asked a series of questions. If answered correctly, the visitor is rewarded with additional information.

2.



1. "Life in the Herd" - The natural behaviour and characteristics of a herd are visualised using an animation whereby each dot represents a reindeer.

2. "Life in the Herd" - Interface.

3-4. "Think Tank" - Encourages visitors to further reflect on their experience at the museum.

5. "Terje Skogland" - Installation where visitors can learn about the life and work of the biologist Terje Skogland.

3.



4.



5.

Think Tank

This last installation encourages visitors to reflect further on their experiences at the museum. Visitors are posed a series of questions that require them to take a stand on certain issues relating to the reindeer and their environment. Their answers can be viewed immediately and compared with those of other visitors.

www.gagarin.is/work



Breheimsenteret

1.



The project

Breheimsenteret is now back in full action again after having been totally destroyed in fire in 2011. The centre was reconstructed with the original architecture, but some interior changes were made to meet new needs.

The exhibition space was enlarged and Gagarin was hired to supply new interactive solutions. We delivered three unique installations where, amongst other things, we had to cross new boundaries in terms of interaction and technique.

The exhibition was designed by Paul Sundhell and the project was managed by Peder Kjærvi. All the hardware and IT solutions were provided by local suppliers.

National Parks Explorer

In this multi-user installation, visitors gather in front of an interactive map of the Jostedal National Parks. Through the use of thematic pucks, visitors can reveal corresponding information on the map by simply turning the puck (anti-)clockwise on the station.

Users navigate within given subjects and/or play animations about topics that include: Wild reindeer, deer, moose, viewpoints, waterfalls, glaciers, valleys, hiking, glacier crossing, summer and winter activities, agriculture, summer cottages, unspoiled areas, local specialties and bear stories.

2.



3.

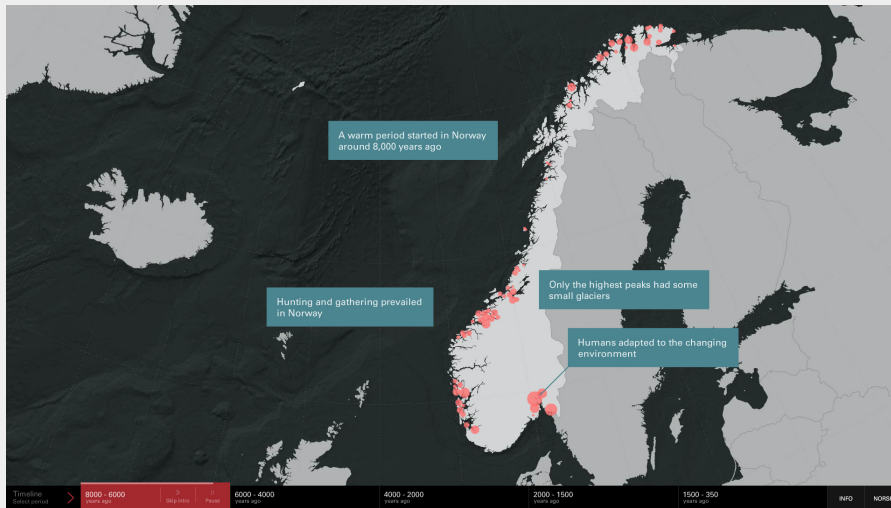


1-3. *National Parks Explorer*

4. *The Ice Age we live in*

5. *Equilibrium*

4.



“We delivered three unique installations where, amongst other things, we had to cross new boundaries in terms of interaction and technique”

The Ice Age we live in

Four interactive touchscreens combine to serve as one long timeline. Each screen can be used simultaneously by different visitors to learn about the last glacial period and its effects on the land, flora, fauna and human communities. By means of an animated map, visitors can browse through time at different levels and while moving through time periods they receive information through text, images and animation.

