

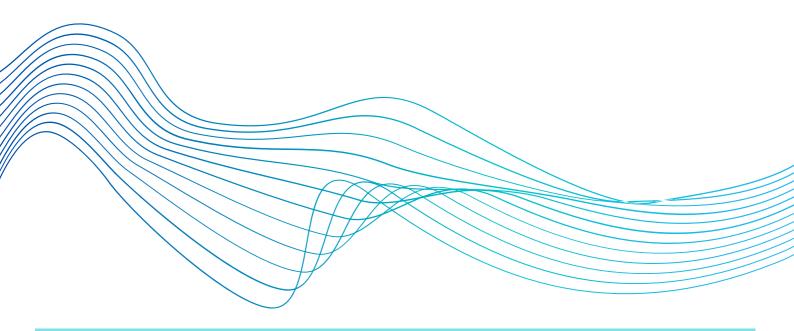
D11.1

HANDBOOK SUPPORTING DEVELOPMENT OF SME INNOVATION



Table of Contents

- **1** Foreword
- 1 Introduction
- Preliminary Process
- The "Snake" Methodology
- Results and Further Examples
- **O**Glossary
- 7 Thanks
- References



COPYRIGHT

©Copyright 2020-2024 the Bridges Consortium, consisting of:

- Trøndelag County Authority, Norway
- SalMar Farming, Norway
- Blue Competence Centre, Norway
- Easy Learning Solutions, Norway
- Icelandic College of Fisheries, Iceland
- Holar University, Iceland
- University of Akureyri, Iceland
- Arnarlax, Iceland
- Gullmarsgymnasiet/Lysekils vuxenutbildning, Sweden
- Nordic Trout Sweden, Sweden
- Peimari Group for Further Education and Training (Livia College), Finland
- Nordic Trout, Finland

This document may not be copied, reproduced or modified in whole or in part for any purpose without written permission from the Bridges Consortium. In addition to such written permission to copy, reproduce or modify this document in whole or part, an acknowledgement from the authors of the document and all applicable portions of the copyright notice must be clearly referenced.

All rights reserved.

This document may be updated if needed and changed without notice.

DISCLAIMER

The European Commission support for the production of this publication does not constitute endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Foreword

BRIDGES

The BRIDGES Network of CoVE targets the development of aquaculture VET and Higher VET transnational platform, with a strong emphasis on the modernisation of work based learning and practical systems within four north European countries; Norway, Sweden, Finland and Iceland. The Bridges mission is to help the finfish sector and industry to re-evaluate and encourage new ways of developing the workforces' knowledge, skills and qualifications effectively and efficiently. The project also aims to develop VET schools in the target countries, which will subsequently be able to take more prominent roles for helping the industry with education, entrepreneurship and innovation issues producing finfish.

The conceptualised aims and objectives for the Bridges initiative from the perspective of all partners within industry and VET and Higher Vet education include the following:

- Develop VET supply to better offer training based up on industry demands.
- Students receive more efficient aquaculture training.
- Introduce new VET methods that are more time- and cost efficient.
- Establish school = industry partnerships.
- Transforms VET schools into regional competence centres.
- Offer world class solutions for SME early innovation and entrepreneurship.
- Provide world leading aquaculture VET.
- Export the new models to Europe.



Definition

The primary objective of this handbook is to provide SMEs, VET and Higher VET providers guidance on business support services and methods developed, piloted and refined to stimulate innovation, enterprise and entrepreneurship, and recruitment in the farming industry.

The intended objective of the following document, although primarily comprised for SMEs, VET and Higher VET provider's needs, aims to assist, encourage and facilitate providers of ALL types and competencies to support, accelerate and focus innovation with partners in a multitude of scenarios. his document can be utilized as a guide and template for the construction of an outline for collaborations with all partner types to gain a clear understanding of current needs,

while facilitating a foundation of trust. The documents components can be refined and developed based on experience gained through first hand usage and correlation of examples from various situations. Providers are encouraged to take inspiration from the layout and make it their own based on local context and competence.

Introduction

The SME handbook is comprised to be as accessible and user-friendly as possible for all manner of situations and competencies and is aimed directly for the use by SMEs, VET and higher VET organisations. The goal is to guide the user through different stages of innovation development from an organizational perspective to assist in the direction of intuitive flow.

