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NordForsk

Branding the Nordic Research and Innovation Area

Promoting the Nordic region as an attractive destination
for global investments in research and innovation

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Interlace-Invent Aps for NordForsk

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Executive Summary

Addressing the challenges of research and innovation in a globalised world

As markets are opening up and capital, talent and other resources are becoming more mobile, the competition for investments in research and innovation has become increasingly fierce and continues to intensify. Globalization in research and technology is accelerating and new scientific and technological powers such as China, India and other emerging economies are attracting growing amounts of Research and Development (R&D) investments. At the same time, innovation has taken a prominent role in Nordic and European policy, being considered a dominant factor in national growth and international competitiveness. The dynamics of research and innovation are also in the midst of a shift towards more systemic models, emphasizing the inter-linked interactions among all the actors in a local innovation environment. As technologies become complex and interdisciplinary in nature, the future company must collaborate and exploit knowledge that is beyond its organizational boundaries in order to remain competitive. Along with the development of specialized local innovation environments competing for global resources, a geography of research and innovation is emerging that is increasingly reorganized around globally connected local clusters (or hubs) of excellence.

Against this background it seems wise for the Nordic countries to make a common effort

in profiling the region on the global marketplace for attracting foreign investments in research and innovation. On a global market the individual Nordic countries are very small and may find it difficult to make their voices heard on other continents. At the same time, the region has a long history of regional collaboration and several collaborative projects and Nordic initiatives are already underway to address the challenges of globalization. While there are certainly differences among the countries, in a global context the similarities are far more important.

Rethinking research and innovation investment promotion

However, when addressing this challenge, there is little experience to draw from. The practice of branding research and innovation environments is very immature. Theoretical models are developed for different contexts, usually focusing on consumer experiences and decision making processes, and practical experiences are rare and difficult to evaluate. In addition, the Nordic region is a complex constellation of five independent countries with sophisticated research and innovation policies, and a variety of place branding strategies in progress. And finally, research and innovation are complex phenomena that require definition and meaning in this particular context and thereby call for an appropriate framework to be developed.

Hence, the ambition of this report is two-fold; Firstly, to create an approach to and a methodology for branding in this particular context, taking the special considerations of the Nordic region and the notion of research and innovation investments as point of departure. Secondly, to put forward a suggestion for a branding strategy, firmly grounded in Nordic strengths and set within this emerging global context of research and innovation investments.

To explore Nordic strengths, 25 interviews with Nordic experts and a survey with international research and innovation professionals were conducted in addition to a review of relevant research in the field. The analysis showed that the Nordic Region is remarkably well positioned to take a leading role in the globalised competition for investments in research and innovation. With an exceptionally highly qualified workforce and the world's technologically most advanced user communities, the Nordic region is in pole position on the two most important factors for choice of research and innovation investment localization. However, there are significant perception gaps in relation to the target audiences, as the region is not necessarily well known on other continents and the high degree of excellence is not always known.

The following requirements for a successful branding strategy emerged out of the analysis:

- **The notion of inward investment in research and innovation needs to be broadened.** Adopting a view of research and innovation that acknowledges the complex interdependencies among companies, public actors, talent and other resources, also requires rethinking the view of inward investment. A “traditional” definition of inward investment would focus on the injection of money by large multinational companies into a region, in order to locate or develop its presence in the region through the purchase of capital goods. Inward investment promotion in the area of research and innovation has thus traditionally focused on attracting R&D investments from large companies, mostly in the form of acquisitions or establishment of R&D facilities.

However, within the context of a more open and systemic view of innovation, the target groups for a brand to attract investments in research and innovation has to be broadened as R&D facilities are only one part of an innovation system. Adopting a systemic view on innovation implies considering not only companies as target groups, but also other kinds of funding providers such as venture capitalists and investments funds as well as public and institutional research funding providers such as the EU or the National Institutes of Health (NIH). Furthermore, other important components of future innovation systems in a globalised world, such as universities and research institutions, cluster managers and other intermediary institutions are considered target groups and, not least – talent. *The ability to attract highly qualified talent is a precondition for attracting other kinds of research and innovation investments.*

- **Build on current resources, actors and networks rather than creating new ones.** The message from the interviewed experts was clear in this regard; there are already national actors that promote the respective countries and Nordic networks that need to be visualized and perhaps integrated. While the idea of branding the Nordic region to attract research and innovation investments was generally positively received, there were also concerns that creating new pan-Nordic organizations that override the current national players was likely to drain resources while generating too few returns, and may lead to political complications. Instead it was suggested Nordic initiatives build on the current actors and their competencies, creating projects, incentives and processes for how the actors can efficiently work together to achieve common Nordic objectives.
- **The branding strategy needs to cover both the general level that ties the region together and the concrete and specific that attracts investors.** There are often specific factors that are important for investment

THE FOLLOWING TARGET GROUPS FOR A BRANDING INITIATIVE OF THE NORDIC REGION WERE PRELIMINARILY IDENTIFIED:

TARGET GROUP	DEFINITION
Universities and Research Institutions	Increasing internationalization of universities (e.g. Japanese university setting up research facility in Copenhagen)
Business Companies	Multinational Corporations Mergers & Acquisitions Small & Medium-sized Enterprises Includes local subsidiaries as key targets
Public Sector Agencies	Fund research on societal challenges or may demand related innovations in services / products to be procured
Regulators	Standard-setting is a global market-creation activity and Nordic actors have benefited strongly from e.g. GSM
Intermediary Institutions	Science and Technology Parks , cluster organisations, incubators, foundations
Media	Specialized journalists, Science and technology writers Lifestyle and related media
Research & Innovation Funding Providers	Public / Institutional research funding bodies (e.g. EU, Rockefeller Foundation, NIH)
Research & Innovation Investors	Venture Capitalists, Business Angels Investment Funds, Private Equity Corporate Venturing
Talent	Experts (world leading in their field) General (well educated) work force Academics (Post docs, professors) Home comers (returning from position abroad) Entrepreneurs (“don’t come for jobs, but to create them”)

decisions, such as access to leading competence in a particular sector for a company, or the reputation of a research group or university for an individual researcher. Yet at the same time, the interviewed experts emphasized the importance of a set of common values for the success of the Nordic region in research and innovation, and as the most important distinguishing feature of the region. An effective branding strategy therefore needs to be able to deal with both these levels; on the one hand show the Nordic culture and shared values that set the region apart and provide the foundation for the Nordic model of research and innovation, and on the other hand be able to highlight the world class competencies and other very local and concrete attraction factors that influence investors' location decisions.

- **Resources need to be visualized on a Nordic scale.** A central obstacle for promoting the Nordic region as opposed to the individual countries is the lack of tools for identifying and visualizing Nordic competences and research and innovation resources on a Nordic scale. The Nordic countries all have different frameworks for mapping and visualizing clusters of excellence or specific competencies, most of them rather general and high-level, or focusing on particular areas or industries. Personal relationships between investment promotion agents and the research communities are today critical for identifying the right competence sought by foreign investors. However, if Nordic actors are to be expected to extend their activities to a Nordic dimension, appropriate instruments are required for supporting them in covering all of the region.

As a result, the branding strategy proposed in this report is based on two pillars; Firstly, a Nordic research and innovation brand, based on the common Nordic values that have paved the way for the success in research and innovation to date, and that present an excellent platform for building common ground for success in the future. Secondly, a set of instruments

to support Nordic actors in their efforts to promote the region. These instruments have been designed specifically to answer to the needs and concerns expressed by the Nordic experts interviewed, focusing on creating a common framework for identifying and visualizing Nordic competencies and creating a process for how the Nordic actors can work together to achieve a common goal.

The Nordic Research and Innovation Brand
Building on the Nordic strengths, it was suggested that the Nordic research and innovation brand is constructed around shared Nordic values. Five extended identity dimensions were developed:



- **Competence** – As world leaders in higher education and training, the Nordic region offers an exceptionally qualified work force and world leading expertise in a disproportionate number of fields
- **Collaborative Culture** – Collaboration and trust lie at the very heart of the common Nordic values and culture – and in the attractiveness of the Nordic region as destination for research and innovation investments
- **Inventiveness** – A creative mindset and an entrepreneurial climate produce unconventional solutions and great inventions

■ **Sophisticated lead market** – With the world's most technology savvy population the Nordic region provides a local experimental environment that makes it an ideal place to pioneer innovations

■ **Socially and environmentally sustainable society** – The success of the Nordic societal model, based on principles of equal opportunities and gender equality, combining socially, environmentally and economically sustainable goals, has become a role model worldwide and made the region an attractive place to live

The core identity then summarizes the Nordic Strengths in terms of the benefits of small scale. In spite of its vast area, the Nordic region only hosts 25 million inhabitants. Developing efficient lines of communication and collaboration, openness to the outside world and finding new and creative ways of solving problems has been a condition for survival – and a recipe for success. Even more importantly, being agile is a prerequisite for succeeding in the new globally connected innovation landscape characterized by rapid change.

The role of any brand is to support the establishment and maintenance of relationships with the target audience(s). In the context of branding the Nordic region as an attractive destination for research and innovation investments, the target group is defined broadly, including companies, funding bodies, universities and research institutions as well as talent. Given the diversity between as well as within these groups, branding activities have to be concrete and tailored to the specific needs of each target group. The Nordic research and innovation brand is to be conceptualized as a platform brand that supports the promotion of other (place, corporate and innovation) brands offered by the region as well as specific targeted brand building activities.

Motivating Nordic Lead Actors and Developing Brand Building Instruments

In order to address the challenge of branding the region on a global scale to a diverse set of target audiences effectively, the branding

strategy is built around efforts to mobilize and motivate Nordic actors that currently interact with target audiences to take on a (new) role of promoting the Nordic region as an attractive research and innovation environment.

To enable the Nordic actors to take on this new role the brand needs to be complemented with incentives and instruments for attracting research and innovation investments and talent on a Nordic scale. To this end a number of instruments were proposed. While these are new roles, it was also emphasized that to the extent possible the instruments, and the entities responsible for them, should be anchored in existing competences, organisational structures and regionally shared values. The suggested instruments are:

■ **Nordic Brand Manager.** A tool to provide leadership, organize the brand and coordinate Nordic actors

■ **Nordic Competence and Lead Market Network.** A tool to enable target groups as well as Nordic actors to identify and present excellent research and innovation clusters on a Nordic scale

■ **Nordic & Global Growth Observatory.** A tool to provide intelligence and thought-leadership to help the region remain in the lead and spot trends early

■ **Innovation Environment Index.** A tool to make it possible to assess and compare Nordic research and innovation environments on a local level as well as to easily communicate the success of the Nordic Region in Research and Innovation

The report is intended as a first step towards constructing a common Nordic branding strategy for attracting investments in research and innovation to the region. The purpose of this document is thus to open up this discussion, to inspire new ways of thinking and acting.



Sammanfattning

Utmaningar för forskning och innovation i en globaliserad värld

Forskning och innovation (FoU) anses idag vara en dominerande faktor för nationell tillväxt och internationell konkurrensförmåga och har därför kommit att få en alltmer framträdande roll i nordisk och europeisk policy. I takt med att marknader öppnas upp och kapital, talang och andra tillgångar blir allt rörligare har konkurrensen om investeringar i forskning och innovation blivit allt hårdare och fortsätter att intensifieras. Globaliseringen inom forskning och teknik accelererar och nya supermakter inom vetenskap och teknologi såsom Kina, Indien och andra utvecklingsländer attraherar betydande utländska investeringar i FoU. Samtidigt är vi mitt uppe i ett skifte av logiken kring forskning och innovation, där synen på FoU som en linjär process med innovation som slutfas håller på att ersättas av mer systemorienterade modeller som lyfter fram relationer och interaktioner mellan alla aktörer i en lokal innovationsmiljö. När teknologier blir alltmer komplexa och multidisciplinära till sin natur måste företag samarbeta och exploatera kunskap som finns utanför företagets egna gränser för att fortsatt vara konkurrenskraftiga. I linje med utvecklingen av specialiserade lokala innovationsmiljöer som konkurrerar om globala tillgångar håller geografin kring forskning och innovation på att förändras och organiseras alltmer kring globala nätverk av lokala världsledande kluster.

Mot denna bakgrund torde det vara en klok strategi för de nordiska länderna att göra en gemensam insats för att profilera regionen på den globala marknaden för investeringar i forskning och innovation. De nordiska länderna är mycket små aktörer på den globala marknaden och har svårt att göra sina röster hörda var för sig. Samtidigt har regionen en lång historia av samarbete och flera nordiska samarbetsprojekt har redan initierats av Nordiska ministerrådet för att möta globaliseringens utmaningar. Även om det givetvis finns markanta skillnader mellan de nordiska länderna är likheterna dominerande ur ett globalt perspektiv.

Ett nytt perspektiv för att främja investeringar i forskning och innovation

Det är dock ont om erfarenheter att lära av för att ta sig an denna utmaning. Profilerings- och innovationsmiljöer är en tämligen ny och outvecklad praktik. Teoretiska modeller har utvecklats för andra sammanhang och målgrupper, ofta med konsumenters upplevelser och beslutsprocesser som utgångspunkt. Praktiska exempel är ovanliga och ofta svåra att utvärdera. Norden är dessutom en komplex konstellation av fem oberoende länder, alla med en sofistikerad forsknings- och innovationspolitik och egna marknadsföringsprofiler och projekt. Slutligen är forskning och innovation komplexa fenomen som kräver definition och mening i

detta speciella sammanhang och ett lämpligt ramverk behöver utvecklas för marknadsföra nordisk forskning och innovation.

Ambitionen med denna rapport är således dubbel: Dels att utveckla en metod för profilering i detta sammanhang som tar utgångspunkt i de speciella förutsättningar marknadsföring av nordisk forskning och innovation ställer. Dels att föreslå en varumärkesstrategi, tungt förankrad i nordiska styrkor och mot bakgrund av det framväxande nätverket av forsknings- och innovationskluster.

