





European Regional Development Fund













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#### TRENDS AND KEY INSIGHTS

#### - GAMING CLUSTERS

#### **Introduction:**

The purpose of this short report is to provide a foundation exhibiting the core elements of a successful games development cluster with a focus on Europe and specifically Ostrobothnia, (Österbotten) Finland and Westrobothnia (Västerbotten) in Sweden.

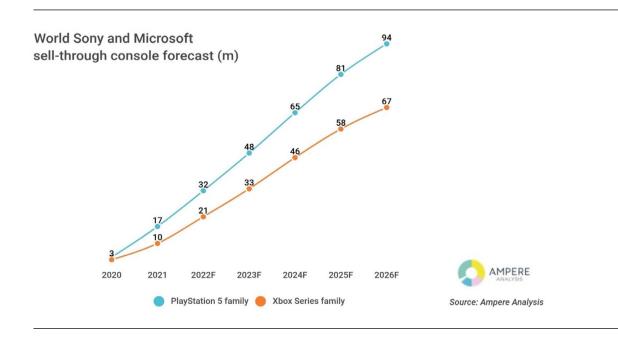
When referring to a cluster in this report, that signifies several entities working together on the same thing. Such entities include governments, municipalities, companies, creative trade organisations, venture capital firms and private money.

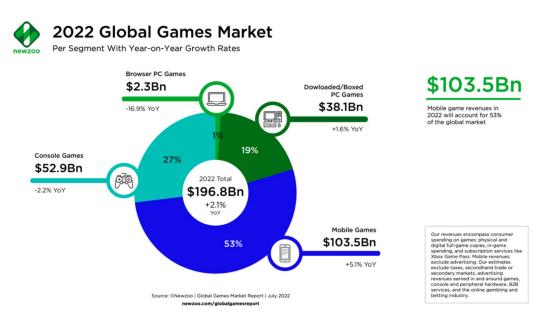
#### The gaming market and top trends:

- PlayStation continue to lead the console race and will stay on top.
   Microsoft has invested heavily in the XBOX Games Pass subscription through the acquisition of games studios, which allows consumer access to games for a monthly price for both PC and XBOX.
- Early access on PC is a win-win for gamers and developers. Gamers love it because they get to play in advance. Developers use Early Access to receive feedback and use it partly as Q&A but also for direction for the later part of the game.
- Roblox help to scale and grow indie gaming because they combine game creation and distribution in one single platform.
- The free to play (F2P) market in mobile gaming is even more

- competitive this year and the iOS apple restriction and IDFA removal makes the customer acquisition much tougher and lower return of ad spend. (ROAS)
- The appetite to invest in Virtual Reality has increased both from gaming studios and investors. The active player base has passed 10M. Resolution Games from Sweden is a great example and they have recently opened a satellite office in a relatively new gaming cluster, Linköping.
- Acquisitions and consolidation activity continue at a high pace. Recently the Chinese top company, NetEase met many start-ups in Finland and Sweden and are moving some people over to Stockholm next month.

To conclude this industry overview, a few words should be said about the growth and success of Roblox. Big scale **user created content** started with Minecraft, and Roblox is now the fastest growing online gaming platform. Their game creation system allows users to program games and play games created by other users. Many companies are now riding on Roblox's success and have implemented new business models partly inside Roblox's ecosystem. One example is the UK company Dubit in Leeds, which raised USD 8M last year and focuses on metaverse esports events.





#### News, trends, and updates about a game cluster building.

Governments have played an active role in driving the industry forwards and the activity and engagement from governments continues to have a huge impact in the development of gaming clusters. Canada, Finland, and UK are the top three in Europe. Germany has the most generous program and in cycles of 5 years. Informal gatherings within the community or/and cluster are vital to success. Another essential element of a successful games cluster is higher education. Lastly, state-of-the-art infrastructure for internet, telecom and business premises is a must-have to compete for talent. The good news is that Finland and Sweden are best in the world when it comes to tech infrastructure.