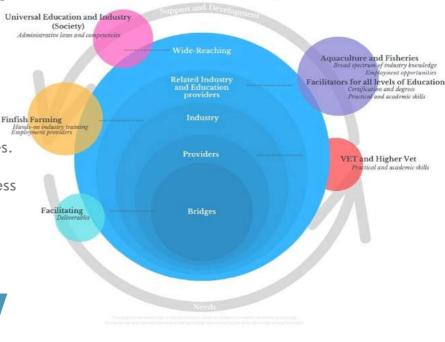
The following Introduction chapter is a theoretical and explanatory base to help the user understand the importance of cross commerce communication and collaboration. Chapter Preliminary **Process** is the beginning of the handbooks practical guide, where the user is informed on the first steps of an innovative process, steered through methodical thinking, and asked the right questions to potentially launch an innovation. Chapter "Snake" Methodology" is where the applied work begins. Explanations and examples are given at each stage of the methodology to ensure satisfactory explanatory methods and accessibility ease. Chapter Results and Further **Examples** contains just that, examples and results, to provide the user with further real-world models for a broad spectrum of scenarios and competencies. Examples are bulleted with red exclamation points (!) to enable effortless observation in each chapter throughout

the handbook.

Bridgehead Aquaculture

Bridgehead Aquaculture is a program that stimulates interaction between business, upper secondary school, university and public administration (community). The Bridges project is a prime example of an initiative to improve the communication of education, industry and community to develop progressive thinking, as shown visually in the below figure.

Collaboration and Expansion



Collabotation

The Benefits of Collaboration Between Industry, Education and Community

01

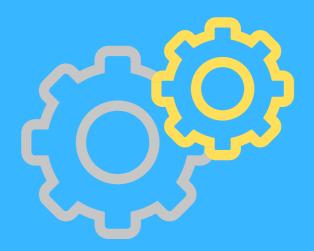
Industry-education-society partnerships are collaborative efforts that bring education institutions, commerce and community together to address their mutual interest in comprehensive education to aid inclusive improvement and development of all forms. This can all stem from an innovative idea created by an individual or organisation. The innovation could become a reality with industrial-educational partnerships for example, each party bringing different strengths and experience to the table.

03

An example of measures to promote this kind of collaboration is the Aquaculture Skills Foresight Forum. **ASFF** is a forum for the exchange of upcoming competence requirements in aquaculture at upper secondary and vocational school level in the Nordics and is one of the measures that emerged from the EU project BRIDGES. It is also a platform where standards are set for what future aquaculture employees must learn at school, in the local community and internationally, based on the industry's direct feedback.

02

While helping to advance the educational development within education institutions, the partnerships also address skills scarcity needs. A greater connection between these three consortiums strengthens communication, which allows for greater understanding of one another's strengths, weaknesses and needs. This highlights how there is no better reason to believe that educational institutions must work proactively with industry, especially SMEs, to deliver appropriately skilled and capacitated graduates to meet today's societal and economic needs.



Criteria for Success



Definition

Success is defined as the accomplishment of an aim or purpose. Success is an extremely broad term and widely idiosyncratic but at its core, regardless of perspective and standpoint, it can be demarcated as a positive result. This handbook is designed to be utilized as an essential tool to assist in the success of any SMEs, VET and Higher VET communicative ventures but is encouraged to be used in any and all types of projects irrespective of scale or competence.

More specifically, the aim of VET and higher VET in supporting SMEs with their ideas is launching and establishing, in some form, the product or service into a relevant market. If this aim could not be reached, then at the very least has VET/higher VET and industry collaboration been solidified, networks built, and communication opened for further relationship development. This strengthening of collaboration between schools and industry in and of itself is a success due to the potential in founding many more projects together and sharing in resource management.



Trust

Key success criteria for innovation, enterprise and entrepreneurship and associated metrics that are witnessed within this handbook, such as systematic collaboration, iterative process to ensure a superlative outcome, and a thoroughly considered conceptualization initial perspective are all important principles to consider when embarking on a project with the aim to succeed. The most important criteria, above all else however, is trust.

Nothing is successfully built on the foundations of mistrust and scepticism. For the purposes of this handbook, the example of VET and Higher VET educational facilities collaborating with SMEs which in turn overlaps with community cannot be wholly successful without a continuously mutual foundation of trust



Metrics

Another key criterion of success is metrics; measures of quantitative assessment commonly used for assessing, comparing, and tracking performance or production. How the tightness of cooperation, the functionality of the method, and the trust of the conceptualization is measured gives a solid foundation of assessment and consequently status of events.