25 intervjuer med nordiska experter, en enkätstudie med internationella forsknings- och innovationsspecialister samt en litteraturstudie utfördes för att kartlägga nordiska styrkor. Analysen visade att Norden är exceptionellt väl placerad för att ta en ledande roll i den globaliserade konkurrensen om forsknings- och innovationsinvesteringar. Med en exceptionellt kvalificerad arbetsstyrka och med världens teknologiskt mest avancerade användare har Norden en topplacering på de två viktigaste faktorerna för lokalisering av investeringar i forskning och innovation. Det finns dock betydande perceptionsgap i relation till målgrupperna då regionen är relativt okänd på andra kontinenter och det inte är känt inom målgrupperna hur framstående Norden faktiskt är på dessa och andra viktiga områden.

Följande kriterier för en framgångsrik varumärkesstrategi utvecklades mot bakgrund av analysen.

■ **Konceptet utländska direktinvesteringar i forskning och innovation behöver breddas.**

En syn på forskning och innovation som medger vikten av komplexa beroendeförhållanden mellan företag, statliga aktörer, universitet, talang och andra aktörer kräver ett nytänkande också kring investeringsfrämjande. En "traditionell" definition av utländska direktinvesteringar fokuserar på en injektion av pengar från ett stort utländskt företag för att lokalisera eller utveckla sin närvaro. Investeringsfrämjande inom forskning och innovation har därför inriktats på att attrahera FoU investeringar från multinationella utländska företag, framförallt genom köp eller etab-

lering av FoU anläggningar. En mera öppen och systemisk syn på innovation kräver dock att målgruppen för varumärket breddas eftersom FoU anläggningar endast är en komponent av ett innovationssystem. Detta innebär att målgruppen inte begränsas till företag, utan också inkluderar andra typer av finansiärer som riskkapitalister och investeringsfonder liksom offentliga och institutionella forskningsfinansiärer som EU och National Institutes of Health (NIH). Även andra aktörer i framtida innovationssystem som universitet och forskningsinstitut, klusteradministratörer och andra organisationer som agerar mellanhand i innovationssystem kan ses som målgrupper – och inte minst talang. *Förmågan att attrahera kvalificerad arbetskraft är en förutsättning för att attrahera andra typer av investeringar i forskning och innovation.*

- **Bygg vidare på befintliga resurser, aktörer och nätverk snarare än att skapa nya.** Budskapet från de intervjuade experterna var väldigt tydligt i detta avseende: Det finns redan nationella aktörer som arbetar med att främja investeringar i forskning och inno-

vation för sina respektive länder och nordiska nätverk som behöver visualiseras och kanske integreras. Även om idén att göra en gemensam nordisk insats för att attrahera forsknings- och innovationsinvesteringar mottogs positivt, uttryckte många experter en viss skepsis inför implementeringen om den blir alltför centraliserad. Nya nordiska organisationer som utvecklas fristående från de befintliga nationella strukturerna riskerar att kosta mer resurser än de genererar resultat samt att bli offer för politiska komplikationer, menar dessa experter. Istället föreslogs att nordiska initiativ bygger vidare på befintliga nationella aktörer och deras kompetenser genom att skapa gemensamma projekt, incitament och processer för hur aktörerna ska kunna arbeta tillsammans för att nå gemensamma nordiska mål.

- **En varumärkesstrategi måste täcka både en övergripande nivå som binder ihop regionen och det konkreta och specifika som attraherar investerare.** Ofta är specifika faktorer, såsom tillgång till ledande kompetens inom en viss bransch, avgörande för företagens investeringsbeslut, eller ett universitets eller en fors-

FÖLJANDE PRELIMINÄRA MÅLGRUPPER FÖR ETT NORDISKT VARUMÄRKE FÖR FORSKNING OCH INNOVATION IDENTIFIERADES:

MÅLGRUPP	DEFINITION
Universitet och forskningsinstitut	Ökande internationalisering av universitet (t.ex. japanskt universitet etablerar forskningsanläggning i Köpenhamn)
Företag	Multinationella företag Sammanslagningar och uppköp Små och medelstora företag Lokala dotterbolag
Offentliga verksamheter	Finansierar forskning om samhällsliga utmaningar eller agerar kravställare för innovationer i relaterade tjänster/ produkter
Lagstiftare & branschorganisationer	Skapar gemensamma standarder vilket är en global marknadsskapande aktivitet och nordiska aktörer har dragit stor fördel av t.ex. GSM
Förmedlande institutioner	Teknikparker, klusteradministratörer, inkubatorer, stiftelser
Media	Vetenskapsjournalister, branschmedia, livsstils- och relaterad media
Forsknings- och innovationsfinansiärer	Offentliga / institutionella forskningsfinansiärer (t.ex. EU, Rockefeller Foundation, NIH)
Investerare	Riskkapitalister och affärsänglar Investeringsfonder, privat kapital Företagsinitiativ
Talang	Experter (världsledande i sitt fält) Välutbildad arbetskraft Akademiker (Post docs, professorer) Återvändare (som återvänder från position utomlands) Entreprenörer

kargrups rykte på ett visst område för en individuell forskare. Samtidigt underströk de intervjuade experterna vikten av vissa gemensamma värderingar för regionens framgång inom forskning och innovation. De menade också att det är dessa gemensamma värderingar som verkligen skiljer ut Norden från andra regioner. En effektiv profileringsstrategi måste därför kunna hantera båda dessa nivåer: Å ena sidan visa hur nordisk kultur och gemensamma värderingar särskiljer regionen och utgör fundamentet för en nordisk modell för forskning och innovation. Å andra sidan kunna framhäva världsledande kompetens och andra lokala och konkreta faktorer som påverkar investerares lokaliseringsbeslut.

■ Tillgångar måste synliggöras på nordisk nivå.

Ett grundläggande hinder för att arbeta med nordiskt investeringsfrämjande är att det saknas verktyg för att synliggöra nordiska kompetenser liksom forsknings- och innovationstillgångar på nordisk nivå. Länderna har alla olika modeller för att kartlägga och synliggöra kluster och ledande kompetenser. De flesta stannar på en tämligen generell nivå eller begränsas till vissa områden eller branscher. Personliga relationer mellan aktörer som arbetar med att främja investeringar och nationella forskarnätverk är idag kritiska för att kunna identifiera den rätta kompetensen som eftersöks av utländska investerare. Om dessa aktörer ska kunna förväntas vidga sina aktiviteter till en nordisk dimension måste de dock få tillgång till lämpliga verktyg för att kunna täcka resten av Norden.

Den varumärkesstrategi som föreslås i denna rapport bygger alltså på två grundpelare: Dels ett varumärke för nordisk forskning och innovation. Detta bygger på de gemensamma nordiska värderingar som lagt grunden till den framgång inom forskning och innovation regionen åtnjuter idag, men utgör också en utmärkt plattform för framgångsrik forskning och innovation i en globaliserad värld. Dels en uppsättning verktyg för att stödja de nordiska aktörerna i sina insatser för att attrahera investeringar. Dessa instrument har designats för att svara till

de behov och potentiella implementeringsproblem som de nordiska experterna gav uttryck för i intervjuerna. Fokus ligger på att skapa ett gemensamt ramverk för att identifiera och synliggöra nordiska kompetenser och på att skapa en process för hur de nordiska aktörerna kan arbeta tillsammans mot ett gemensamt mål.

Varumärke för nordisk forskning och innovation

Det nordiska varumärket för forskning och innovation bygger på identifierade nordiska styrkor och är således konstruerat kring gemensamma nordiska värden. Fem identitetsdimensioner utvecklades:



■ **Kompetens** – Som världsledande inom högre utbildning erbjuder Norden en exceptionellt kvalificerad arbetsstyrka och världsledande expertis inom ett oproportionerligt antal områden

■ **Samarbete** – En kultur som präglas av samarbete och förtroende utgör kärnan av gemensamma nordiska värderingar – och attraktionskraften i Norden som destination för investeringar i forskning och innovation

■ **Uppfinningsförmåga** – Ett entreprenöriellt och kreativt klimat gynnar okonventionella lösningar och framgångsrika uppfinningar

■ **Sofistikerade användare** – Med världens mest tekniskt kunniga befolkning utgör Norden en experimentell miljö som är idealisk för att testa nya innovationer

■ **Socialt och miljömässigt hållbart samhälle** – Den framgångsrika nordiska välfärdsmodellen, baserad på principer om jämställdhet, som kombinerar socialt, miljömässigt och ekonomiskt hållbara mål, har gjort Norden till en förebild världen över och ett attraktivt samhälle att leva i

Kärnidentiteten sammanfattar de nordiska styrkorna i **småskalighet**. Trots de stora geografiska vidderna är Norden hem för endast 25 miljoner invånare. Att etablera effektiv kommunikation och samarbete, en öppen attityd mot omvärlden och att hitta nya kreativa vägar för att lösa problem har varit en förutsättning för överlevnad – men också ett recept för framgång. Att vara snabb och lätttrölig är också en förutsättning för att bli framgångsrik i framtidens globaliserade innovationslandskap, stadd i snabb förändring.

Ett varumärkes uppgift är att främja etablering och underhåll av relationer med målgruppen. I detta fall är målgruppen brett definierad och inkluderar företag, finansiärer, universitet samt talang. Givet divergensen mellan och inom dessa grupper måste marknadsföringen vara skraddarsydd för varje grupps specifika behov. Det nordiska varumärket för forskning och innovation bör därför ses som en plattform som ger stöd och mervärde åt de andra varumärken (för platser, företag eller innovation) Norden marknadsför till de olika målgrupperna.

Motivera nordiska aktörer och utveckla verktyg för varumärkesbyggande

Varumärkesstrategin är utvecklad för att motivera nordiska aktörer som idag interagerar med de olika målgrupperna till att ta på sig en ny roll för att marknadsföra Norden som en attraktiv destination för investeringar i forskning och innovation. För att dessa aktörer ska ha rätt förutsättningar för att ta sig an denna uppgift måste varumärket kompletteras med incitament och instrument för att

kunna marknadsföra forskning och innovation på nordisk skala. Ett antal verktyg föreslås i rapporten för detta ändamål. Även om det handlar om nya roller för aktörerna, bör det också understrykas att i så hög utsträckning som möjligt bör verktygen och de organisationer som är ansvariga för dem förankras i existerande kompetenser, organisatoriska strukturer och gemensamma nordiska värden. De föreslagna verktygen är:

■ **Nordisk varumärkesadministratör.** Ett verktyg för att bedriva ledarskap, organisera varumärket och varumärkesbyggande aktiviteter samt för att koordinera nordiska aktörer

■ **Nordiska kompetensnätverk.** Ett verktyg för att målgrupper såväl som nordiska aktörer ska kunna identifiera och presentera ledande forsknings- och innovationskluster på ett enhetligt sätt inom Norden

■ **Nordiskt och globalt tillväxtobservatorium.** Ett verktyg för att generera omvärldsanalys och framtidsscenarier som kan hjälpa regionen att bibehålla sin ledande position och identifiera trender i ett tidigt skede

■ **Innovationsmiljöindex.** Ett verktyg för att möjliggöra jämförelse mellan lokala forsknings- och innovationsmiljöer i Norden samt för att kunna kommunicera dessa miljöers framgång på ett enhetligt sätt

Rapporten är tänkt som ett första inlägg i en diskussion för att skapa en nordisk varumärkesstrategi för att attrahera investeringar i forskning och innovation till Norden. Syftet med rapporten är således att öppna upp diskussionen och inspirera till nya sätt att tänka kring varumärkesbyggande i detta speciella sammanhang.



1. Introduction – the Case for Branding the Nordic Research and Innovation Area

Reflecting on a branding process for the Nordic research and innovation strengths, with the objective to strengthen the region's attractiveness for inward investments posed special challenges to the authors. First, both theory and practice of place branding offer few frameworks and methodologies that are suitable or can be easily adapted to the branding of research and innovation investment destinations. Second, the concept of the Nordic region is a complex constellation of five independent countries with sophisticated research and innovation policies, and a variety of place branding strategies underway. This offers particular challenges in identifying a common uniqueness and joint motivation, especially when recognising the competitive relation among the various actors. Third, research and innovation is a term that requires definition and meaning in this context thereby calling for an appropriate framework to be developed. And fourth, inward investment in the context of research and innovation is a broad concept that defies easy reduction into simple target groups.

Hence, this report attempts to touch upon the methodological challenges, but in particular to illuminate the complexity of the tasks and decisions ahead. The branding of the Nordic region would involve a great number of actors, address a complex range of target groups and would require a range of new concepts and instruments to be implemented. Yet, this report concludes, there is a role for such an

effort not only in correcting misperceptions of the region, but in aligning structural research and innovation policies with the motivations of the target groups for a Nordic brand.

Branding places, whether nations, regions or cities has long been a practice in particular for the attraction of tourists. Today, any regular consumer of international business and economics media will note that place branding to attract business investments has become a mainstream activity. This surge of interest in attracting corporate investments can be interpreted as an effect of globalization, highlighting the perceived increase in mobility of capital and talent, adding to the insecurity in the marketplace. In Europe alone 150.000 mayors seek to retain and attract those resources that may prove essential for future competitiveness. More recently, the capacity to innovate and create new knowledge, services and products is considered a critical feature to secure competitiveness in an ever more knowledge-intensive, globalised economy.

Research and Development (R&D) has therefore only recently become part of the discourse on place branding. R&D has traditionally been considered to be among the least mobile activities of firms. High demands on skill, knowledge and support needs, like other core functions were met primarily in developed countries with strong national innovation systems¹. But as capital, talent and other resources are becoming increasingly mobile

Research and experimental development

(R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.