#### Challenges for the regions Ostrobothnia and Westrobothnia.

- The lack of senior level experience and mentors outside of the bigger cities.
- Shortage of skilled talent is one of the biggest challenges for clusters when it comes to attracting gaming companies to establish a satellite office.
- Logistics, it takes extra time to travel from Helsinki, Stockholm, or London. However, Skellefteå now has good flight connections with Stockholm.

# Suggestions for future project towards a good gaming cluster in the region.

- Create a common vision for the region. What is the Ostrobothnia area good at and where do we want to be in the next three to five years? Make sure it is fun to visit also outside the work. The work-life balance factor is a strong selling point.
- Appoint a smaller steering group to coordinate the initiatives. Figure out a way to include nearby cities and how to attract top industry people to visit and inspire via events or meetings.
- Make sure there is a hub where people can come and work in, have meetings, etc. This is common in Sweden and all relevant clusters have this. Malmö, Skellefteå, etc.
- Organise both formal and informal gatherings. Develop a culture where all stakeholders share information and key learnings.

- Appoint one advisor and/or a marketing team that can come up with measurable goals to promote the region and to attract talent, visitors, studios and investors.
- Make sure that the local politicians understand at least part of the business, and that a few of them have a genuine interest in being involved.
- The Cluster need a vision that everyone understands and buys into. It is essential to properly define and prioritise goals and strategies intended to meet those goals.
- For the longer term start to develop a good structure for private investors.
- Join up and support the local industry events in Finland or Westrobothnia, Sweden.

Stefan Lampinen Game Advisor Sweden AB September 26th, 2022



## Describe the key area and its role in the start-up infrastructure in the Qvarken area.

- Regional community building for game developers, students, teams, and start-ups
- Communities are a vital part of any industry
- Communities enable individuals to create a game industry in the region
- Peer review, support, and networking are the key benefits of communities

#### **BASE LINE**

#### Describe the situation today within the key area

- Limited support network for individuals who are interested in game development
- Limited networking between individuals, in turn, making it hard to create companies and teams
- Minimal peer support and lack of game industry expertise in regional development services
- Some regions lack recognized game development communities
- The cultural and creative industries are substantial actors in our regions
- Some regions have universities providing game education (see 02\_Education)

# QVARKEN GAME LAB COMMUNITY BUILDING

#### THE CHALLENGE

#### **Problem**

- Hard to find enthusiastic actors
- Meeting other developers and creators
- Little support from regional development services
- Missing national and international networks

#### **Causes**

- No connections and no game industry expertise
- Limited number of game industry events for networking
- Not identifying the game industry as a "real" industry that can provide actual work
- The Ostrobothnia region is playfully viewed as a death valley of the game industry

#### **Effects**

- Hard to create communities
- The game industry is viewed as "just a hobby, get a real job"

#### THEORY OF CHANGE

#### The Goal

- Making the game industry more visible and viable for the region
- To create the starting point of the game industry community and help people network

#### **Key Activities**

- Arrange inclusive and easy-to-join events (see 03\_Improved Equality and Inclusion)
- Big marketing campaigns to attract people to join and create communities naturally
- Getting game industry mentors to help and guide newcomers

#### **Effects**

- Creation of local game industry communities
- More individuals interested in making games and business

- New project to arrange easygoing and inclusive game industry events in the region
- To inform schools, high schools, vocational schools, universities, companies, and regional development services about game industry possibilities
- Cross-border co-operation with international partners
- Creative industry incubator and mentoring



## Describe the key area and its role in the start-up infrastructure in the Qvarken area.

- Attracting the right talent is vital for the success of game companies, both in a regional and global perspective
- Most companies would prefer/need experienced talent but the cost and competition for that talent is high
- When in a region with few game developers attracting talent to a new place to live and work presents an additional challenge
- Regionally educating new talent is key to meet start-up companies needs within their capabilities as well as being able to support more established companies

#### **BASE LINE**

#### Describe the situation today within the key area

- There is a high demand for talent that can jump right into production
- Universities/University Colleges are less equipped to handle the fastgrowing industry
- Success is highly dependent on attracting students to the region and making sure that attractive educations and communities can support that work
- There are differences and similarities between Finnish and Swedish educational systems that needs to be understood but also can be of use for peer review learnings
- There are few cross-border collaborations between educations to ensure internship positions, examination needs, industry support etc.