Equilibrium

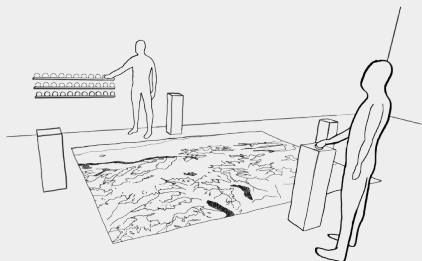
An incoming visitor automatically activates a 3D animation about the annual cycle of a glacier through the use of a motion sensor. The user can learn about how weather conditions influence the glacier's balance, which in turn affects the land.

www.gagarin.is/work

5.

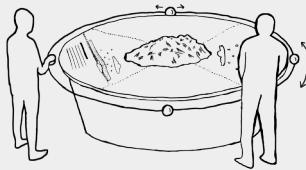


Example of solutions



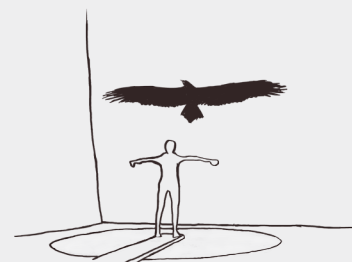
Interactive maps

Interactive maps provide context and spatial awareness to help situate stories in real or imaginary worlds. They can also encourage new insights by allowing audiences to filter and visualize complex geographical data, or zoom in and out to gain a new perspective.



Interactive tables

Single/multitouch tables are large, interactive touch screens that audiences engage with directly either independently or in collaboration with other viewers. We can combine audio, animation and interactive objects to draw viewers into stories and allow them to engage with them in compelling ways.



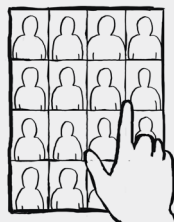
Motion tracking

Sensors that follow a viewer's movement through physical space are a powerful tool for engaging the audience directly in the experience. Viewers can test ideas for themselves, experience a new way of seeing, or directly participate in changing the outcomes of a story.



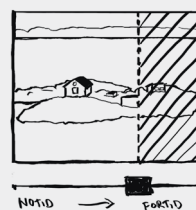
Tangible Interfaces

With the interface between the data and the visitor be something physical we help give visitors a more memorable experience. By using something tangible we make the interface much more immediately understandable.



Interactive multimedia

From touch input devices and sensors to interactive video and audio, we employ a wide range of supplementary devices and techniques that can be used off-the-shelf or customized based on requirements and in service of storytelling.



Timelines

Timelines help audiences to understand the relationships between events and to recognize trends. Viewers can step back and see the big picture, or interact directly with the timeline to dig in deeper and explore specific details of an event or topic.

Awards



Information design

Two graphic designers at Gagarin received awards at The Association of Icelandic Graphic Designers Awards 2013 (FÍT Awards): Kristín and Maggi received an award in the “Information Design” category for the Norwegian Seabird Centre. The exhibition was opened in Værlandet’s old boat yard in Gjestehamn in 2012.

The annual FÍT Awards are given for the best Icelandic graphic design each year. During DesignMarch 2013, The Association of Icelandic Graphic Designers hosted an exhibition at the Reykjavik Art Museum in which those projects which had received awards were displayed.