Basic research is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view. **Applied research** is also original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or experience.

Experimental development is systematic work, drawing on existing knowledge gained from research and/or practical experience, which is directed to producing new materials, products or services, to installing new processes, systems or services, or to improving substantially those already produced or installed.

Innovation is the implementation (commercialization or adoption) of a *new* or significantly improved product (goods or services) or process. The latter may involve changes in equipment, human resources, working methods or a combination of these.

these dynamics have begun to change. Globalization in research and technology is accelerating and new scientific and technological powers such as China, India and other emerging economies are attracting considerable amounts of R&D investments².

Hence competition in attracting R&D has become fierce and will intensify in the coming years³. Until now, Europe appears to have been losing out as large firms globalize their R&D. The net imbalance of R&D investment by EU firms in the USA compared with US firms in Europe increased five-fold between 1997 and 2002, from about €300m in 1997 to almost €2b in 2002⁴. Many European and other countries now address the need for more targeted policy and branding activities.

FROM R&D TO RESEARCH AND INNOVATION

R&D and innovation, as terminologies and more importantly their role in economies, have long been subject to heated debate⁵. At

the macro-level, there is a substantial body of evidence that innovation is *the* dominant factor in national growth and international patterns of trade. At the micro-level – within a firm – R&D is seen as enhancing a firm's capacity to absorb and make use of knowledge of all kinds, not just technological knowledge⁶. In recent years however, the concept of innovation has taken a prominent place in European as well as Nordic policy. The Lisbon strategy, set out by the European Council in Lisbon in 2000, sees innovation as central to the process of making the EU the most dynamic and competitive knowledge-based economy in the world by 2010.

The emphasis on R&D implied a linear view of innovation, where inventions in a research laboratory are then “used” by a company or a community. Today, more systemic approaches to innovation dominate the policy discussions in both the Nordic countries and the EU, implying that innovation emerges from the quality of interactions between producers, users and mediators of knowledge in a region, including local authorities, companies, universities, coordination institutions and funding providers.⁷

In Nordic policy, research and innovation are now treated as “innovation systems”, a concept developed with strong contributions by Danish, Swedish and Norwegian researchers. This notion essentially requires all actors involved in research and innovation to act in an interlinked environment⁸. Importantly, such innovation systems do not exist in isolation, but maintain important international hub linkages to integrate broader markets and resources.

This emerging view of the dynamics of innovation⁹ has a number of important implications, most critically an increasing openness in the system along several dimensions. The rapid pace of technological change means that firms can no longer internalise all competencies. As technologies become increasingly complex and interdisciplinary in nature, the future firm must collaborate and exploit knowledge that is beyond its organizational boundaries in order to remain competitive. Accessing external knowledge from networks and collaborations is broadly known as *open innovation*.

Networks are thus becoming increasingly important as industrial firms see themselves as network organizations whose competitive advantage depends more on their ability to interact in order to connect technologies, people and organizations, than on their own R&D investment. Markets have become more open to international competition and to globalization of production and distribution of products, services and knowledge. Firms have become more open, outsourcing activities, widening their supply chains, and relying on collaborations with external parties for R&D, innovation and production. The role and challenge for government policy is to increase awareness, commitment and skills in relation to the systems integration of businesses and institutions to enable them to operate successfully in an environment of open innovation, collaboration and knowledge transfer¹⁰. Open innovation will be a source of competitive advantage as it determines how cost effective firms manage to exploit knowledge commercially.¹¹

Closely linked to open innovation is *user-centric innovation*, a concept that refers to learning through close interaction with the end-user in the innovation process. For example, the so-called Aho report emphasizes the importance of lead users in Europe for providing a fertile ground for launching innovations¹².

Greater emphasis is placed on the spatial dimension in innovation processes, coinciding with the emergence of specialized local innovation environments competing for global resources¹³, creating a geography of research and innovation that is increasingly reorganized around globally connected local clusters of excellence. The European Research Area is progressively structuring itself along the lines of a powerful web of research and innovation clusters¹⁴.

Taking these developments into account, this report takes a broad view of research and innovation. It is increasingly difficult to separate research from innovation as they become mutually independent in this emerging global innovation landscape. Furthermore, while investments in R&D and innovation are con-



ductive to boosting productivity, the more so if the elements of “the knowledge triangle”, i.e. R&D, innovation and education and training, are well integrated¹⁵.

RETHINKING INWARD INVESTMENT


Adopting this view of research and innovation, acknowledging the complex interdependencies among firms, public actors, talent and other resources, requires rethinking also the view of inward investment. A “traditional” definition of inward investment would focus on the injection of money from an external source into a region, in order to purchase capital goods for a branch of a corporation to locate or develop its presence in the region. Inward investment promotion in the area of research and innovation has thus traditionally focused on attracting R&D investments from large firms, mostly in the form of acquisitions or establishments of R&D facilities. However, within the context of this broader view of innovation as discussed above, the target groups for a brand to attract investments in research and innovation has to be broadened. Adopting a systemic view on innovation implies considering not only companies as target groups, but also other kinds of funding providers such as venture capitalists and investments funds as well as public and institutional research funding providers such as the EU or the National Institutes of Health (NIH). Furthermore, other important components of future innovation systems in a globalised world, such as universities and research institutions, cluster managers and other intermediary institutions are considered target groups and, not least – talent. The ability to attract highly qualified talent is a precondition for attracting other kinds of research and innovation investments. Accordingly, the notion of inward investment is conceptualized as investments from either of these target groups that strengthen the local innovation system.

BRANDING THE NORDIC RESEARCH AND INNOVATION AREA

Within the context of the trends described in this introduction, a common Nordic strategy for branding the region as an attractive region for research and innovation investments seems a natural avenue to be pursued. In a global perspective the Nordic countries are all very small players, and while there are certainly differences among the Nordic countries, these differences are not always well known on other continents. In areas of common strength, the initiative to profile the Nordic region might therefore be more effective than separate initiatives for each of the countries. Furthermore, there is already a long tradition of collaboration among the Nordic countries, which have already begun to address the challenges and opportunities of globalisation in a number of common projects.

This report is intended as a first step towards constructing a common Nordic branding strategy for attracting investments in research and innovation to the region. The purpose of this document is to open up this discussion, to inspire new ways of thinking and acting. Covered in the report are some of the empirical resources, considerations, value dimensions and instruments that may form part of the coming steps in a joint process.

AN



**ACKNOWLEDGING
TODAY'S COMPLEX
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THE VIEW OF INWARD
INVESTMENT.**

2. Methodology for Branding the Nordic Research and Innovation Area

A brand is traditionally described as a *promise* of the value the product or service will deliver to the customers. Within the branding literature it is common to distinguish between *brand image*, which refers to the perception of the brand which exists in the minds of consumers, and *brand identity*, which is what organizations transmit to the market place as their desired brand image¹⁶. To be successful, a brand identity – a set of associations the brand manager seeks to create and maintain¹⁷ – should drive brand building efforts.

The purpose of the first part of this report is to develop a brand identity for the Nordic region as an attractive destination for research and innovation investments. In terms of branding methodology this focus poses some particular challenges. The concept of branding was initially developed for supporting the marketing of consumer products. Clearly, promoting the Nordic region to attract inward investments in research and innovation presents quite a different context and so the methodology needs to be modified in order to fit these special conditions, adding several layers of complexity.

Firstly, it is not a product or a service that is to be sold, but a *place*, and in this case a region that spans over five different countries. The concept of *place branding* has emerged in recent years to address the need for marketing places. The basic premise of the practice of place branding is that places, whether nations, cities or regions, should be marketed as effi-

ciently as firms market products and services, and therefore deserves to benefit from the best marketing practices of the private sector¹⁸. As noticed in the introduction, the active marketing of places has become an increasingly important activity for national and regional governance and there is today an emerging body of practical experiences of successful as well as less successful place branding initiatives to draw from. There are studies showing that perceptions of a producer's home country influences perceptions of the producer's products.¹⁹ However, theoretically this is a very young field, and there is hardly a coherent literature on branding of places²⁰. Much of the work in this area addresses the branding of place from a particular research tradition or professional field. For example, work on tourism management deals with branding of places as tourism destinations, and contributions from urban planning address the redevelopment, gentrification and rebranding of city neighbourhoods.

Secondly, the place to be promoted is not just any city or region, but a *research and innovation* environment. While the models and theories developed for the practice of place branding may provide interesting insights into the dynamics of place, they tend not to be suitable for the purpose of branding places to attract research and innovation investments. The target audience is not made up of consumers in the traditional sense, but include a com-

plex set of actors such as multinational companies, researchers, funding providers and universities. Attraction factors are obviously different for stakeholders such as large corporations looking into establishing R&D facilities or funding research activities or for a top researcher looking for interesting professional opportunities than for, say, a tourist seeking a nice location for a weekend getaway.

Target groups' motivations, selection (c.f. purchasing) processes and decision making processes differ from those of tourists or other so-called "place buyers"²¹. Consequently, messages, offerings and channels for reaching out to the target groups and thus the whole branding strategy need to be conceptualized differently from a traditional branding strategy or even a place branding strategy.

A methodology for positioning the Nordic region as an attractive destination for research and innovation investments needs to take these prerequisites into consideration. Aaker and Joachimsthaler's (2000) process for brand identity planning is used as framework for the analysis, but the methodology has been adapted to the particular conditions outlined above. The purpose of this analysis is to uncover the foundations for the brand identity. As was discussed in the introduction, the analysis is not restricted to the target group of companies. The analysis has three components and sources of data:

■ **Review of research.** A review of relevant literature, research reports and statistical sources was conducted to investigate what is known about drivers in inward investments in research and innovation as well as for underpinning the perceptions of Nordic Strengths in these areas.

■ **Interviews with Nordic experts.** Semi-structured interviews were conducted with 25 experts within the Nordic countries representing research institutions and organizations as well as inward investment agencies to identify Nordic Strengths as a host to investments in research and innovation. Interviews were conducted face-to-face or over the phone and lasted from 30 to 90

minutes. This approach was chosen in order to tap into the considerable experience of these experts. By using their own words to express their experiences of what constitutes Nordic strengths rather than restricting answers to the format of a strict interview protocol, we were able to get richer and more nuanced answers, going beyond the vocabulary and categories traditionally used for studies on inward investment in R&D. A list of the interviewed experts is found in Appendix 1.

■ **Survey of international research and innovation professionals.** An Internet based survey consulted non-Nordic research and innovation professionals on their perception of the Nordic region as research and innovation environment. The survey was sent out as an Internet link to about 350 non-Nordic research and innovation professionals. 59 filled in the survey, which yields a response rate of about 17%. The survey was open from January 10th to February 10th 2008. The purpose was to get an idea of the perception from the outside world on the Nordic Strengths as defined by the experts. Of course, given the modest size of the sample in relation to the vast target group as well as the complexity of the topics treated, the results can only be seen as indicative. Nevertheless, they provide some interesting insights into the general perceptions of the Nordic region as research and innovation environment. The overwhelming majority of the respondents were currently working in Europe. Only 8% reported they were currently working in Asia and 5% in the USA.

OVERVIEW OF BRAND IDENTITY SYSTEM

A brand identity is a set of brand associations that the sender aspires to create or maintain. These associations imply a promise to the target audience from the sender; in this case what the Nordic region will deliver as destination for research and innovation investments.

The brand identity involves a range of different dimensions in order to adequately

describe the brand’s aspiration. The brand identity can be structured into²² an *extended identity* which includes all the brand identity elements, organized into meaningful groupings. The relative importance and focus of the brand identity elements may differ between target groups and the brand identity platform should therefore allow for some flexibility in the presentation of the brand identity to the various audiences. The *core identity* however, should be the same and is likely to be stable over time. The core identity should capture the essence or source of the overall brand identity. The core identity should reflect strategy and values, and at least one association should differentiate the brand and resonate with all target audiences.

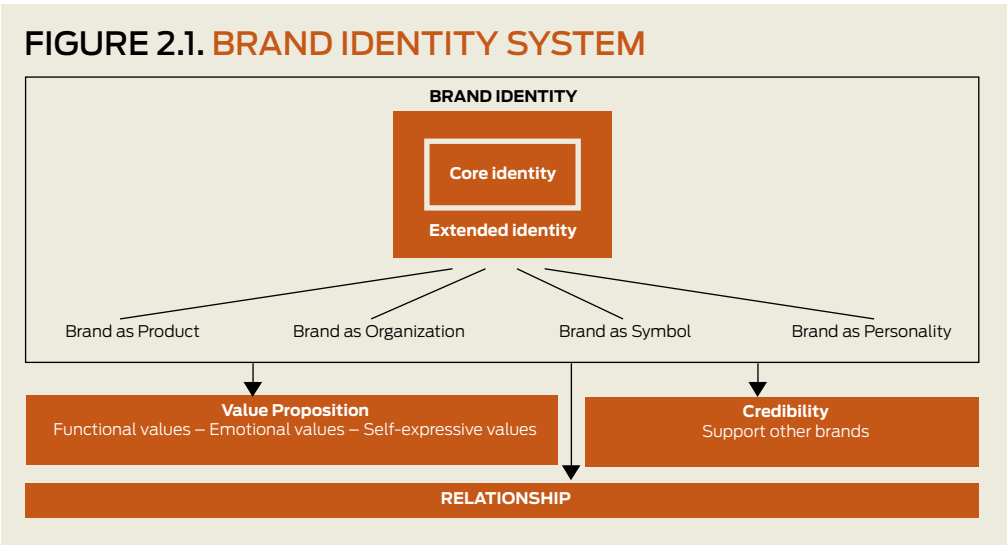
The brand identity elements can be organized into four categories. Within the context of Nordic research and innovation these might be;

- Brand as *product*. This category describes what the region has to offer to the target groups. This might be expressed as clusters or innovation environments, research institutions, work force etc.
- Brand as *organization*. This category refers to organizational attributes of the region such as innovation systems, networks, research infrastructures, educational systems etc.