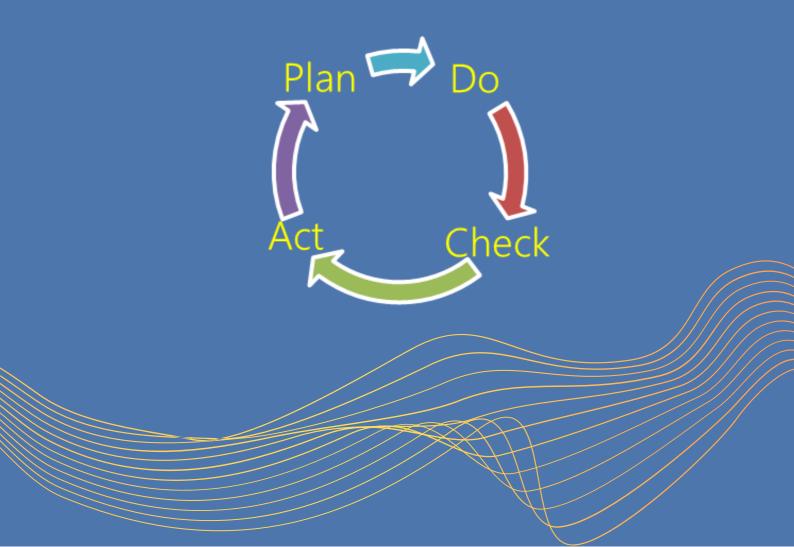
Both trust and metrics should be continuously taken into consideration throughout the entire process of this handbook. They are the basis of any and all undertakings and key in each and every stage of the process to enable success.

Metrics

(!) Metrics can be measured in a multitude of ways:

- Assessment surveys.
- Internal meetings.
- Evaluation seminars.
- Educational participants (students) involvement.
- Engaging the Knowledge Triangle (involving a industry-R&D-educational institutions collaborative effort).
- Effective resource management amongst innovation participants.
- GAP-analysis
- SWOT-analysis
- Risk analysis
- Needs analysis
- Impact analysis
- Relevant skill-building courses for innovation participants
- Access to private and public funding
- Access to private and public investors
- Access to incubators and accelerator programs
- Choose appropriate working methods to the context at hand (Waterfall, Agile, Scrum etc...)

Other metrics one can use to evaluate the potential of achieving innovation is the effectiveness of collaboration itself.



Metrics

(!) Certain criteria for successful collaboration are as follows:

- Creating a collaborative strategy that is appropriate for the particular issue being addressed. Imposing a uniform framework for collaboration while paying little attention to regional conditions and ambitions is not practical.
- How collaboration will realistically show impact early on in a project needs to be taken into account. It might be challenging to show impact in the early phases of collaboration. Managers could grow impatient with progress because relationship-building does not typically have the same weight as other indicators of impact.
- Having realistic time frames in mind is also crucial for collaboration to be successful. Lengthy lead times for design and implementation are typical elements in a project, as well as difficult processes of forming relationships and deciding on working methods. These procedures frequently take much longer than expected, therefore patience and acceptance are required.
- Being aware of the cultural dynamics and interactions among the collaborators. Good
 interpersonal and communication skills alone are insufficient for successful collaboration. A skill
 set that combines an acute sensitivity to the interpersonal dimension of human interaction with an
 astute appreciation of the emotional resonance of systems, relationships between organizations,
 and the "baggage" brought to the collaboration by various actors is summated as "collaborative
 intelligence". As Dr. John Butcher, an ANZSOG Adjunct Research Fellow at Curtin University's
 Institute of Public Policy, notes:

"CQ [collaborative intelligence] encompasses a number of personal attributes, such as knowing when to take charge and when to let others lead; a willingness to listen and respond nimbly to changed circumstances or new information; a capacity for empathy and the ability to see things from other people's point of view; a deep appreciation of systems and how they intersect and interact; and the ability to forge enduring relationships based on trust."

• Another aspect is that long-term collaboration can be challenging, especially if there are changes in who is involved. Additionally, a group's feeling of purpose and dedication can deteriorate over time, which may lead to less effective collaboration down the line.



Metrics

(!) In summary:

- Time and committed resources are required for collaboration.
- The established reaction force, team or peoples involved require the ability to accept uncertainty since the course of collaboration can be unpredictable.
- Significant time, effort, and emotional involvement are necessary for effective collaboration.
- Collaboration requires a personal commitment to the problems at hand.
- Partners in a partnership must give assurance to their executives and boards as well as to the other partners.
- To respond to shifting conditions, agility and adaptability are required. Although they can be good foundations at the beginning of a project, terms of references may need to be modified throughout the duration the project.
- Collaboration might not always be the most optimal strategy.

Preliminary Process

Once an innovative idea has been formulated, a preliminary process gets underway. The big question being: What now?

Responsibility

Dependant on the type of innovation, it can be difficult to decide who should take responsibility for seeing the process to fruition. This is the first step. Has the idea come from an individual or group? Within or without an SME or educational organization? Deciding who is going to be dedicated to taking on the creative process of this innovation and whether it comes to fruition is key as they will usually be the driving force that will see the project through and ensure completion of tasks.