# QVARKEN GAME LAB EDUCATION

#### THE CHALLENGE

#### Ostrobothnia

#### **Problem**

- Missing well adapted educations in the region
- Lack of existing industry to support educations

#### **Causes**

- Failure to understand the game industry needs
- Missing support from the game industry
- Failure to communicate with education providers

#### **Effects**

- Missing talent
- Slow industry growth

#### Westrobothnia

#### **Problem**

- Missing a pipeline to attract local students
- Few options on University level
- Educations have grown faster than industry

#### **Causes**

- Big emphasis on attracting new people
- Lack of internship positions
- Risk of educations losing quality

#### **Effects**

- Hard to keep talent in the region
- Slow industry growth

#### THEORY OF CHANGE

#### The Goal

 Effective game development education that meets industry needs

#### **Key Activities**

- Cross boarder collaborations around examination and internships
- Peer review between existing educations in the Qvarken region
- Expanding the view of the local region to keep talent and industry in Qvarken
- Continuous dialogue with the business to ensure need, focus and quality of educations.

#### **Effects**

- Accessible, skillful talent in the region
- New companies created through collaborations during education
- Non-regional companies branching into our region as a preferred strategy to secure talent
- Existing companies will grow faster and more cost efficient

- Build a pipeline from earlier school years to fill up educations more easily
- Keep companies constantly involved in creating, educating and evaluating the educations
- Market existing educations on a big regional scale to raise awareness
- Support education providers in creating new educations and connecting them to the industry
- Identify the educational needs of the Finnish creative industry
- Evaluate cross boarder internship and examination collaboration to strengthen each other's weak spots



## Describe the key area and its role in the start-up infrastructure in the Qvarken area.

- The game industry in the region is limited, so in order to grow we cannot afford to be exclusive!
- Exclusion can be both intentional and unintentional → there is a need for awareness about how norms and structures can be limiting
- "We do things this way because that is the way we have always done them"
- "Gain interest first, become inclusive later"
- Improved equality and inclusion can be an ace up our sleeve/selling point

#### **BASE LINE**

#### Describe the situation today within the key area

- Highly male-dominated game development scene, where the patterns from a male-dominated game culture are maintained and exported into the structures of the game education and game industry
  - "Many respondents (74%) felt that there is not equal treatment and opportunity for all in the industry. In addition, 56% of respondents perceived inequity towards themselves and 71% perceived inequity towards others based on gender, age, ethnicity, ability, or sexual orientation."

    (according to the IGDA Developer

Satisfaction Survey of 2021)

- Small companies consisting of one or few developers, often white heterosexual (cis) men
- Some female actors in the regions (e.g. graphical designers, marketing)
- Hierarchy of game types (real games, real gamers, real game developers, see Consalvo & Paul, 2019) and game industry work tasks (e.g. marketing, HR)

#### THE CHALLENGE

#### **Problem**

- The male-dominated industry restricts who gets access and feels welcomed
- Limited self-reflexivity regarding company practices and structures
- Limited arenas for discussion about equality and inclusion

#### Causes

 Societal norms and structures affecting access to technology and associated competence, knowledge, and skill

#### **Effects**

- Limited inclusivity in terms of gender, age, religion, and ethnicity, eg the culture of "grabbing a beer"

   harmless as it seems, can still be excluding
- Game industry loses potential knowledge, creativity, personnel, and innovation
- Minorities are only included to fill a quota or to represent marginalised groups as opposed to in their own capacity

#### THEORY OF CHANGE

#### The Goal

- Increased awareness of how norms and societal structures can be limiting
- Increased diversity within the game industry in the region

#### **Key Activities**

Raising awareness of discriminatory and marginalising structures, aka "putting the glasses on", through:

- Workshops, events and game jams for diversity and inclusion for both existing game companies as well as new talent
- Analyzing and examining existing and forthcoming activities and events and creating new action plans going forward
- Research is disseminated and put into action plans