■ Brand as *person*. This category is about the personality of the brand. In this particular context it refers to cultural dimensions, both of the region as such and within the context of research and innovation.

■ Brand as *symbol*. This category covers visual images and metaphors as the brand heritage. In the Nordic region there are many important symbols for its innovative capacity including the Nobel Prize and success stories such as Linux and Skype.

The brand identity should act as a platform for the subsequent brand building efforts and therefore needs to have depth and richness. Most importantly it should provide a basis for **establishing a relationship** between the brand and the target audience. This is achieved by generating a value proposition that (potentially) involves *functional* (cf. what the brand is), *emotional* or “*self-expressive*” (cf. what the brand does) benefits, or by providing *credibility* for endorsed brands. How this might be achieved is further discussed in chapters 5 and 6.



Source: Adapted from Aaker and Joachimsthaler (2000)

3. Articulating Nordic Strengths

Identifying and articulating the strengths of the Nordic region is a basic premise for being able to present the area as an attractive region for research and innovation investments. It provides the foundation for the brand identity dimensions, ensuring that the brand message resonates with the target audiences, differentiate the brand from competing regions and represent the true unique characteristics of the region.

As discussed in the introduction, a broad definition of inward investment in research and innovation is adopted in this report. The objective is the establishment of brand recognition in the investors' social vicinity and collaborators, but more importantly to capture the trend in defining inward investment not

narrowly through capital expenditure or jobs created, but more adequately in knowledge operations, flow of talent, project initiatives and other directly or indirectly value adding activities. For example, a professional visiting the Nordic Region for advanced professional training may well be considered a future ambassador (or investment decision-maker) in her own right. Hence, the focus on all stages of research, idea conception, incubation, business development and traditional forms of inward investment may be a winning formula to capture the full dynamic.

The first section of this chapter, a review of existing research on the drivers of inward investments, focuses on the groups traditionally considered as place investors in this con-

The following target groups for a branding initiative of the Nordic region have been preliminarily identified:

TARGET GROUP	DEFINITION
Universities and Research Institutions	Universities, research institutes and -centers both in the Nordic region and abroad Increasing internationalization of universities leads to greater mobility of talent as well as activities (e.g. Japanese university setting up research facility in Copenhagen)
Business Companies	Multinational Corporations Mergers & Acquisitions Small & Medium-sized Enterprises Includes local subsidiaries as key targets
Public Sector Agencies	Fund research on societal challenges or may demand related innovations in services / products to be procured
Regulators	Standard-setting is a global market-creation activity and Nordic actors have benefited strongly from e.g. GSM
Intermediary Institutions	Science and Technology Parks , cluster organisations, incubators, foundations
Media	Specialized journalists, Science and technology writers Lifestyle and related media
Research & Innovation Funding Providers	Public / Institutional research funding bodies (e.g. EU, Rockefeller Foundation, NIH)
Research & Innovation Investors	Venture Capitalists, Business Angels Investment Funds, Private Equity Corporate Venturing
Talent	Experts (world leading in their field) General (well educated) work force Academics (Post docs, professors) Home comers (returning from position abroad) Entrepreneurs ("don't come for jobs, but to create them")

text, namely companies and commercially-oriented institutions. This is partly in order to delimit the review to a comparable and thus meaningful target group, but most importantly because of the material available. As large corporations are conventionally conceived as the prime target group for inward investments, the studies available tend to focus on this group. Similarly, these studies tend to focus on R&D rather than innovation. In chapter 6 instruments for closing this information gap in relation to other target groups are discussed further.

The interviewed experts represent the broader perspective on inward investments. These experts are however representatives of the Nordic institutions, albeit with and international perspective and experience of interacting with the target audiences, broadly defined. Thus, depending on the experience and focus of the interviewed expert other target groups than companies were discussed where appropriate. In most interviews special attention was dedicated to the issue of attracting talent, as this feature was given special significance by the interviewees. See Appendix 1 for list of interviewees and their professional profiles.

DRIVERS OF INWARD INVESTMENT FOR COMPANIES

On the basis of a number of recent studies with a European perspective, and in some cases a Nordic perspective²³, the key factors that determine localization of R&D activities can be divided into four themes:

Inward Investment Drivers
Access to talent
Access to markets
Innovative climate
Attractive lifestyle proposition

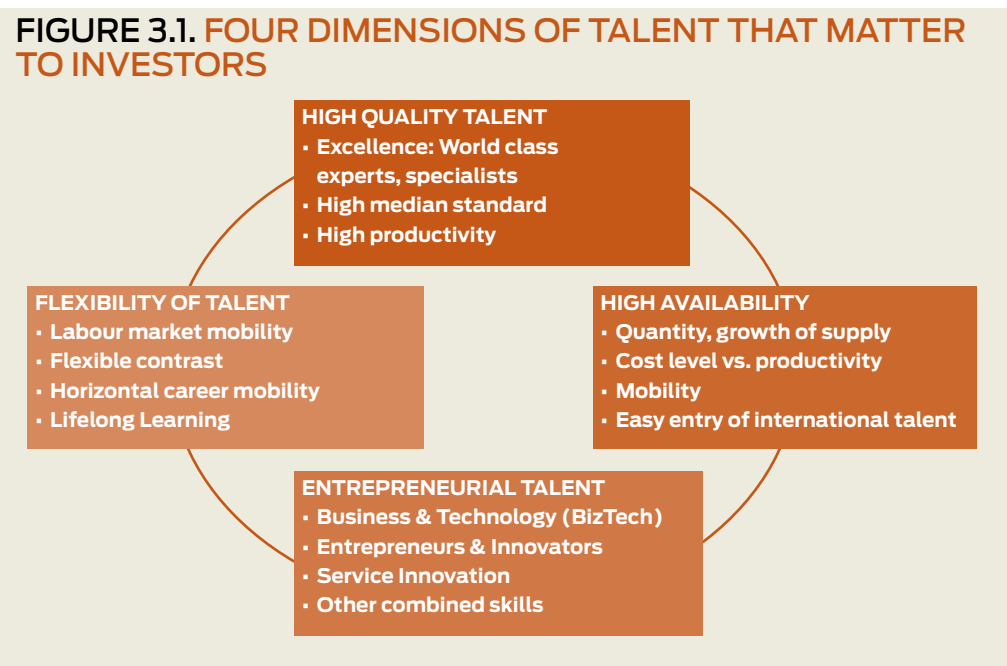
The consensus across the studies of attraction factors maintains that access to talent remains the most important factor, while there is no clear ranking of the subsequent factors. As the studies cover a wide range of companies in a broad spectrum of markets, size and industries, their specific needs and drivers vary greatly.

THE CONSENSUS ACROSS THE STUDIES OF ATTRACTION FACTORS MAINTAINS THAT ACCESS TO TALENT REMAINS THE MOST IMPORTANT FACTOR.

Inward Investment Driver 1:
Access to Talent

The concept of talent in the context of inward investment in research and innovation ranges from world leading researchers to a generally qualified work force. In some cases, specific competences are required, in other situations a large supply of educated engineers is more important. Cost of labour may also be an issue, but rarely emerges as critical for localization of

does not mean that this recognition transcends into business and investment practices. The “buyer” side may need to be sufficiently educated to recognise added value propositions. A well known discrepancy between investment decisions based on cost of labour rather than investment-cycle productivity triggered a wave of outsourcing in the past 20 years, including R&D.



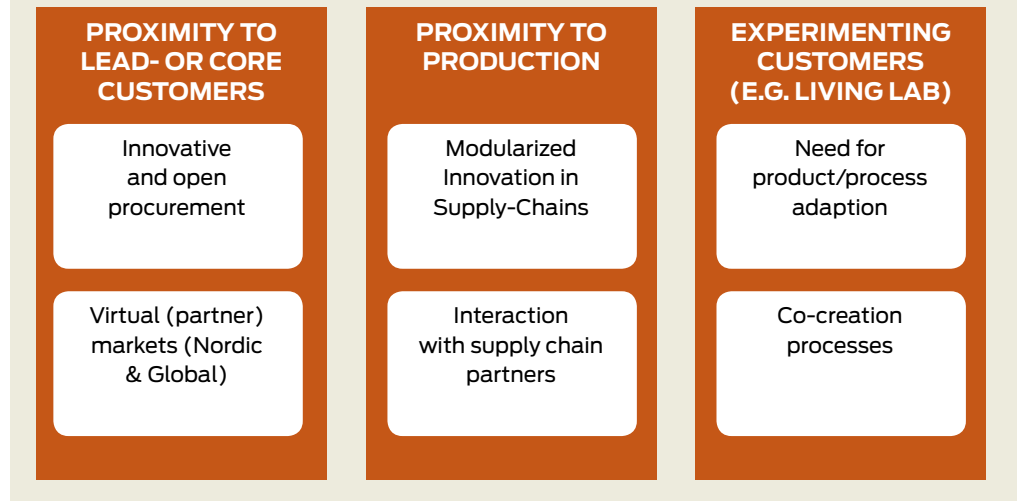
R&D activities in these studies. Measures in German policy development in the high-tech sectors, for example, place emphasis on labour productivity instead of costs in research and innovation.

In the European Commission’s survey on business trends in R&D investments, availability of researchers is the critical factor for choice of R&D investment location. At the same time availability of researchers is considered an unimportant factor for R&D investment decisions, and hence the availability of researchers becomes the true location factor. However, throughout the investment process, once the company/R&D facility is established, availability of talent takes on a more peripheral role. Consequently, whilst investors rate availability of talent as the top location factor, it

Inward Investment Driver 2:
Access to Markets

Access to markets ranks highly in locating research and innovation investment²⁴, and proximity to a local mass markets, where products may need to be adapted, is an important driver for locating R&D activities in developing countries such as China or India. European single market policies have not yet completely evened out the different national regulatory differences and removed the host of barriers to market entry which have haunted European, and thus the Nordic, markets. However, in Europe access to mass market is a much less important driver and varies across industries, with some sectors, such as medical technology, even being a source of above-normal profits for multinational firms. However, in some sectors access to lead customers is considered a criti-

FIGURE 3.2. ACCESS TO MARKET



cal dimension, and the lack hereof being a barrier to the attractiveness of market entry. In a study on American firms investing in Finland, closeness to customers was the most important reason for doing business in Finland; the technology, media and telecommunications sector was well represented in the sample and Nokia was often referenced as a key attractor to inward investments, with Nokia as well as a number of related companies representing world leading customers driving their markets²⁵.

Due to the small size of domestic Nordic markets, it is usually the presence of advanced lead customers that provide the attractiveness, as compared to larger regional markets such as Germany. Hence, we can conceive the Nordic region as having a range of partner markets both in the region and beyond, that are served by Nordic integration creating regional markets and the highly internationalised companies linked to the global market arena. This notion of virtual or partner markets means that location in one country may be considered a gateway to the rest of the region's 25m citizens, the increasingly integrated Baltic Sea Region with its 105m citizens or the rest of the world.

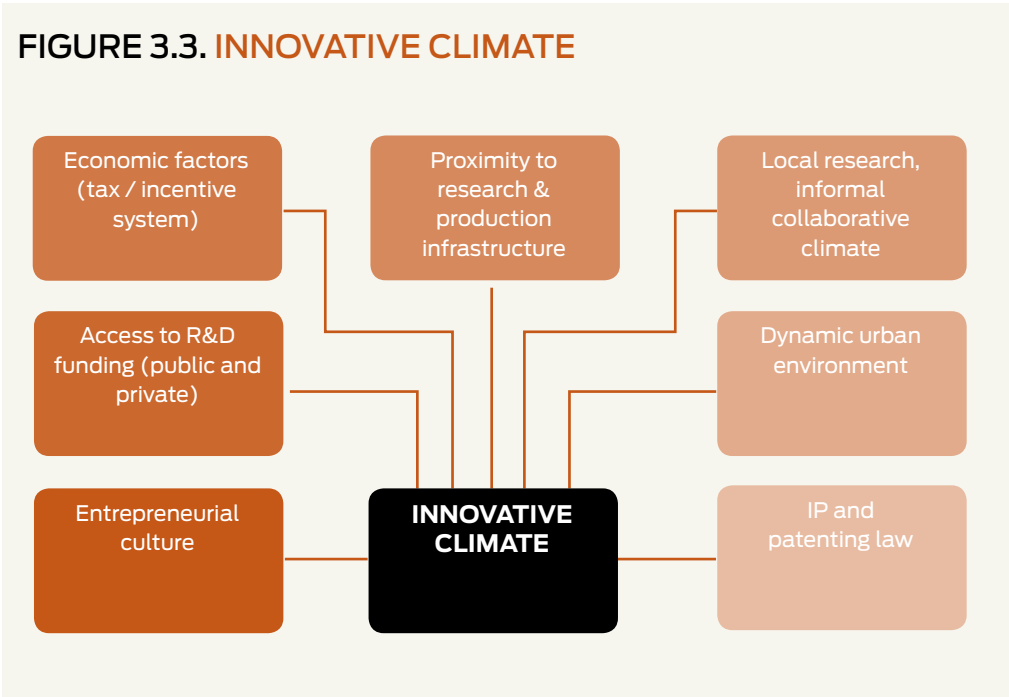
Lead markets can enable R&D investors to not only work with sophisticated end-users in developing new products and services, but importantly may also provide early revenue

(or at least experiments in business models) that additionally subsidise R&D. Solar cells in Germany is one example where regulatory intervention generated guaranteed revenue for solar energy triggering significant investments. In the Nordic region a highly sophisticated market is used, among other things, to pioneer mobile technologies and services before expanding into less advanced or resourceful markets.