How to Proceed

The designated personnel must then decide how to proceed. Will they take on the effort of the innovation process within the organisation itself or will it be delegated to an outside partner/facility? If funds are available and time is short, or innovative inspiration and direction is stunted but the thought of the final product is lucrative, seeking out a third party to push the innovation forward could be the way to go. A third party can also be helpful to those who are unsure about business modelling and/or procedure. Outside help from individuals and organisations with experience in overall innovative process can make the journey to completion a lot more agreeable. There are a multitude of companies, enterprises, government funded initiatives

and non-profit organisations that are

to funding and those who do not (see Financing for more on financing).

available to both those who have access

The following organisations are provided as examples:

- The EU, one of many funding and consulting options they offer: https://ec.europa.eu/commission/presscorner /detail/en/ip_22_4402
- The Blue Competence Centre, Norway: https://bksnorge.no/
- Incubator/ Accelerator for marine ideas "KLP Pressure Chamber Ocean" (Norway based): https://trykktanken.no/klp-trykktanken-2023/
- The Innovation Centre, Iceland: https://www.nmi.is/en
- Iceland Ocean Cluster, Iceland: https://www.sjavarklasinn.is/en/
- Global incubator resource https://incubatorlist.com/search
- Public innovation resource group, Team Finland https://www.team-finland.fi/en
- EIT European Institute of Innovation and Technology: https://eit.europa.eu/
- Kalmar Science Park, Sweden: https://kalmarsciencepark.se/

It is also appropriate to think on an even smaller scale. Does somebody know another person in a local educational organisation or industry that could help? Are there any local community programmes that could assist? Sometimes it's the simple action of making a phone call or sending an email to someone familiar that can get an innovative concept off the ground. Help is habitually given to those who ask for it.



Contractual Agreement and NDA

For all transactions, intellectual or commercial, a contract should be drafted to ensure a clear structure of any and all transactions, conversations and future collaborations between all parties. The more detailed contacts are, the clearer each contributor's role and responsibilities will be. When an initial communication occurs, it should be decided whose responsibility it is to draft and finance the contract, or if a third-party contractor is needed. Is a non-disclosure agreement required to protect the innovative idea? If so, this ought to be drafted alongside or within the contract. Further contacts can be drafted or the initial contract emended when and as the innovation evolves. This should also be discussed as to who and when this responsibility lies.

! The following is an example of a simple contract form:



Matanuska-Susitna Borough School District

Print Form

Business Partnership Agreement

This agreement is completed by the school/department administrator or liaison. Print the form after completion at the top of the form. Submit forms to Federal Programs. DO NOT CLOSE the form until you have printed the form. The principal/director and business organization sign the printed copy and the school keeps the original.