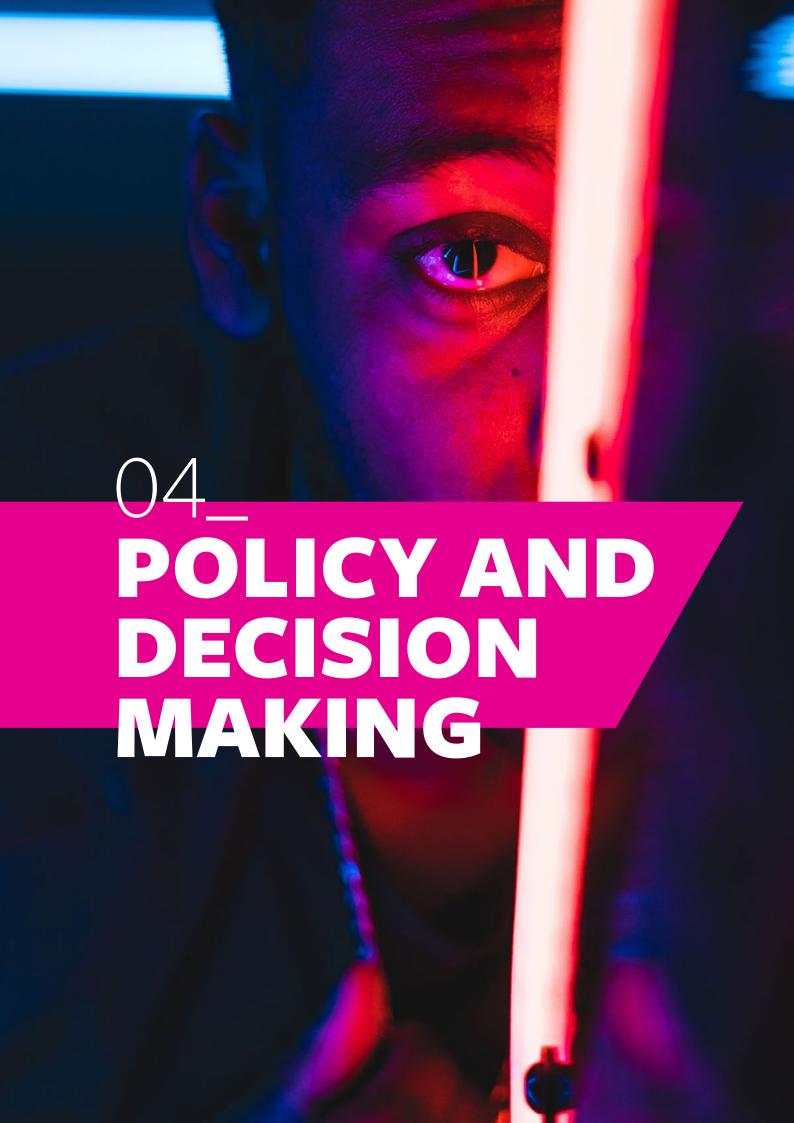
#### **Effects**

- Women developers (cis & trans), as well as ethnic minorities and LGBTQIA+ developers of all age groups, are included in existing companies and are encouraged to start their own companies
- Increased number of developers in the region with additional

- competence, collaborative partners and new concepts
- An eco-system, which the game industry is part of, where the activities are informed by current research

- This phase of QGL: doing our own "homework" by addressing biases within the project group and project activities
- Next phase is more focused on impact within the game industry and the startup scene
- Create a framework for analyzing and examining activities and create future action plans
- Arranging events, education modules, workshops and game jams

- Increased diversity within the game industry is beneficial both to established developers as well as those previously marginalized
  - → potential for a new workforce,
     something that could become our
     future brand"Qvarken Game Lab
     the diverse and inclusive game
     scene"



## Describe the key area and its role in the start-up infrastructure in the Qvarken area.

- Support and action from policy and decision makers are needed to attract more game companies, support structures, and game education to our regions
- The game industry in the Westrobothnia region is more evolved compared to the Ostrobothnia region, thanks to decision makers supporting the industry