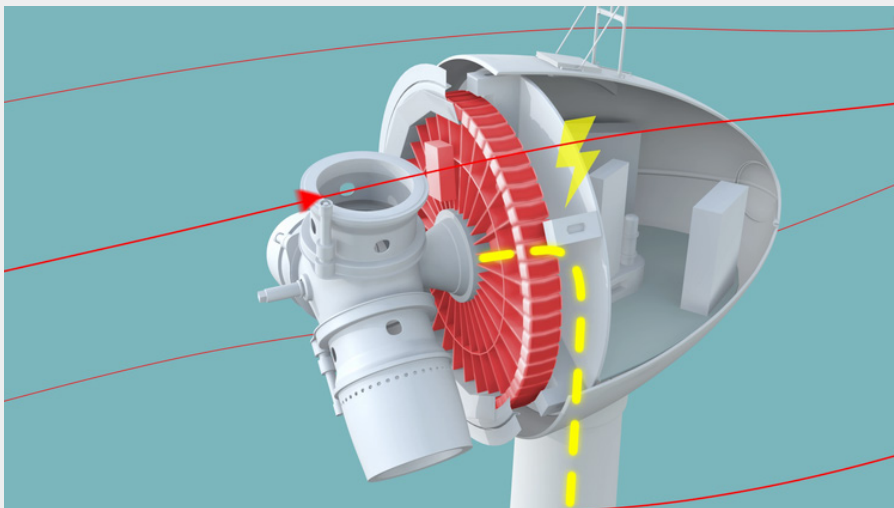
Filmmaking

Gagarin’s filmmaker Heimir Freyr Hlökkversson was awarded the “Silver Glasses” prize at the Yakutsk International Film Festival 2013 for his film Hverfa (Disappear). The festival was attended by filmmakers from the Arctic region (Russia, USA, Canada, Finland, Sweden, Norway, Iceland, Denmark, and Greenland). Congratulations Heimir!

www.gagarin.is/about

Reykjavik IO

1.



2.



Helping great ideas come to life

Jörundur Rafn (Jörri) is the owner of a new visual effects company called Reykjavik IO, a good partner and friend of Gagarín.

Jörri previously worked on visual effects in various Icelandic and Hollywood feature films and in big international commercials. Some of the more noteworthy titles he has worked with are: Tinker Taylor Soldier Spy, Salt, Harry Potter, Contraband, The Deep, The Horse in Us, and Spooks and Spirits.

As Jörri says: “We immediately focused on establishing ourselves as the premier visual effects house for the Icelandic feature film industry, an aim in which we feel we have succeeded.” The clients

of Reykjavik IO have certainly become mostly Icelandic film producers and directors.

Jörri adds: “The interactive installation field is very interesting and offers countless unexplored frontiers. We enjoy being part of any project that sets new bench-marks for the immersive experience – and I trust Gagarín to do this better than anyone else.”

This year Reykjavik IO has worked on a few exhibits for Gagarín, one of them, Equilibrium, being about the inner life of the glacier. The moment visitors are detected, 3D animated narrations made in collaboration with Reykjavik IO display the annual cycle of the glacier and how weather conditions affect its

balance, thereby also having powerful effect on the environment.

According to Jörri, “the technical approach for each project is based on the particular needs of the client. I break the project down into component parts, all of which are needed to create the big picture.” He adds: “There are hundreds of things you have to think of when you are doing visual effects for a film. A typical scene is broken up into two main parts: the 2D and the 3D. The 2D part can consist of many layers of live action footage and film elements that all have to be prepared for the final composition. The 3D part is more complicated and can be broken down into hundreds of different tasks. The typical workflow for 3D is blocking,

3.



1. Landsvirkjun Wind turbines in close collaboration with Gagarin. The presentation involved both 2D and 3D graphics and was done in a very illustrative style.

2. Jörundur Rafn, Reykjavík IO's founder and CEO.

3. Hross í oss (Of Horses and Men). Winner of best director at San Sebastian and Iceland's Oscar submission this year.

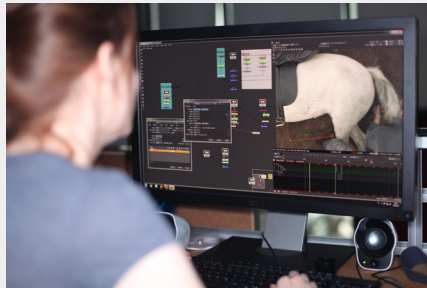
4. Ofeigur gengur aftur (Spooks & Spirits). Reykjavík IO was involved with the film from the very first pre-production planning to the very end of post-production.

5. A typical scene is broken up into two main parts 2D and 3D.

4.



5.