ichool or Department		Name					
dministrator		Liaison					
ddress (street, city, state, zip)							
thone	Fax		E-mail				
USINESS/ORGANIZATION PA	RTNER						
SUSINESS/ORGANIZATION PAR	TNER						
ontact		Title					
address (street, city, state, zip)							
Phone	Fax		E-mail				
hat type(s) of partnership sup	port will this par	tnership provide (chec	k all that apply				
Increase Academic Achiever Enhance the Learning Envir Career Awareness - Offer job Take an Advisory Role - Be a Faculty or Staff Developmer Done/Sponsorships - Donat	ment - Read to st comment - Mento coshadowing, int member of a co at - Invite teache	tudents, tutor, provide r students, provide time ernships, career fair or mmittee (School Impro rs to in-house training	technical exper e for employee career day, care ovement, Title 1 seminars, provi	rtise, dis s to volu eer mate) de job s	inteer, fie rials hadowin	ld trips	
Increase Academic Achiever Enhance the Learning Envir Career Awareness - Offer job Take an Advisory Role - Be a Faculty or Staff Developmer Done/Sponsorships - Donat	ment - Read to st comment - Mento coshadowing, int member of a co at - Invite teache	tudents, tutor, provide r students, provide time ernships, career fair or mmittee (School Impro rs to in-house training	technical exper e for employee career day, care ovement, Title 1 seminars, provi	rtise, dis s to volu eer mate) de job s	inteer, fie rials hadowin	ld trips	
Increase Academic Achiever Enhance the Learning Envir Career Awareness - Offer job Take an Advisory Role - Be a Faculty or Staff Developmer Done/Sponsorships - Donat Other	ment - Read to stonment - Mento o shadowing, int member of a co at - Invite teache e supplies or equ	tudents, tutor, provide r students, provide time ernships, career fair or emmittee (School Impro rs to in-house training uipment, scholarships,	technical experience for employee career day, care overnent, Title 1 seminars, proving sponsor events	rtise, dis s to volu eer mate () de job s or field	inteer, fie rials hadowin	ld trips	
Increase Academic Achiever Enhance the Learning Envir Career Awareness - Offer job Take an Advisory Role - Be a Faculty or Staff Developmer Done/Sponsorships - Donat Other ECIPROCAL ACTIVITY //hat type(s) of school mutual a School T-shirt & spirit items	ment - Read to stonment - Mento o shadowing, int member of a co nt - Invite teache e supplies or equ ctivities will this	tudents, tutor, provide r students, provide time ernships, career fair or mmittee (School Impro- rs to in-house training uipment, scholarships, partnership provide (con on marquee, bnews	technical experience for employee career day, care overnent, Title 1 seminars, proving sponsor events sponsor events sponsor experience all that appropriate the spaper, web sit	rtise, dis s to volu eer mate) ide job s or field ply)	inteer, fie rials hadowin trips ers, etc.	ld trips	chers
Increase Academic Achiever Enhance the Learning Envir Career Awareness - Offer job Take an Advisory Role - Be a Faculty or Staff Developmer Done/Sponsorships - Donat Other ECIPROCAL ACTIVITY That type(s) of school mutual a School T-shirt & spirit items Assist with special events	ment - Read to stonment - Mento o shadowing, int member of a co nt - Invite teache e supplies or equ ctivities will this Recognit	tudents, tutor, provide r students, provide time ernships, career fair or mmittee (School Impro rs to in-house training uipment, scholarships, partnership provide (coion on marquee, bnews ication of school event	technical experience for employee career day, care overnent, Title 1 seminars, proving sponsor events sheck all that approper, web sitts	rtise, dis s to volu eer mate i) de job s or field ply)	inteer, fie rials hadowing trips ers, etc.	d trips	chers
Increase Academic Achiever Enhance the Learning Envir Career Awareness - Offer job Take an Advisory Role - Be a Faculty or Staff Developmer Done/Sponsorships - Donat Other ECIPROCAL ACTIVITY //hat type(s) of school mutual a School T-shirt & spirit items	ment - Read to stonment - Mento o shadowing, int member of a co nt - Invite teache e supplies or equ ctivities will this Recognit	tudents, tutor, provide r students, provide time ernships, career fair or mmittee (School Impro- rs to in-house training uipment, scholarships, partnership provide (con on marquee, bnews	technical experience for employee career day, care overnent, Title 1 seminars, proving sponsor events sheck all that approper, web sitts	rtise, dis s to volu eer mate i) de job s or field ply)	inteer, fie rials hadowin trips ers, etc.	d trips	chers
Increase Academic Achiever Enhance the Learning Enviro Career Awareness - Offer job Take an Advisory Role - Be a Faculty or Staff Developmer Done/Sponsorships - Donat Other ECIPROCAL ACTIVITY That type(s) of school mutual a School T-shirt & spirit items Assist with special events Notes from students	ment - Read to stonment - Mento o shadowing, int member of a co nt - Invite teache e supplies or equ ctivities will this Recognit	tudents, tutor, provide r students, provide time ernships, career fair or mmittee (School Impro rs to in-house training uipment, scholarships, partnership provide (coion on marquee, bnews ication of school event	technical experience for employee career day, care overnent, Title 1 seminars, proving sponsor events sheck all that approper, web sitts	rtise, dis s to volu eer mate i) de job s or field ply)	inteer, fie rials hadowing trips ers, etc.	d trips	chers
Increase Academic Achiever Enhance the Learning Envir Career Awareness - Offer job Take an Advisory Role - Be a Faculty or Staff Developmer Done/Sponsorships - Donat Other ECIPROCAL ACTIVITY That type(s) of school mutual a School T-shirt & spirit items Assist with special events Notes from students Other	ment - Read to stonment - Mento o shadowing, int member of a co nt - Invite teache e supplies or equ ctivities will this Recognit Commun Free ticke	tudents, tutor, provide in students, provide time r students, provide time ernships, career fair or simmittee (School Improvist to in-house training uipment, scholarships, partnership provide (coion on marquee, bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication & partn	technical experience for employee career day, care overnent, Title 1 seminars, provis sponsor events sheck all that appaper, web sitts or grams	rtise, dis s to volu eer mate i) de job s or field ply) e, banne linvit.	nteer, fie rials hadowing trips ers, etc. ations to seciation p	g for tead	chers chool progr
Enhance the Learning Environment Career Awareness - Offer job Take an Advisory Role - Be a Faculty or Staff Development Done/Sponsorships - Donat Other EECIPROCAL ACTIVITY What type(s) of school mutual a School T-shirt & spirit items Assist with special events	ment - Read to stonment - Mento o shadowing, int member of a co nt - Invite teache e supplies or equ ctivities will this Recognit Commun Free ticke	tudents, tutor, provide in students, provide time r students, provide time ernships, career fair or simmittee (School Improvist to in-house training uipment, scholarships, partnership provide (coion on marquee, bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication of school events & partnership provide (coion on marquee) bnewsication & partn	technical experience for employee career day, care overnent, Title 1 seminars, provis sponsor events sheck all that appaper, web sitts or grams	rtise, dis s to volu eer mate i) de job s or field ply) e, banne linvit.	nteer, fie rials hadowing trips ers, etc. ations to seciation p	g for tead	chers chool progr

Iterative Evaluation Process

The iterative process is a trial-anderror methodology that brings projects more holistically to an end goal. For a more detailed description of the iterative evaluation process see chapter Iterative Process. At this part of the innovation process the goal is to determine whether the innovative idea is worth pursuing.