Inward Investment Driver 3: Dynamic Innovative Climate

The dynamic innovative climate refers to the context of research and innovation including cultural dimensions, technological and institutional infrastructures. Economic factors such as tax breaks and subsidies are central to the Nordic context for purposes of access to R&D funding. In addition, proximity to research infrastructures and research partners such as universities and research institutes are considered critical in certain sectors, as are predictable legal frameworks for R&D, such as Intellectual Property Rights (IPR). Cultural dimensions, such as entrepreneurial climate are not easily captured in surveys (and are therefore rarely included), but are often mentioned in interviews with R&D managers which underlines their importance as factors associated with a dynamic innovation climate.

FIGURE 3.3. INNOVATIVE CLIMATE



**Inward Investment Driver 4:
Attractive lifestyle proposition**

Related to the first theme of availability of talent is the theme of an attractive lifestyle proposition of the place in the Nordic region, the individual nations or, of increasing importance, the city-region. This theme is often linked to interviews where tax issues are brought up, referring to high levels of personal taxation in the Nordic countries as well as current experiments with tax cuts for visiting researchers and knowledge workers.

Apart from economic factors, a significant factor related to the lifestyle proposition is family-related issues such the employment options of spouses to work, attractive schooling and welfare systems. A particular issue, especially for globally active talent is the degree of internationalisation of the region. Hence, countries and regions often try to attract talent solely on the basis of lifestyle proposition, and beyond singular professional opportunities fail to offer an environment with equally valuable career options (e.g. in other companies, institutes, sectors) as well as a high density of advanced services at global standards. Whilst this is considered primarily an argument for corporate investment locations, it affects the professional directly as well by impacting long-term mobility. What appears to be clear is that

lifestyle considerations are increasingly important to coming generations that expect to live in cities or regions that are aligned with their personal values and goals. This is further underlined through the major shift taking place in the mass-customisation of offerings and emergence of alternatives. In Europe, this marketplace is highly competitive with more than 150.000 communities vying for leading or sustainable offerings. In the US, Richard Florida identified the Creative Class as a new socio-economic entity following a distinct set of locational rules, preferring places characterised by availability of 3 T's (Talent, Tolerance, Technology)²⁶. The rise of an urban creative class of knowledge professionals puts emphasis on the social dynamics and long-term attractiveness of the region beyond the immediate needs associated with employment and salary. Translations of the US findings to the European context have been insufficient to draw any conclusions, but the overall trend appears to be similar. Yet, European mobility patterns are very distinct to the US, and national identities and cultural differences cannot be compared to the United States. Although European mobility patterns are still to a large degree linked to national identities and cultural heritage, an increasing portion of the lifestyle proposition is lateral, meaning that internationally-oriented

professionals increasingly seek identical and very specific factors independent of place, culture and heritage.

The Nordic Region is an excellent performer in the knowledge intensive economy at global level, implying that a dense fabric of opportunities for talented individuals has emerged. This is important, as it goes beyond singular high-profile professional offerings to a competitive local environment in which the market offers a variety of options. Many feel captured in regions with singular offerings, however attractive they may be, as they offer little perspective beyond the current position. This goes against the emerging trend of increasing fluctuation of talent between employers and sectors not just vertically, but horizontally across organizations.

The Challenge:

Managing Serendipity in Inward Investment

Another way of looking at the drivers for localization of R&D activities is to take an historical perspective on how the decisions that led to the localization of research and innovation activities were made. Cases of locational motives for R&D investments by multinational corporations show that such decisions are typically not taken as a result of an analytical process, but based on path dependency. Most often localization of foreign R&D to the Nordic region is a consequence of acquisitions rather than green field (i.e. newly established) investments²⁷. Particularly in Asia, R&D activities are set up to support local manufacturing activities. Other explanations mentioned were particularly entrepreneurial individuals in a foreign subsidiary driving the initiative to set up an R&D centre.

This indicates that targeting green field investments (i.e. inward investments without prior activity by investor in target region) may not be the most effective strategy for attracting investments in research and innovation. While studies are designed for understanding what makes a place an attractive innovation environment, the results should be considered with care. The complexity of the issues involved is not easily resolved by surveys, as choice on investment destinations tend to be related business processes rather than active location

benchmarking. In many ways, this means that the “buyer” appears to typically not consider the location of investments a critical dimension across the investment cycle, making it in turn harder to present arguments to attract investment.

For example, in more than two thirds of the 95 cases in the European Commission’s survey on business trends on R&D investments, respondents chose their home country as the most attractive location for R&D investments. The authors suggest this preference may be due to geographic proximity to other company sites and familiarity with the language and the environment. This illustrates the complexity of the relationship between the responses to questions on the importance of specific dimensions and the actual overall assessment of a place as well as the actual decision-making process leading to (re)locations. It also highlights the considerable “complacency” of investors in decision-making, despite significant global regional branding efforts.

This has direct policy implications, in that generally accepted practices of inward investment attraction via the targeting of new or green field investors should be strongly complemented by targeting subsidiaries of international businesses with a high degree of research and innovation activities, encouraging them to expand their programmes. The motivational aspect of a subsidiary, often in direct competition with other sites, should be understood and prioritised accordingly. Depending on the typology of subsidiary (centralised, decentralised, regional / global responsibility), special attention could be given to support these in their corporate competition for mandates, resources and projects.

PRESENTATION OF KEY POINTS FROM INTERVIEWS

Summarizing the key messages from the interviews yields several points on which there is a broad consensus among the interviewees, as well as a number of points underlining the difference in perceptions of the Nordic region and the actual knowledge about certain key factors.

In general, the interviewees were **positive to**

promoting the Nordic region for the purpose of attracting investment into Nordic research and innovation, albeit to varying degrees. The underlying assumption is that the individual countries are too small to be promoted individually in an increasingly globalized world. While there are certainly differences among the Nordic countries, the similarities are more important from an international perspective. There were however worries from a few respondents (in particular those interviewed that had been involved in similar branding initiatives relating to the Baltic Sea Region) about superficial branding initiatives that are more costly than beneficial.

The **awareness and knowledge of the Nordic region is generally low** outside of Europe according to our respondents. When known, associations tend to be positive, albeit vague. Several experts remarked that our societal welfare model is known and admired in other continents, but that the Nordic region is not known as a research region beyond certain sectors (such as mobile technology). Some respondents noted that the Nordic region is only one of several place brands, such as Scandinavia and the Baltic Sea region, and is not necessarily perceived as a meaningful term internationally. Others pointed out that the Nordic region is becoming increasingly used and referred to as an entity, e.g. within the EU.

The **most important Nordic Strength is Competence**. This may have been expressed as expertise, knowledge, good research or talent by the interviewees. The common denominator is that it represents excellence in research, but also that this is part of an innovation environment or innovative context. This dimension includes both a generally high level of competence among the workforce and specific world class competence in a particular subject area.

In relation to the role of competence many interviewees also emphasized the **role of clusters or local innovation environments**. Companies do not care about national borders; they look for interesting places where all the components of a good innovation environment are in place. Equally, researchers are interested in interesting research communities rather than a specific country. Consequently, when focusing

on the greater Nordic region, the local regional level must not be lost.

What makes the Nordic region unique and attractive as a destination for research and innovation investments, is the deeply enshrined **tradition of collaborative culture**. This is based on shared values such as **trust** in fellow citizens as well as in public institutions and embodied in successful collaborations among companies, universities and public institutions. There is a **strong sense of shared Nordic values** reflected in the collective of the interviews.

There is also a long **history of interest in new knowledge and technologies**. This tradition is reflected in the quality of the education systems, an entrepreneurial and innovative culture and the involvement of consumers in innovation processes. Consequently, the Nordic region is considered a **lead market** in many high-technology and knowledge-intensive industries. Indeed, several experts underlined that the region is frequently used as a test market for new technologies and trends.

In line with the review of the studies in the earlier sections, experts stated that little is known about **attraction factors for talent** within the Nordic context. No studies on attraction factors for highly qualified talent were known to the experts, though there are a few studies on factors attracting students to Nordic countries²⁸. However the interviewed experts shared their personal experiences and several experts suggested that in order to attract talent, the region has to be “a great place to live”. In broad terms, the attraction factors for individuals can be divided among five categories:

- **Quality of research institution or company**. In particular for academic and top level researchers this is a critical issue. The reputation of the research environment or institution is critical. An issue for attracting world class research talent is that the Nordic region has few first tier research institutions (Karolinska Institute is the exception here). The number of universities and research institutions is high in relation to the number of inhabitants in the Nordic region, but on average these institutions are small in size. Experts expressed concern that this situation

may hinder universities from reaching the critical mass needed to achieve world class excellence.

■ **Economic factors.** Relocation needs to be an interesting proposition financially. Tax issues were often mentioned as a key problem (see below) for attracting top talent. With its relatively flat remuneration structures, the Nordic region can be attractive to young researchers, but becomes less attractive for the more senior positions. On the positive side, among the things the Nordic region offers, the welfare model was mentioned as particularly important for young researchers with families. Also of great importance among the economic factors are the resources available to the host institution.

■ **Personal relationships.** Having a personal connection to the host country can be an important reason for relocation, or factor in the decision-making process. This can be a family relation or simply a personal recommendation. As one respondent remarked²⁹, especially in Asia students tend to make choices based on personal recommendations from friends.

■ **Quality of life.** Nordic values were suggested as an attraction factor for the younger generation wanting to live in sustainable societies. In this respect, it was proposed, the Nordic region is considered a role model. Also the Nordic welfare model was suggested to be an attractive proposition in terms of life style for families, including e.g. school system, child care and health care. Opportunities for spouses to work are an important issue from a family perspective. Access to international environments where it is easy to integrate was also mentioned as important for quality of life of visiting researchers. Beyond these points, the notion of quality of life remains very vague also among respondents.

Furthermore, several respondents emphasized the critical **importance of an increased inflow of talent**, not only to ensure the Nordic region can

keep up a relevant supply, but also to ensure inflow of ideas and competencies. A diverse workforce is an important component in successful innovation environments, and increasingly so in a globalized competition. Also, the importance of attracting young researchers was underlined by a number of experts as there is a greater chance they will stay if they come at a young age.

Tax structures, in particular **personal taxes** were considered by far the **greatest barrier** for research and innovation investments into the Nordic region. This is particularly important for attracting world class research talent. Within the top layer in academic research, the Nordic region is not competitive on a global market with lower salaries than most other European countries and higher personal taxes. Inflexible labour markets were mentioned as a barrier. Finally, some experts mention that a shortage of qualified workforce is starting to become a barrier in some sectors, and within ICT in particular.

In terms of important trends to be considered, a critical theme emphasized by the interviewees was the **increasing importance of specialization**, to a great extent a consequence of globalization. This is important for research activities but also for branding activities. We have to be world leading in specific areas to be attractive. In addition, an increasing focus on **cross-disciplinary work** groups in research as well as innovation contexts was underlined.

Finally, many experts emphasized that **Nordic branding initiatives should be well targeted** so that the benefits can be made **explicit and concrete**. This entails both tuning in on what world leading competences the Nordic region has to offer as well as who the target audience is and what they need. This point was particularly emphasized by those interviewees that had been involved in other place branding initiatives (such as the Baltic Sea Region or national projects). It was emphasized that the value of branding is often in the process, in creating a common language within the working group. But the “implementation” part of “traditional” branding, which is traditionally, in a corporate setting, as much about internal as external communication is not necessarily appropriate for the Nordic region.

CONCLUSIONS FROM SURVEY

The Internet-based survey was directed to research and innovation professionals outside of the Nordic region with the aim of getting some high level insights into the perceptions of the region as research and innovation environment among the key target groups. The 59 respondents represented a wide range of industries and activities, including universities and academic research. As illustrated by the figure below, most of the respondents had at least some experience of working with Nordic countries.

The overall perception of the Nordic region is generally very positive – but few rank it as a world leader. On the question *How does the Nordic region compare globally as a source of innovation in your industry?* 69% of respondents ranked the region as “very good”. Only 12% ranked it as average or below average, but even fewer, 7%, ranked it as “Excellent, like no others”.