#### **BASE LINE**

#### Describe the situation today within the key area

- There is only one IGDA hub (International Game Developers Association) in the region
- No active discussions about game industry at the current policy / decision makers in our region
- Rural areas in the region seem to have a little bit of panic, and therefore interested in finding new ways to attract talented people

# QVARKEN GAME LAB POLICY AND DECISION MAKING

#### THE CHALLENGE

#### **Problem**

- No higher-level game development educations in our region
- Limited input from decision makers in our region

#### **Causes**

- Limited game culture and community in our regions (due to few game companies and lack of game dev students)
- Decision makers are used to focus on heavy industries in our region
- Decision makers have a lacking knowledge of the game industry

#### **Effects**

- The game industry can not grow in our region
- Decision makers do not prioritize the game industry development

#### THEORY OF CHANGE

#### The Goal

- Increased awareness of the game industry and the benefits that the region would get from a game industry.
- To get the decision makers more interested in the game industry
- To get a game industry community and culture up and running in rural areas

#### **Key Activities**

- More day-to-day meetings with decision makers to create awareness
- Invite decision makers to workshops and events
- Show success stories of game development regions
- More gatherings for game developers in our regions – implement community building playbook

#### **Effects**

- With decision makers on board, a change is more likely to happen
- A game industry cluster is created and will benefit the region
- Several game development educations are created to support the region

- Implement the concept from successful regions
- Learn from failures (concepts, regions, educations)
- Invite successful game development regions to share their experience with our decision makers
- Increase the cooperation between existing educations in the region
- Suggestions for future projects:
  - Test a concept of game villages in rural areas



## Describe the key area and its role in the start-up infrastructure in the Qvarken area.

- Research sets the base for game development education which in turn sets the base for the game development scene
- Applied research can directly benefit startup and existing game studios
  - E.g. Studios get expert help and guiding based on research results
  - Studios can get an advantage in getting funding if they implement research based insights into their development process (e.g. playtests, audience research, prototype testing)
- Active and visible game research can raise interest for games as a business and developers can benefit from free knowledgesharing through disseminated research "Research creates more research & international networks"
- Networking between researchers, companies, organizations and other actors is central for supporting the local game developments scenes and can help them grow

#### **BASE LINE**

#### Describe the situation today within the key area

- Not much game development research at the moment
- No strong research network about games/game development in the Qvarken region
- Game research areas in: playtesting and user experience (Experience Lab), learning in and through games (ÅAU and University of Vaasa), games as literacy (Luleå University of Technology), games and equity (ÅAU with Universities of Tampere
- and Jyväskylä as well and University of Vaasa), game development as entrepreneurship (University of Umeå) and research into technical platforms (Luleå University of Technology)
- Many small islands of game research
- Weak connection between studios and research in the region and between research institutions as well

# QVARKEN GAME LAB BUS DEV

#### THE CHALLENGE

#### **Problem**

- Limited game (development) research at the moment
- Weak communication between universities and researchers
- Weak connection between studios and existing research and researchers
- Limited meeting points between different actors in the field

#### **Causes**

- Mismatch between university profile and game industry
- Mismatch in work processes between academia and game development business
- Game business has not been seen as important as for instance research in the energy sector
- City, municipalities, Ministry of education and Universities strategic decisions not supporting the game industry and/or game research

#### **Effects**

- Small islands of independent game researchers and no joint research profile
- No strong networks around game research, and thereby the responsibility to implement research in game development falls upon the individual developer/small
- companies → studios interested in game research does not know where to start looking
- Limited visibility

#### THEORY OF CHANGE

#### The Goal

- Create opportunities for collaboration between researchers
- Create opportunities for collaboration between researchers and game industry
- Strengthen and highlight the game (development) research field

#### **Key Activities**

- Include a game research track in existing industry events and vice versa in academic events
- Create a research network and thereby facilitate connections between game (development) researchers and game developers in the Qvarken region

#### **Effects**

Strengthen a research-based game development scene

- Create meeting points for research and game dev business
- Create game dev tracks in existing research events and vice versa
- Identify challenges and research gaps
- Define the Quarken regions strengths and areas of expertise

- connected to game development and game research.
- → Create a need-based common research project with game studios and researchers in the area
- Expand universities' presence in future project teams



## Describe the key area and its role in the start-up infrastructure in the Qvarken area.

- Games are developed where game developers live. Traditional approach to support the creation of a game cluster is to funnel developers from a population. This is not likely to succeed in low populated areas
- Game developers will move to pursuit their dream. If we give them a good offer they will move here
- The offer needs to include
  - Support in creating a balanced team including leagals, sales, accounting etc.