Why was the innovation thought of in the first place? What is the end goal? Is the overall consensus from a multitude of individuals/organisations that it is a good idea (! found out through surveys for example)? Is the idea tangible physically and financially, and if so in what ways (See Financing)? How long is estimated until a final product is produced? Is only part of the innovation perceptible and the initial idea needs to be reworked to make feasible? These are all important questions that need to be answered in order to proceed or, alternatively go back to the drawing board.

The more individuals/organisations involved at this stage the better. Opinions from a multitude of competencies and backgrounds ensures a well-rounded scale of views which in turn will ensure a stable starting point.

! Examples for fundraising

Financing

The saying "money makes the world go round" is inherently true. Many innovations are halted because of lack of funds to bring the ideas to fruition.

As mentioned earlier, it is often small and local actions that can make a big difference in the long run.

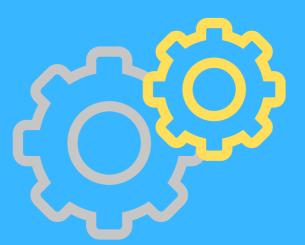
If the innovation was fathomed from within an organisation, can the organisation itself fund (at least the preliminary) stages of the innovation? Can an educational organisation envelop the innovation into their model in order to finance and incorporate the innovation from within an established framework? Are there any local programmes, council or local crowdfunding initiates that could assist in funding? Does the innovation need initial funding at all? If an outside party was utilised for How to Proceed? can they help by networking or assisting in an application for funding in some way? If the innovation was thought of by an individual, are they willing to fund the project themselves (and is it actually worth it? See Iterative Evaluation Process).

- Eureka is an international initiate that has provided funding for innovating ideas since 1985: https://www.eurekanetwork. org/
- GoFundMe. "GoFundMe is an easy and powerful way to ask for help, trusted by over 100 million people. Whenever you need help, you can find it here."
 - https://gofundme.com/
- Nordic Innovation. "An organization under the Nordic Council of Ministers that aims to make the Nordics a pioneering region for sustainable growth by promoting entrepreneurship, innovation and competitiveness in Nordic businesses."
 https://www.nordicinnovation.
 - https://www.nordicinnovatio n.org/
- Icelandic Research Fund. A helping hand for innovative research in Iceland: https://en.rannis.is/funding/r esearch/icelandic-researchfund/
- Vinnova. Sweden's Innovation Agency: https://www.vinnova.se/en
- Innovation Norway supports innovative and sustainable ideas through funding and expertise:
 - https://www.innovasjonnorg e.no/en/start-page/
- Sitra. "We collaborate with partners from different sectors to research, trial and implement bold new ideas that shape the future."https://www.sitra.fi/ en/
- Applying to EU-projects

Technical

Business intelligence, market dynamics, strategy, and leadership are the main areas of concentration for technical assistance. Economic gardening is evolving into a model for long-term economic growth as communities come to terms with the fact that the big enterprises established outside a local region aren't as significantly supportive of local communities as local SMEs can be. One such example of economic gardening is the Business Garden Hitra and Frøya.

This publicly funded tool assists local business support groups and leaders in making the case for entrepreneurship as a method of economic growth.



02

! Other examples of technical assistance to innovation are as follows:

- Funding.
- Expertise in the relevant field.
- A network of company experts for potential collaboration in the realization of innovation. Perhaps the best course of action is to allow innovation success to be shared amongst more than one company based of effective resource management.
- Contracts and declaration of expectations.
- A network of relevant suppliers.
- Choosing a project lead with experience in the relevant field and/or process.
- Establishing an innovation team with a broad skill set.

The "Snake"

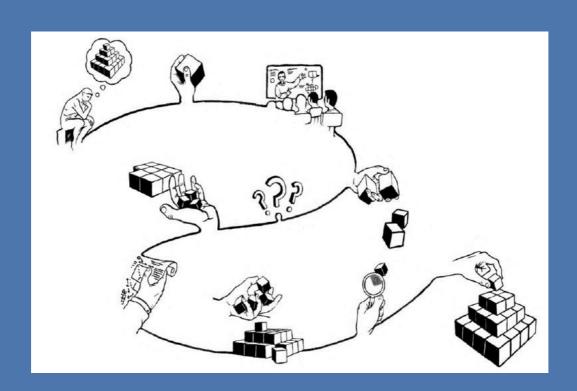
Figure 5 represents how, with the help of systematic collaboration, an idea can be developed into something tangible.