The open-ended question *What are the first three qualities that come to mind when you think of Nordic Research and Innovation* was asked to capture free associations of the Nordic region

FIGURE 3.4. RESPONDENTS’ WORK EXPERIENCE WITH THE NORDIC REGION (%)

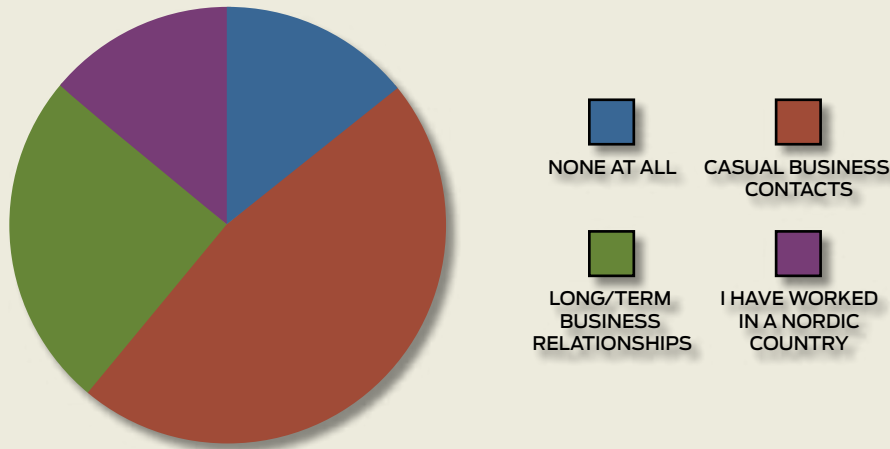


FIGURE 3.5. RATING OF THE NORDIC REGION AS SOURCE OF INNOVATION

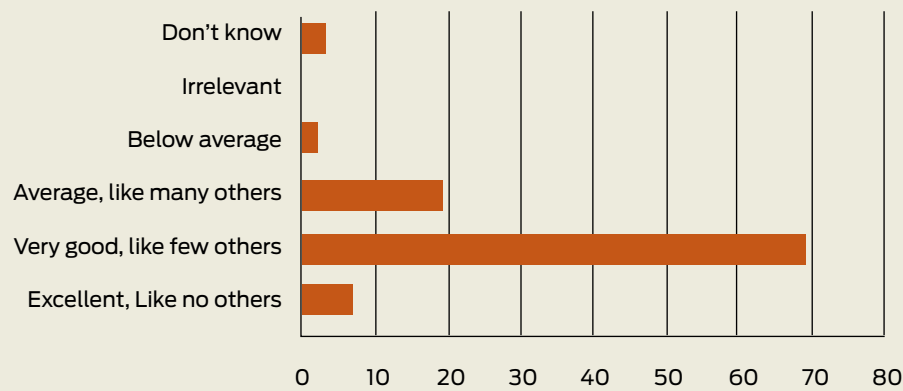
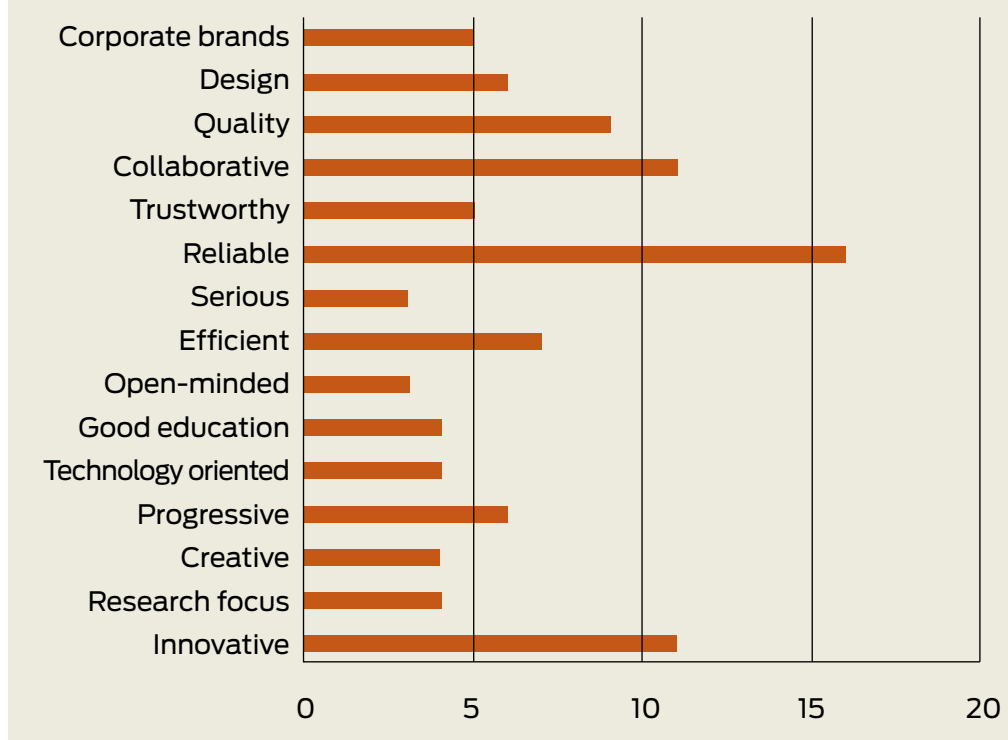


FIGURE 3.6. QUALITIES OF NORDIC RESEARCH AND INNOVATION



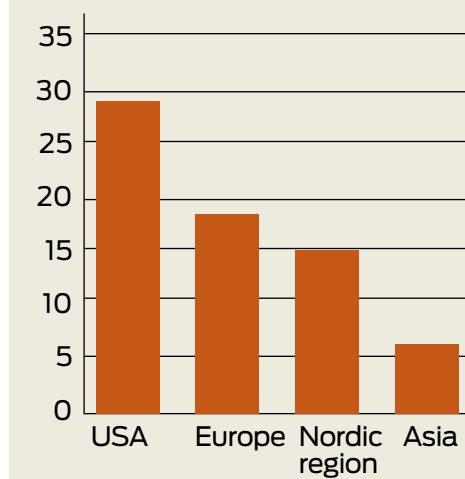
as a research and innovation environment. The figure below gives a picture of the most common responses. Categories that received less than 3 individual responses have been excluded.

Again, with only a couple of exceptions the responses paint a very positive picture of the Nordic region. The responses can be further grouped into two themes – the Nordic region is perceived as an innovative place where you can be sure that things get done. The chart clearly illustrates that respondents perceive the region to be **innovative**, including words like progressive, creative, collaborative and open-minded. The other cluster of qualities circles around **reliability**; including the words trustworthiness, serious, efficient, and quality.

On the open question of *What do you consider the most innovative region in your industry*, 49% of responses referred to the USA (29 responses, 10 of which answered California or Silicon Valley). This is in line with other surveys where the USA comes out as the most attractive destination. However, the Nordic region also hold a

prominent position. 25% of responses referred to the Nordic region (as a Nordic country or a place in the region). Together with the rest of Europe the Nordic region account for 58% of responses. As noted above, familiarity tends to

FIGURE 3.7. MOST INNOVATIVE REGION

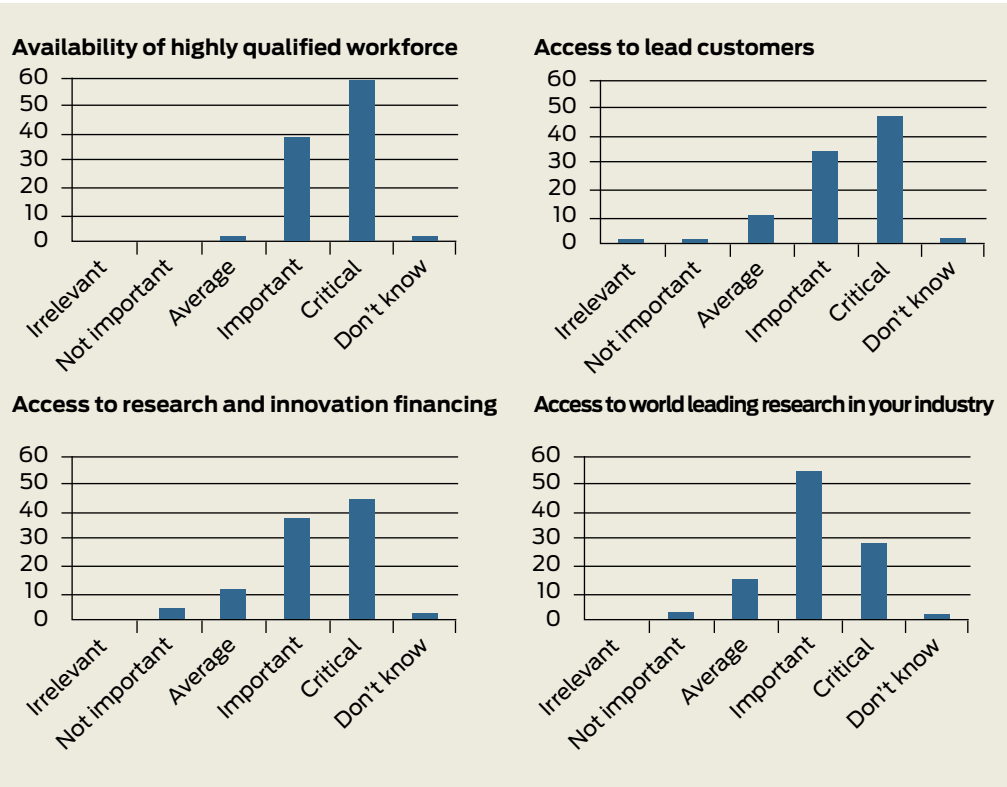


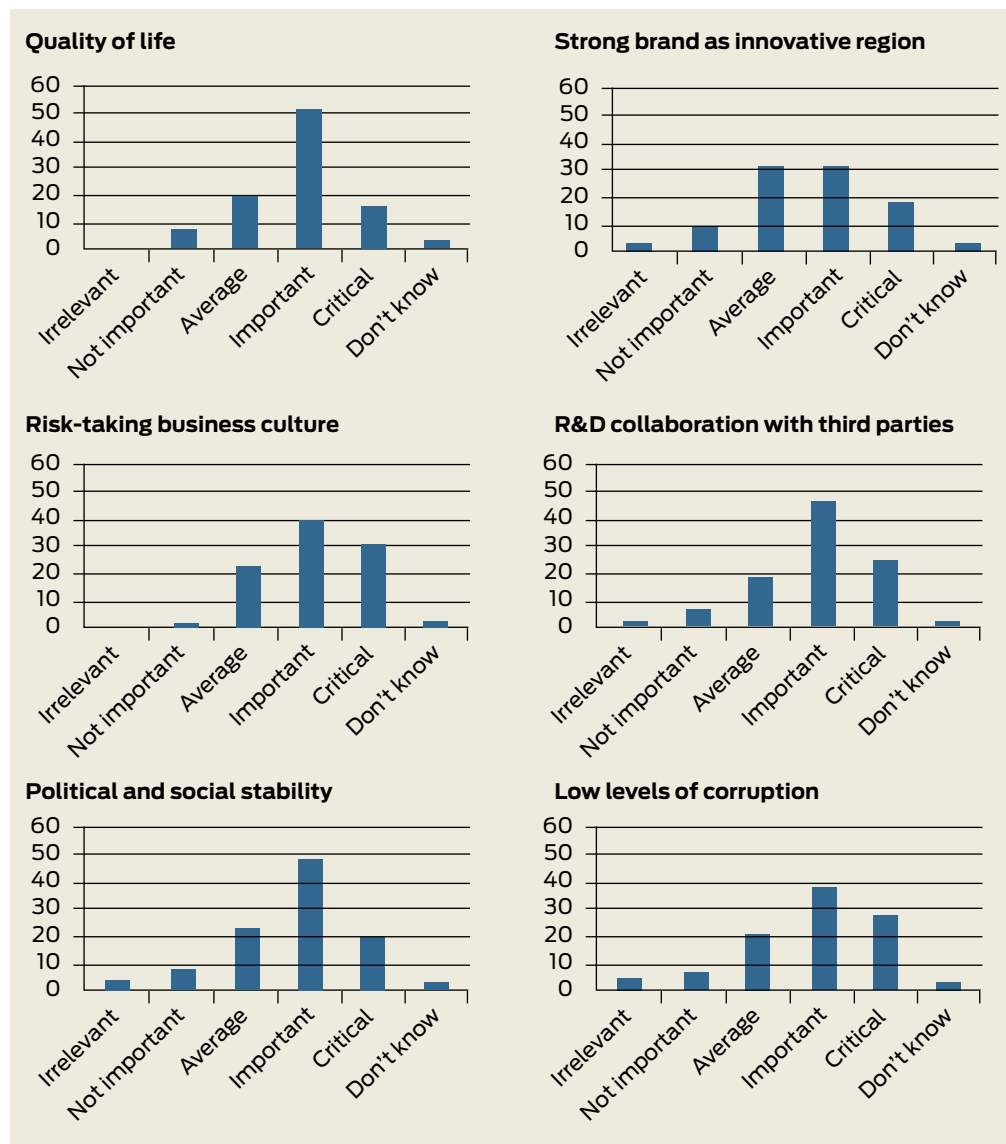
be strongly related to preference for a region as destination for R&D activities.

Before rating the Nordic region on its specific qualities, respondents were asked the question: *In 10 years time, how important will the following factors be for your firm when locating investments in research and innovation?* The dimensions included were based on the dimensions considered important in the surveys referred to earlier as well as the Nordic attraction factors mentioned by the experts. The future perspective was added to capture a more forward looking perspective – what dimensions are likely to increase and what are likely to decrease in importance over the coming ten years? Below the answers are summarized in a set of graphs.

Standing out as critically important in the overview below is the *availability of highly qualified workforce*. 59% of respondents considered this dimension “critical” and 38% considered it “important” (or 98% combined). The other dimension that was rated as “critical” by the

respondents was *access to lead customers* (48% and 34% rated this dimension as important – 82% in total). While the market dimension tends to end up high in studies on drivers of R&D investments, this usually includes for example access to mass market. This highlights that access to the most sophisticated customers may become increasingly critical for research and innovation in order to experiment with and try out new solutions. This confirms the trends mentioned earlier towards a stronger focus on user-driven innovation. Interestingly however, only 28% considered *world leading research in your industry* to be “critical”, although 53% considered it “important”. The diversity of respondents’ industries and geographical background makes it difficult (and imprudent) to interpret these responses in greater depth. Still, 80% considered this dimension important or critical (and indeed, only 16% rated this as being of “average” or “below average” importance).





The next set of graphs is an overview of respondents' perceptions of the Nordic region as a research and innovation environment on specific dimensions. The dimensions were chosen based on the Nordic strengths as expressed by the interviewed experts as well as previously identified critical drivers for inward investment in research and innovation.

In line with the question on the overall perception of the Nordic region as a source of innovation, the overall tendency on the dimensions below is generally that it is good, though with a greater bias towards average rather than excellent. A full 57% consider the Nordic region a dynamic innovation environment (rating it as "good" on this dimension), though only 10%

regard it as "excellent" and 22% as "average". On the most critical dimension as defined above, i.e. *Availability of highly qualified workforce*, 67% of respondents rate the Nordic region as "good", 17% as "excellent" and 14% as "average". However on the other critical dimension, *Access to lead customers*, only 9% rate the Nordic region as "excellent" and 38% as "good". 46% rate the region as "average", "poor" or "very poor".

The important dimension *World leading research in your industry* was rated as "average" (38%) to "good" (34%), although 16% considered it to be below average. This is noteworthy in relation to the very positive rankings on the Nordic region as source of innovation (Figure 3.5).