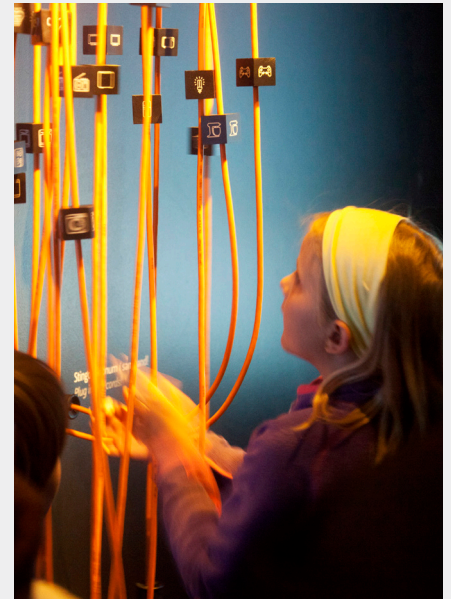
“The market is growing, particularly as an assisting tool for practical film production, what we like to call “Invisible Effects”

modelling, rigging, animation, lighting, surfacing, rendering, retouching and finishing.”

Reykjavík IO has established a strong relationship with Icelandic producers and Jörundur thinks the market is good for him, considering its small size: “The market is growing as an assisting tool for practical film production, for what we like to call “Invisible Effects”: shot clean-up, set extension, matte paint, weather alteration, sky replacements, background enhancements and so on. These types of task are constantly increasing. Smaller Indy-production companies are also getting more and more into doing vfx-driven films.”

www.reykjavikio.com

The aesthetics of physical exploration



How do we remember where we put the coffee cup and how come we are able to point at our nose while having our eyes closed?

Proprioception, the capability of a human being to always know where his/her body is, makes sure that when we use movement we relate to that action - we have an unconscious memory of where we put the coffee cup.

It works excellently in the real physical world. In the digital world, however, this quality is lacking.

If you move a file to a new folder in a computer you need some sort of mnemonic device to tell you where it is. You need to have some kind of a mental model in your head of how the

structure of the files is organized. You need to be told by the design how that structure works. For a long time, the job of interaction designers has been to design interfaces that teach users and make it easier for them to navigate their way through these mental models of systems.

At Gagarin, we inhabit a very different interactive space in which experience is so important that we cannot begin by teaching the visitor about underlying structures or mental models. In order to take the visitor directly into a rewarding experience, we utilise a number of strategies to make everything more intuitive and playful.

One of the strategies we use is to be constantly aware of this powerful

overlooked sense of proprioception, and the knowledge of our own body.

“We empower our visitors through proprioception by using tangible objects to move data.”

Visitors interact with our installations by moving their bodies and moving real things. As a result, they do not have to think about where they are in a menu system or how to get back to where they were. The installations lend themselves to physical exploration and as such can be understood physically, and then remembered with aid of muscle memory.

The core team



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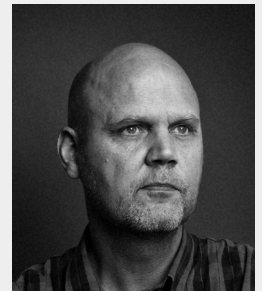
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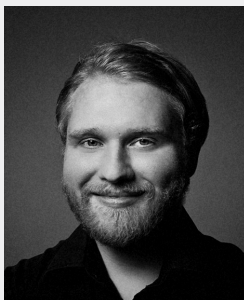
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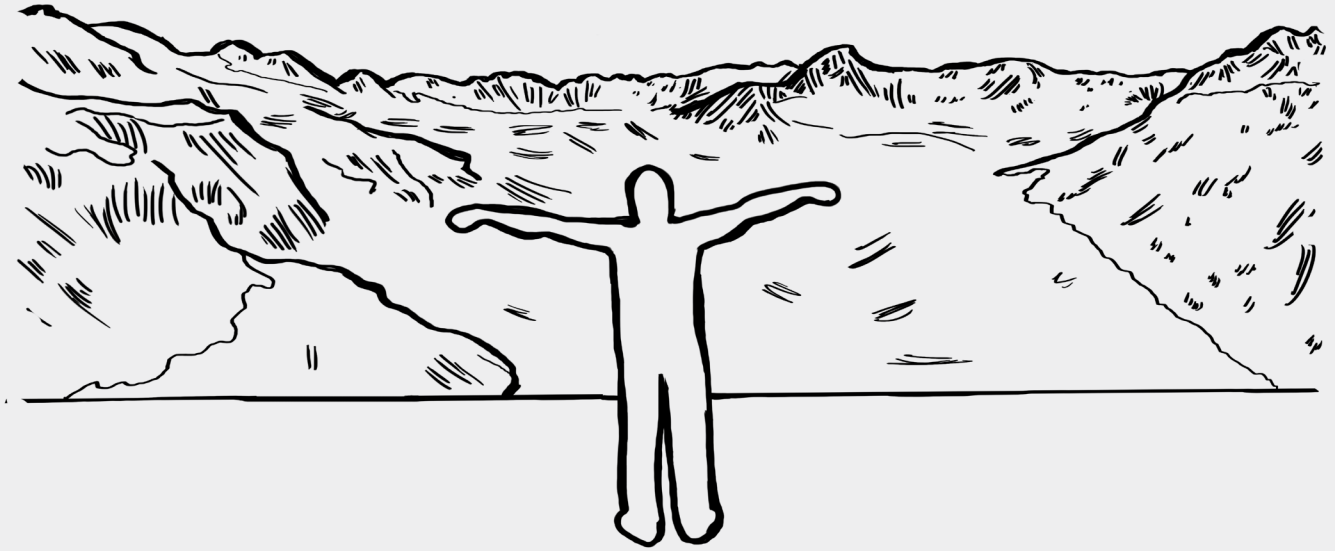