After the preliminary process, whereas an innovation has been deemed by iterative process to be worthy of pursuit, the next stage of the innovative process is set into motion. There are many ways to take an innovation from start to finish and for the purposes of user accessibility the snake methodology was selected to be utilised as the framework for this handbook.

The snake methodology is designed to illustrate how a fabrication flow of innovative ideas is conducted. It is a clear illustration of the manufacturing method. The start is always an external order, e.g., alike a pyramid, to be delivered at the end of the procedure.

Hereafter this handbook is framed in the same flow as the snake methodology to ensure clear and accurate practical application to real world application.

In the case of this handbook, the methodology could be utilized to help developing an innovation that is linked to a product or process. The next steps are to start thinking of innovation alike an industrial manufacturing process. Finally, the figure illustrates how you provide iterative process at both component and product levels before a final product is released.



The "Snake"

Throughout this handbook, the snake methodology will henceforth be witnessed to simply as the methodology.

In summarization terms the methodology flows as follows:

After the preliminary process whereas the innovative idea is thought of, it is then manifested and distinguished to be accessible enough to share. The innovation is thereafter conceptualized into a physical venture with the collaboration and relationships from others. After the innovation is deemed ready though processes of metrics the situation can be moved to the materialization phase where it can be formed into a tangible state. The all-important question of financial logistics and overall funding of the innovation although represented as a separate step in the methodology, must always be kept in mind throughout. Financially securing the innovation becomes more tangible if it is pitched to investors and/or sponsors after the workings out of the physicalises. The final stages of the methodology see the innovation come to life and be refined through review and iterative processes before, alongside and after the ultimate result.

Each following chapter is complete with real world examples as explanatories. This handbook is to be used as an organisational guide. If it is suitable to utilise only part of the methodology, skip steps or loop back to prior steps after completion, this is to be considered and decided by each individual user according to their own analysis and competencies.

Initial Idea

The world is filled with ideas. There is an old superstition that if an idea is not utilised and put into action in good time, it will leave and find someone else. Whether this is believed or not is down to the superstitious nature of the reader, never the less it does ring true with the core message: Put your thoughts to action or nothing will come of them.

When an idea occurs the big and perhaps most important step of the methodology is to take action. What now?

What kind of innovation is the venture? Is there a system already in place? The preliminary process will have provided a lot of background to these new queries. The significance to this second initial faze is to refine the innovation further. How to identify the key level of the innovation for various user groups?

With the help of initial or further outside parties (examples listed in Preliminary Process) processes can be put into place to expand on the innovation further.

- ! The following is a list of possible actions that could be taken to conceptualise the target groups for the innovation:
 - Target group analysis.
 - Target market analysis.
 - "Experts in a Team" workshops.
 - World Café workshops.
 - "First line services". See Blue Competence Centre (BKS) examples.
 - Business Garden activities. See Blue Competence Centre (BKS) examples. (BKS) examples.









Manifestation

An idea has been conceptualised and targeted, now it is the next phase of sculpting this idea into something that can both help oneself in relation to structuring the process and be presented and shared with others outside oneself/organisation and prior involved parties.

One way of organising refinement of an innovation is a business plan. A business plan ensures the core message and functionality of an innovation is portrayed and devolved correctly.



The following template of a business plan can be edited and re-ordered as needed:

Partners

Who are our partners?

Which suppliers do we have?

Which future collaboration partners do we need?

Core activities

Which core activities must we do ourselves for the product to gain value?

How can we make the business more efficient?

Promise of value

How do we provide value to customers through the company, goods or services?

What problems do we solve for

Customer relationship

What type of relationship do we have with our customers?

How will we maintain the relationship with customers over time?

<u>Customer</u> segment

Who are our most important customers?

Who do we create value for?

Costs

What are the most important costs we have?

Resources

What resources do we have?

What resources do we need to fulfill the value promise?

How should the resources be used?

Channels

In which channels do we reach our customers?

Which channels do we use to deliver products and services to customers?

SWOT analysis

<u>Income</u>

What do customers pay for today?

How do we get paid?

What other ways can we charge in the future?

Conceptualization

Conceptualization is the process of specifying what we mean when we use particular terms, creating clear and concise definitions. It is the reverse process of conception.

Problem and/or opportunity conceptualization is defined as the process which begins after recognition that a problem, opportunity, or combined problem and opportunistic scenario exists and culminates in a conceptual model of the problem. Conceptual skills help avoid the pitfall of not seeing the overall picture. With the possess conceptual skills, you can both envision problems and brainstorm solutions. Encouraging these skills enables communities to work through abstract concepts and ideas effectively.

The conceptualization process for problems and opportunities within industry, in this case SMEs to determine the skills needed to innovate, improve and grow can be greatly assisted by the education sector and for the purpose of this handbook, VET and higher VET schools.