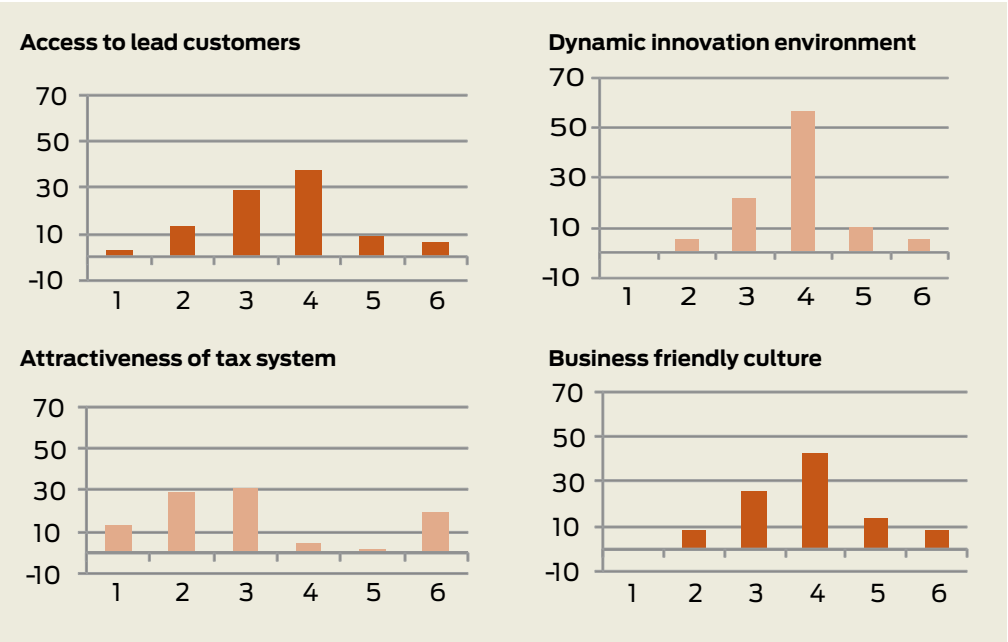
The most positive dimension was the *Environmentally sustainable society*. Indeed, a full 88% ranked the Nordic region as “good” (47%) or “excellent” (41%). *Trustworthiness* is another area of excellence for the Nordic region; 84% rated the region as “good” or “excellent” on these dimensions. This is interesting as it was also one of the values that were underlined by the experts. Similarly, the confidence in the *Efficiency of public institutions* is high.

On the dimension of collaborative culture, we specified it to *Collaborative culture across public-private sectors* as this was a point emphasized by the experts for setting the region apart, but also as a critical component for the Nordic model. On this dimension, respondents seemed to agree with the experts, 55% ranked the Nordic region as “good” and 14% as “excellent”. Furthermore, the majority of respondents also considered the *Quality of life proposition* “good” or “excellent” (69% together).

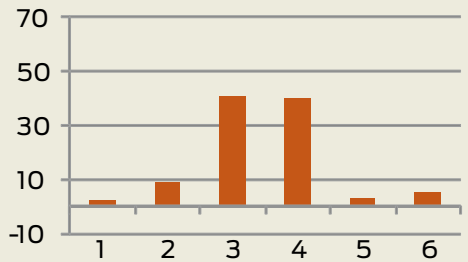
Tax system gets the most negative assessment. This comes as no surprise as this issue was brought up as greatest barrier by the Nordic experts. Only 7% ranked it as good or excellent and 43% considered it “below average” or “very poor”. This indicates that the tax levels are perceived as unattractive not only within the Nordic research and innovation community, but that this is well known issue also in the international community. A fifth of respondents however ticked the “do not know” box.

The graphs below illustrate respondents’ answers to the question: *Within a Global context, how would you rate the Nordic region on the following dimensions?*

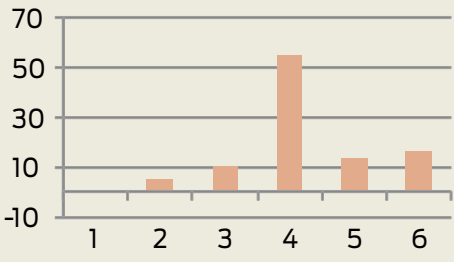
1=Very poor, 2=Below average, 3=Average, 4=Good, 5=Excellent, 6=Don’t know



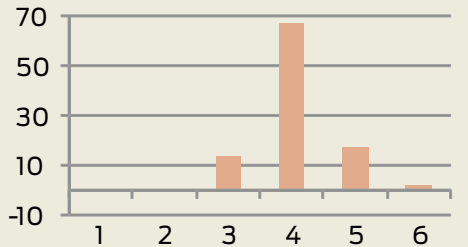
Labour productivity (cost vs. value added)



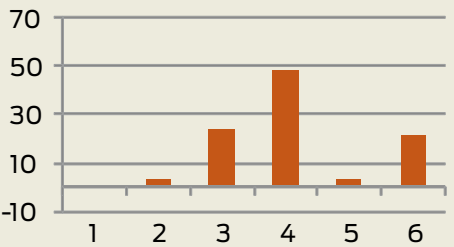
Collaborative culture across public-private sectors



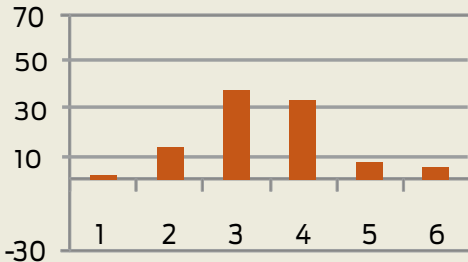
Availability of highly qualified workforce



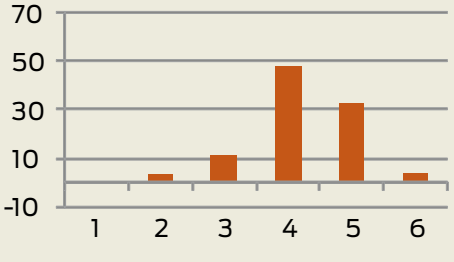
Access to research and innovation financing



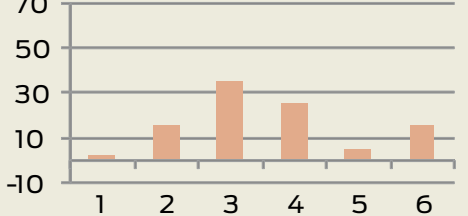
World leading research in your industry



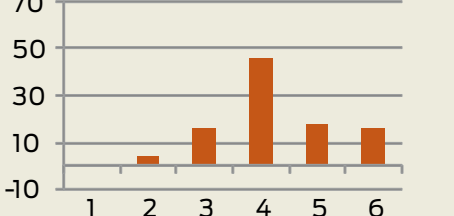
Trustworthiness of business community



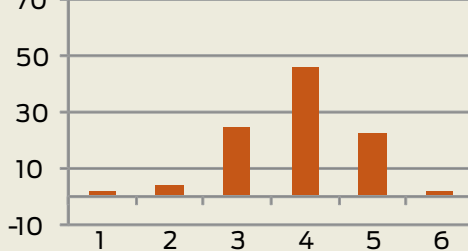
Risk-taking business culture



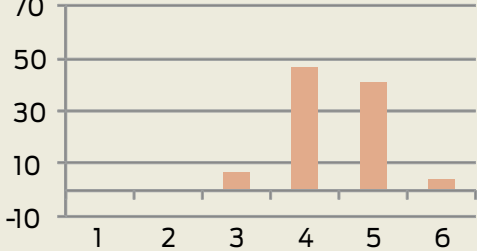
Efficiency of public institutions



Quality of life proposition



Environmentally sustainable society



Finally, the open-ended question *In an ideal world, what should the Nordic region offer to make it an even better destination for investments in research and innovation* offers some additional insights. Again, the unattractiveness of the tax system to foreign companies and researchers was highlighted as the most frequent response. Out of the 40 respondents that typed an answer, 8 suggested changing the tax system (20%). 7 responses suggested *improved international networking* in one form or another. Both improving ties with Asia and other parts of Europe were mentioned here. 5 respondents answered a greater cultural diversity or international outlook would make the region more attractive to international visitors, and another 3 suggested better marketing or improved visibility of the region in other regions would make it more attractive. The remaining answers varied greatly, including better universities, innovation financing and cluster policies. Several related to different aspects of lifestyle.

FROM GOOD TO GREAT: CHALLENGES AND OPPORTUNITIES FOR BRANDING THE NORDIC REGION

There is no doubt that the point of departure for branding the Nordic region as an attractive destination for research and innovation investments is excellent. Perceptions of the region are predominantly positive and perceptions of the qualities of the region as a research and innovation environment are to a great extent in alignment with the views of the Nordic experts consulted. Three groups of findings can be found to summarise perceptions – Excellence, Perception Gaps and Critical Challenge:

1. Excellence to be emphasized: Collaboration, Trust, Social and Environmental Responsibility

Where the Nordic region really **stands out as excellent** is on the values dimension. The experts interviewed emphasized **shared Nordic values of trust, collaborative culture and a socially sustainable society** as distinguishing features that set the region apart as an attractive research and innovation environment. These were also dimensions

emphasized by the respondents in the survey who considered the Nordic region to be marked by reliability, trustworthiness and collaboration in the open-ended question. Trustworthiness of the business community was also one of the dimensions that was ranked the highest by respondents in the comparative ranking, though collaborative culture across public-private sectors was considered good rather than excellent. As will be seen in the following chapter, the latter is another perception gap to the disadvantage of the Nordic region.

However, there are also some perception gaps that should be highlighted before moving on to the brand identity dimensions.

2. Challenging Perception Gaps to be corrected

Firstly, whilst the Nordic region is highly regarded as a source of research and innovation among the communities where it is known, this group is relatively limited. Beyond Europe, and outside of certain sectors, **the Nordic region is not well known**, and even less as a research and innovation environment. The first challenge in those areas is therefore to initiate a relationship with the target groups.

Secondly, while the perception of the Nordic region is generally “good” according to the survey above, the Nordic region is in fact world leader in innovation according to global innovation studies. For example, in the European Innovation Scoreboard, Sweden has been ranked the most innovative country in the EU, closely followed by Finland and Denmark, all well ahead of the US, for the 5 years the study has been conducted.³⁰ In other words, **the region performs better in practice than the dominant perceptions** of the target groups represented in the survey. In the increasingly fierce competition for global research and innovation investments, this perception needs to be corrected through communication.

This negative perception gap is also noticeable in some of the dimensions considered critical for future decisions on research and innovation location. A case in point is *Access to lead customers*, where the region is ranked “average” rather than “excellent”. However, as the experts pointed out, and as will be shown in the next chapter, the Nordic region is host to the world’s most technologically savvy population, with a long tradition of





being fast adopters of new technologies and ideas. Indeed, the region is often used as a test bed for new products in a range of different markets, from clinical testing to fashion. As was noted in the introduction, with trends towards more user-centric innovation, this dimension is becoming increasingly valuable. It was ranked as the second most important factor after availability of highly qualified workforce in our survey. It is therefore important to rectify this perception gap in relevant target groups.

Another example that deserves to be mentioned is the perception of the general business climate in the region. Only 14% rated the **business-friendly culture** as “excellent”, while 9% considered it to be “below average” (43% rated it as “good” and 26% as “average”). However, according to the Economist Intelligence Unit’s Business Environment Ranking, Denmark, closely followed by Finland, is the best place in the world to do business today and over the coming five years³¹.

3. Critical Challenge:

Ability to attract talent

What clearly stands out as the most critical dimension for being an attractive destination for research and innovation investments – and thus **the greatest challenge in the future**, in the studies reviewed as well as this survey, is the ability to **attract talent**. Like in many other European countries, shortage of talent is becoming a growing problem in many sectors, such as ICT and advanced engineering in the Nordic region. The American companies consulted in the Finnish study referred to earlier, complained that this is already a problem in areas such as sales and marketing³². Attracting talent is becoming an increasingly important issue in globalized competition as the increasing importance of human capital and the increasing mobility of skilled individuals is creating an emerging market for talent³³. To keep its privileged position as an excellent innovation environment, the Nordic region has to become more competitive in this emerging market. As discussed above, there are several barriers for inflow of talent (tax structures, but also legal and administrative) and few structures for consciously recruiting top talent from abroad.

THE NORDIC
RESEARCH AND
INNOVATION BRAND
IS DEVELOPED
AROUND A SET OF
SHARED NORDIC
VALUES THAT
DISTINGUISHES
THE REGION, AND
THAT HAVE LAID
THE FOUNDATIONS
FOR THE REMARK-
ABLE SUCCESS IN
RESEARCH AND
INNOVATION IT
ENJOYS TODAY.

4. The Nordic Research and Innovation Brand Identity

Like any other brand, the Nordic Research and Innovation brand identity has to be credible and well founded. Further, it has to be attractive and motivating to internal stakeholders (Nordic actors) as well as external audiences (target groups). A balance needs to be found between broad appeal to the many important Nordic stakeholders, whilst conveying relevant messages for the diverse target audiences.

By necessity then, a common brand for Nordic research and innovation therefore needs to stay at a relatively high level of generality, focusing on the *common* strengths of the Nordic countries. A common Nordic research and innovation brand has to avoid highlighting specific local strengths, whether places, industries or products, at the expense of possible others. A historical perspective is important to ensure the brand is well anchored within the region and builds on the region's true strengths. Yet at the same time, branding is about the future direction, about setting out the vision for what the region should represent in the future – and ultimately about the promise to the target groups of what the region will do for them. This is why the survey reported in the previous chapter focused on what factors are expected to be most important for decisions on locating research and innovation investments in 10 years time. Put briefly, the Nordic brand has to touch on the very essence of Nordic research and innovation – today and in the future.