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Our team of creative artists, designers, animators, programmers, producers, and film and sound specialists has years of experience in design and the production of interactive media.



How we do it - The Journey

At Gagarin, we utilize an iterative design process that takes us from the original 'light bulb idea' all the way to a final product.

We continually test the value of our ideas by using an operative image (a sketch / prototype / model) as a tool for the team and the customer, to enhance the idea and ensure a high quality outcome.

This requires our thinking to expand into a wider search space... to think

“We utilize an iterative design process that takes us from the original ‘light bulb idea’ all the way to a final product”

“out of the box” in order for us to attain new, dynamic and ground breaking visions.

Constantly venturing into “unthought-of territory” but at the same time

keeping the process on a distinct path of progress makes Gagarin’s team unique in the field.

www.gagarin.is/about

The process

Over the past 19 years, we at Gagarin have put great effort into creating a rigorous inhouse process. This process enables us to develop and deliver solutions on time and within budget.

Depending on the needs of our clients, we can undertake the entire process or only carry out part of a project.

Our goal is to constantly improve the

quality of our work and the nature of creative culture. We passionately believe in always getting better at doing our job, and effective processing is the key to our success.



1. Preparation

In the preparation phase, we analyze the needs and the expectations of our clients and simultaneously study the general needs of the end users i.e. the guests of the museum. Furthermore we become acquainted with the topics and the stories that are to be told as part of the exhibition.



2. Concept and planning

Here we gain an in-depth insight into the topic involved with our client. Also we familiarize ourselves with the scenario / exhibition space. In this phase we start on the actual concept design work. We define the interaction, the content and the applicable technology. Having done this we are ready to make a project plan including time and cost.



3. Pre-production

In the pre-production phase, we work on further advancing our concept and implementations. Where applicable we create prototypes and we test them with the target groups. The storytelling part of the work is finalized with a manuscript and in some cases a storyboard. The budget is revised and approved and we begin the development phase of the project.



4. Development

The development phase consists of close collaboration between all stakeholders. The final versions of the user interfaces are designed and here we will finalize all the interactive parts of our solutions. All the necessary content is developed and the technology is completed with intuitive programming and a suitable hardware setup. This phase ends with thorough tests.



5. Deployment

Next comes the deployment and delivery phase. Here we deliver our solutions to our customer. We complete the final testing on location and we go through an approval session with our client. We also train the staff upon request.



6. Support

Details of support are defined with the clients at the final stage of the development phase. Support is provided both remotely and on location.

“Curiosity about life in all of its aspects, I think, is still the secret of great creative people”

Leo Burnett



Sometimes it gets windy by the North Atlantic Ocean outside our office.

Our headquarters

Our headquarters are located near the Reykjavik harbour area at Fiskislóð 31, accessed by the second doorway away from the sea.

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Inquiries & opportunities

Please drop us a line to find out more about how we can help you create engaging interactive media experiences for your audiences.