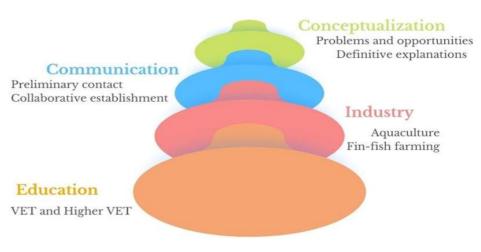
There are many ways to approach conceptualization which are applicable to different scenarios and competencies. The correct approach type of conceptualization for problems and opportunities is key for effective development continuation. This phase should be thought about with consideration.

Conceptualization and Development of Problems and Opportunities

! Examples:

- Bottom-up methodology.
- Statistical data analysis.
- Innovation camps.
- Brainstorming seminars.
- Focus groups.
- Questionnaires.
- Conferences.
- Quotative research.
- Peer-to-Peer meetings.
- Triangulation (for example industry, education and community).
- Facilitation by VET providers at the local level.
- Identifying target groups and group activities.
- Involving third parties (including key stakeholders).
- Competitor analysis.
- 1. What makes your idea different? How does it address a challenge differently?
- 2. Does your idea target an emerging market or an unaddressed need?
- 3. This can be a part of a SWOT-analysis

Conceptualization



Financials

Financial perspective on problem solving and innovation. How do economics help in problem solving?

Economics seeks to solve the problem of scarcity, which is when human wants for goods and services exceed the available supply. A modern economy displays a division of labour, in which people earn income by specializing in what they produce and then use that income to purchase the products they need or want.

The financial perspective indicates whether the SMEs strategy and operations add value to shareholders. For organisations that do not have shareholders, the financial perspective indicates how well the strategy and operations contribute to improving the organisation's financial health.

Looking at products from a financial perspective is imperative. As the saying goes "money makes the world go round". When conceptualizing and developing solutions to problems and opportunities a multi-faceted end goal must be envisioned that encompasses all aspects of a successful innovation, not least including the financial aspect. It is important to ask economical questions from the get-go such as;

- Is funding needed for the communication and conceptualization process. If so, how will this be obtained? Internally or third-party contributors for example?
- Is the collaboration economically sound? If not applicable now, then perhaps in the future after corresponding strategies are made, and by whom?
- Is the process financial liable?
- Does the end goal improve economics for all involved?
- What are the short term and long-term projections?
- Do the financial and economical tools, skills and outcomes involved benefit community?

This is not to say that financials and economical ideals should in any way discourage any forms of collaborative efforts, rather embraced as one of the key parts of the creative process.

Iterative Process

The iterative process is the practice of building, refining, and improving a project, product, or initiative. Teams that use the iterative development process create, test, and revise until they're satisfied with the end result. The iterative process is a trial-and-error methodology that brings projects more holistically to the end goal. As seen in Figure 7 an idea is methodically processed to create an end product but does the story truly end there? With instruments and tools applied from conceptualization and systematic collaboration the "final products" of projects can be continuously re-evaluated and improved upon through iterative process to better suit and be incorporated into ever changing scenarios.

! Examples:

- The overall timeline of a learning project: It has been decided that it would be apt to hold the project to a short timeline to allow for a longer evaluation and further development period for activities and teaching materials.
- Students are taught basic aquaculture process, smolt-sea-harvest, in a practical manner to then be able to independently complete reflective projects on development processes and potentially discover innovations themselves to improve these systems.

Development and Iterative Process



WORK IN PROGRESS....

Results and Further Examples
Practical examples from each chapter from each country.
See attached.

Glossary

EQF European Qualifying Framework

VET Vocational Education and Training - EQF level 3 and 4

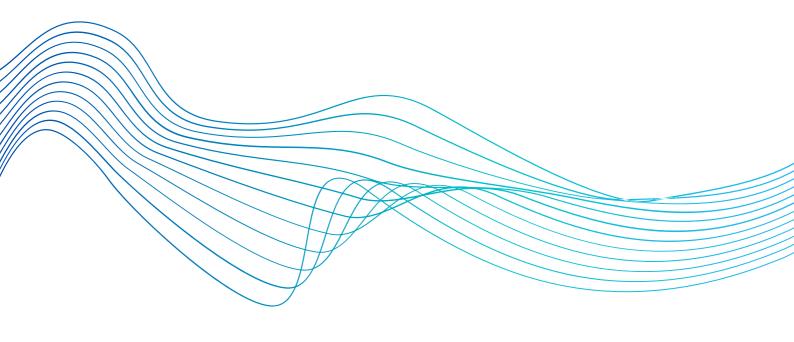
Higher VET EQF level 5

SME Small and Medium sized enterprises

Bridges Blue Region Initiatives for Developing Growth,

Employability and Skills in the farming of finfish

CoVE Centres of Vocational Excellence





The European Commission support for the production of this publication does not constitute endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.