- Coaching and network from industry seniors
- Pre seed money
- Possibilities to grow the team
- Good living conditions
- Without this infrastructure chance of a local game industry cluster are slim outside a bigger city

#### **BASE LINE**

#### Describe the situation today within the key area

- A pilot project Game village Jörn – is launched
- Pre reqs is close collaboration between local authorities, local entrepreneurs, real estate developers, game educations and the pre seed investor Mind Detonator
- Game Village No. 2 in Nordingrå is launched right now
- Five studios has moved to Jörn and two have already moved to Nordingrå
- This gives the game industry cluster Arctic Game a wider role in the rapid expansion of the cities in Northern Sweden

# QVARKEN GAME LAB BUS DEV

#### THE CHALLENGE

#### **Problem**

Weak Game industry cluster

#### **Causes**

 Low population density limits traditional approach on game cluster development. I.e. funnel game dev studios by supporting gaming culture, game dev educations, game start-up and growth.

#### **Effects**

 Limited possibilities for growth and low attraction

#### THEORY OF CHANGE

#### The Goal

Strong game industry cluster in low populated areas

#### **Key Activities**

- Get developers to move here by creating a great offer to start up studios
  - Support in creating a balanced team including leagals, sales, accounting etc.
- Coaching and network from industry seniors
- Pre seed money
- Possibilities to grow the team
- Good living conditions

#### **Effects**

 A more attractive and growing countyside by supporting export based videogame studios

- Game Village Jörn has no public funding and will in worst case close down during 2023
- Game Village Nordingrå have funding until the fall of 2023 and the risk is that it also have to close down
- Suggestion is to apply for funding for Jörn, Nordingrå and a village in Finland and include research and education to this project

# QVARKEN GAME CRUISE -CONCEPT

#### **PURPOSE**

The concept Quarken Game Cruise (QGC) has two purposes. The first purpose is to disseminate knowledge, co-creation, and innovation for the game developers within the Quarken region. The second purpose and goal is to help cities and municipalities realize the potential and impact the game development industry has on society, welfare and growth.

#### **FORMAT**

The QGC is a three-day event in three different places: Umeå, Cruise ship and Vaasa. The concept builds around people who are interested in games, gaming community, gamification and game development in Västerbotten and in Österbotten (Pohjanmaa). The QGC is a mixture of a cruise, conference and exhibition with games as a core context. The intended participants in QGC will be described in detail in section target audience. To easier explain the concept we use the Sweden group and the Finland group

- **Day o** Participants register to the event via a Qvarken Game Lab website. On the website information about the QGC, its program and schedule are available. There are also possibilities for sponsors to register.
- Day 1 Sweden group boards the ferry towards Vaasa. The trip to Vaasa takes approximately 3,5 hours. Onboard program will be arranged during ~3 hours of the trip in conference space onboard Aurora Botnia. After arriving in Vaasa, the Sweden group will be transported to their accommodations. Day 1 ends with a networking mingle, meet & greet event hosted by a sponsor, at a local venue where the Sweden and Finland groups meet.
- Day 2 A Qvarken Game Cruise conference day in Vasa (09:00 ~ 15:00). Events and programs consist of workshops, seminars, company visits, exhibitions, and talks. These events and programs are on parallel tracks, so every participant finds something of interest. Lunch will be served for all registered participants. Bus transportation takes all participants to the cruise ship where the QGC continues onboard with both groups (Finland & Sweden group). Dinner is served onboard. Arriving in Sweden all participants are transported to their accommodations. Networking and mingling continue at a local venue hosted by a sponsor.
- **Day 3** QGC continues in Umeå with programs in parallel tracks. Company visits, exhibitions, and demonstrations. The Finland group is transported back to the ferry on which the onboard program commences. This program is the same as the Sweden group got to experience on their trip to Vaasa. The conference ends after the Finland group have arrived in Vaasa.

#### TARGET AUDIENCE

#### **Primary target audience**

- Game developers: both small and large studios/companies. Start-ups and already established.
- Game interested people: people who are interested in game development, gamification, game-based learning, serious games and in general interested in using games as means to fulfil a goal or a need.

#### Secondary target audience

- Researcher & Teachers interested in game-based learning and gamification
- Cities and Municipalities: Vasa, Umeå, Skellefteå, Jakobstad, Lycksele, Nykarleby
- Politicians
- Regional development companies and organizations: e.g. Vasek in Vasa, Vaasan Yrittäjät, Arctic Game Lab.

# QVARKEN GAME LAB QVARKEN GAME CRUISE - CONCEPT

#### TIME SCHEDULE EXAMPLE

Scheduling the QGC is dependent on Wasaline and its timetable. A detailed timetable for the ferry Aurora Botnia can be find here: https://www.wasaline.com/tidtabell/

Time schedule example for Qvarken Game Cruise organized in august 2022 (local times):

#### Day 1: Umeå - Vaasa Thursday

- **11:15** Departure from Umeå
- 11:30 Onboard program for the Sweden group (~3 hours)
- **15:45** Arrival in Vaasa, bus transportation to accommodations
- **19:00** Meet & greet with the Finland group

#### Day 2: in Vaasa Friday

- 10:00 Qvarken Game Cruise starts with workshops and seminars
- **12:00** Lunch
- **13:00** Program continues
- **15:30** Bus transportation to the ferry
- **16:30** Departure from Vaasa
- 17:00 Onboard program + skärgårdsbordet dinner (~3 hours)
- 19:00 (local time) Arrival in Holmsund and bus transportation to accommodations
- **21:00** Networking and mingling at local venue

#### Day 3: in Umeå Saturday

- **10:00** Qvarken Game Cruise in Umeå starts.
- **12:00** Lunch
- **15:00** Bus transportation to the Ferry
- **16:30** Departure from Umeå
- **16:45** Onboard program for Finland Group
- **18:00** (local time) Arriving to Vaasa and end of Qvarken Game Cruise

#### PROGRAM AND EVENTS

Describe each option in enough detail to explain how it works, including a diagram and a brief list of pros and cons relative to the project objectives.

#### On board the Aurora Botnia

- What are the key design requirements and how were these developed from functional requirements?
- What major design approaches were considered to satisfy these design requirements?
- How were the design alternatives evaluated?
- What is the current baseline approach?

#### Finnish side, Vaasa

- What are the key design requirements and how were these developed from functional requirements?
- What major design approaches were considered to satisfy these design requirements?
- How were the design alternatives evaluated?
- What is the current baseline approach?

#### Swedish side, Umeå

- What are the key design requirements and how were these developed from functional requirements?
- What major design approaches were considered to satisfy these design requirements?
- How were the design alternatives evaluated?
- What is the current baseline approach?

#### **Ideas**

- Virtual Driving School (Umeå)
- Workshop about startup/Qvarken industry
- Workshop about woman in gaming
- "Get funded" workshop
- post-mortem talks
- CEOs mingle
- political mingle
- Political workshop on supporting growth of industry locally/regionally
- Game pitch
- success stories
- demo expo

This playbook was developed during 2022 as part of the Interreg Botnia Atlantica funded project Qvarken Game Lab.

Qvarken Game Lab is a project focused on collecting, refining and further developing knowledge about the gaming industry to strengthen the gaming industry by creating a cross-border competence center.

The ambition of the intensive project is to develop and establish the competence center during the project period in order to continue the development process after completion of the project.

#### Lead partner:

Novia University of Applied Sciences

#### **Project partners:**

Centria University of Applied Sciences Kramfors kommun Skellefteå Science City Åbo Akademi / Experience Lab