Against this background, the Nordic

research and innovation brand is developed around a set of shared Nordic values that distinguishes the region, and that have laid the foundations for the remarkable success in research and innovation it enjoys today. It was clear from the survey of international research and innovation professionals that the Nordic region is renowned for certain values, such as reliability and trustworthiness. In a similar vein, the consulted Nordic experts emphasized the importance of particular Nordic shared values and culture as critical sources for the success of the Nordic region as research and innovation environment.

The importance of a common set of values as a distinguishing feature for the Nordic region was also emphasized in a recent study based on interviews with 27 Nordic thought leaders. The shared Nordic values identified were *trust, proximity to power, inclusion, flexibility, respect for nature, the protestant work ethic and aesthetics*³⁴. Whilst this study did not focus explicitly on research and innovation, but on the Nordic competitive model in general, it is interesting to note the importance these thought leaders assigned to these shared values, underpinning the Nordic social system which represents an unrecognized strength when it comes to business economics. For example, they pointed to the link between trust and innovation, and thus part of the explanation for the success of the Nordic countries as innovation environments. The report

FIGURE 4.1. THE NORDIC RESEARCH AND INNOVATION BRAND IDENTITY



concluded that the Nordic vision needs to be redefined, based on a better understanding of Nordic values and strengths, and then branded globally as a value region based on the values and distinctive culture of the region.

The figure above presents the Nordic Research and Innovation Brand Identity, distilled from the Nordic Strengths as defined by the interviewees. Their relevance for the target audience is ensured by the results from the survey and other studies on drivers for investments in research and innovation. These dimensions are backed up by data from statistical sources to ensure that the experts' perceptions of Nordic Strengths are well anchored in facts. Note however, that the measures presented here are to be seen as illustrations and examples. As these identity dimensions are value based, they overlap to some extent and blend into each other. They are multifaceted and can be described in many different ways depending on context. The particular statistics in the pages to come were selected because they highlight the excellence, or leadership, of the Nordic region on a global scale. The data should be replaced over time and complemented by facts and examples of relevance for particular industries, geographical or other areas of interest. On the following pages the 5 dimensions of the extended identity are outlined first, followed by the core identity.

COMPETENCE

As world leaders in higher education and training, the Nordic region offers an exceptionally qualified work force and world leading expertise in a disproportionate number of fields.

Whether called competence, knowledge or expertise, this dimension is often described as the most critical attraction factor for companies establishing their research and innovation activities in the Nordic region. This is not surprising as competence is at the core of research and innovation. While term competence covers a very wide and diverse range of skills and expertise, at the individual as well as group level, the interviewed experts suggested there are distinct qualities to *Nordic competence*. The Nordic human-centric, non-hierarchical and egalitarian culture has provided the foundations for open-minded and flexible ways of working. As a result, Nordic competence is characterized by cross-disciplinary work, an ability to view situations and address problems holistically. As the respondents in the survey noted, the Nordics have a reputation of being reliable and are trusted to “get things done”.

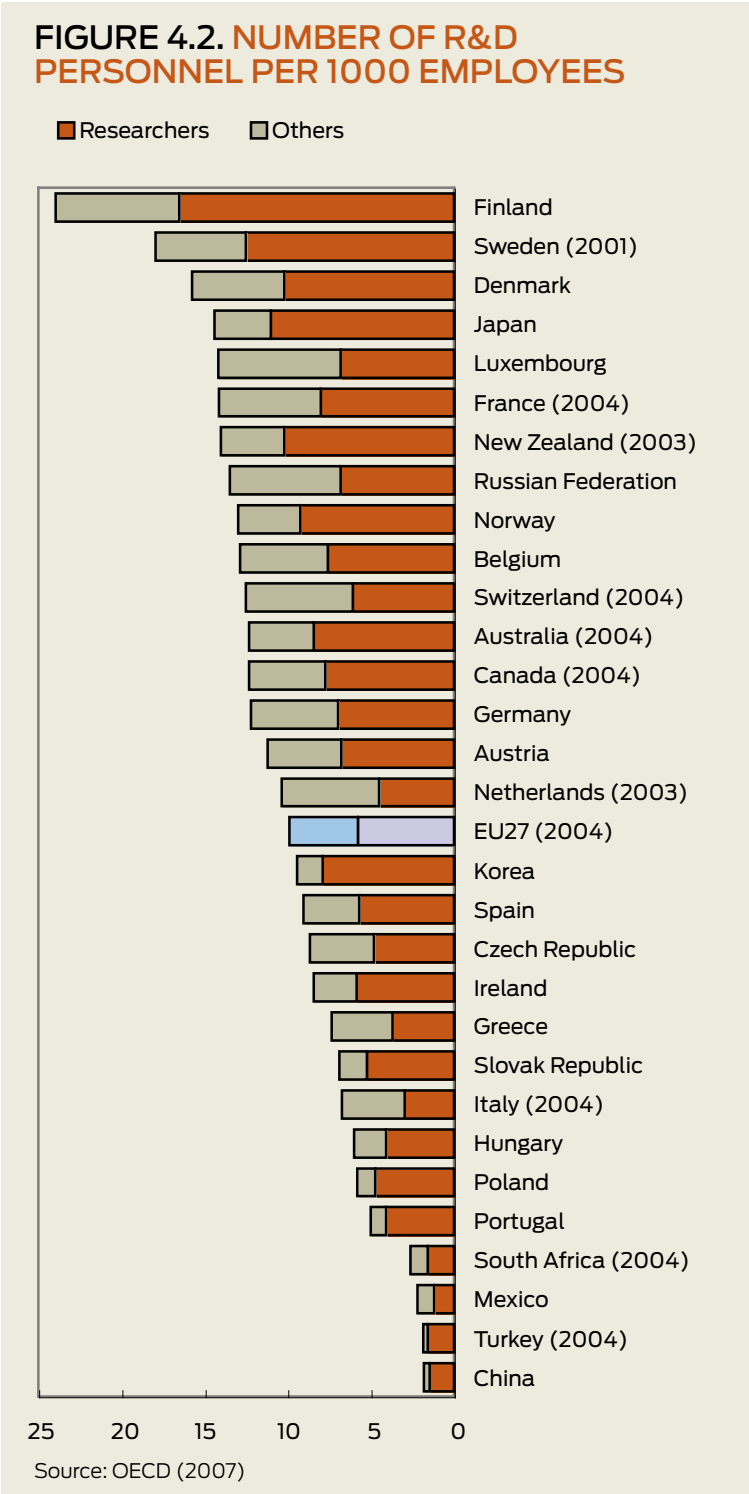
These values have also led to a long-term appreciation of and focus on education. The result is that, today, the region excels at both levels of competence that were highlighted as critical for inward investments in research and innovation according to the review of research. Firstly, a **highly qualified workforce** was considered the most critical factor in the future by the respondents in our survey, confirming the results from other relevant studies. The internationally renowned school systems constitute a considerable strength for the Nordic countries. Indeed, according to World Economic Forum's Global Competitiveness Index, the Nordic countries are global leaders in higher education and training. Finland has ranked 1st on this indicator for several years in a row. This is the case also in the 2007 ranking, followed by Denmark in 2nd place and Sweden on 3rd, with Norway and Iceland making it into the top 10. This high ranking is the consequence of a significant focus on higher education in the Nordic region over recent decades, which has been strength-

ened by excellent on-the-job training programs. This has provided the workforce with the skills needed to adapt rapidly to a changing environment and laid the ground for very high levels of technological adoption in recent years³⁵.

Looking at the regional level, the Norwegian and Swedish capitals are the European regions with the highest proportion of human resources in science and technology, HRSTC (i.e. persons having successfully completed tertiary level education and/or working in a science and technology occupation)³⁶. 33% of the workforce in the Oslo region and 28% in Stockholm belong to the HRSTC category and 6 of the top 25 regions were Nordic. This group is important as it can be considered as active stakeholders in the development of knowledge and technological innovation³⁷.

The high levels of qualification of the Nordic workforce are also reflected in the high proportion of the workforce engaged in R&D. The number of personnel engaged in R&D in OECD economies is directly linked to their R&D effort. In Finland, Sweden and Denmark, over 15 R&D personnel per 1 000 employees contribute to R&D activities, well above the EU average of 10 per 1 000.³⁸

Secondly, access to **world leading expertise** is of vital importance to the establishment of many research and innovation activities. However, the notion of expertise in this context goes beyond the competence of individual researchers and refers to an entire innovation environment. This can be constituted by a specialized research group at a university department, a regional competence cluster or a living lab involving sophisticated users trying out new technological solutions or services. Excellent people are always at the core of a successful innovation environment, but for a competence to become world class, people need to be embedded in a critical mass of researchers, a supportive culture and relevant infrastructures. The Nordic region boasts an impressive number of such world class competence clusters, or innovation environments, in areas ranging from high technology sectors such as information and communication tech-



nologies, life sciences and the energy sector to smaller or more service oriented areas such as the creative industries and health care.

Due to the idiosyncrasies of these highly specialized innovation environments, a mechanism is needed for presenting them in

a coherent and comparable manner. However, today no such instrument exists on a Nordic scale. This constitutes a critical problem for branding Nordic research and innovation and will be further discussed in chapter 6.

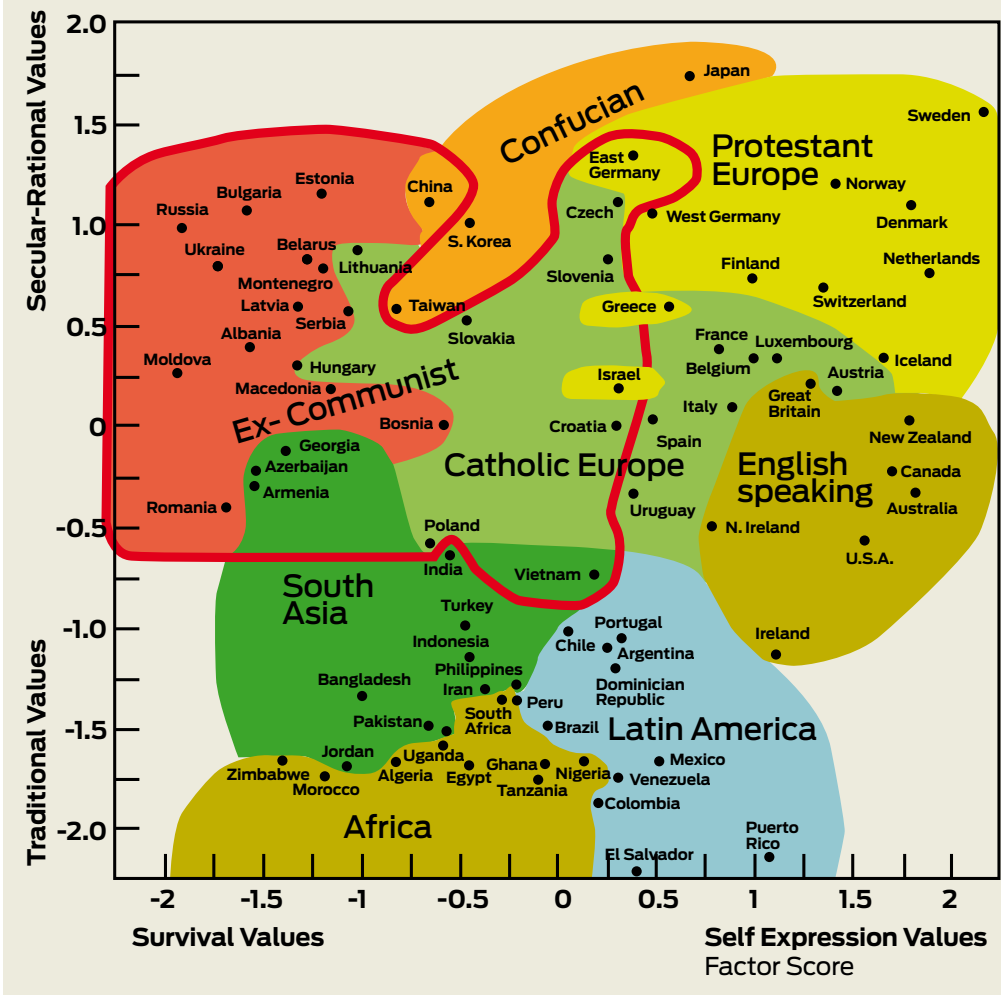
COLLABORATIVE CULTURE

Collaboration and trust lie at the very heart of the common Nordic values and culture – and in the attractiveness of the Nordic region as a destination for research and innovation investments.

As noted in the summary of interviews, the collaborative culture that the experts considered distinguishes the Nordic region was put forth as instrumental to the success and attractiveness of the region as research and innovation environment. This culture also rests on the foundation of Nordic shared values. Low social inequality generates little conflict, promotes social cohesion, solidarity and hence a fertile climate for collaboration³⁹. Furthermore, **openness** towards people, disciplines and cultures were mentioned by interviewees as a feature of Nordic collaborative culture. There is a long tradition of international relations in the Nordic countries. Being small in terms of number of inhabitants, international trade is a prerequisite for growth.

However, the most important cultural trait mentioned by the interviewed experts as an asset for the Nordic region as an attractive research and innovation environment was the **high levels of trust**. This view was confirmed by the survey of international research and innovation professionals, but also by numerous other independent international surveys. In the World Values Survey for example, the Nordic countries achieved top scores for levels of interpersonal trust. In terms of the Inglehart-Welzel cultural map of the world, which summarizes the key dimensions of the World Values Survey, the Nordic countries come out as the most culturally advanced in the world. The surveys were designed to provide a comprehensive measurement of all major areas of human concern, from religion to politics to economic and social life and two dimen-

FIGURE 4.3. INGELHART-WELZEL
CULTURAL MAP OF THE WORLD



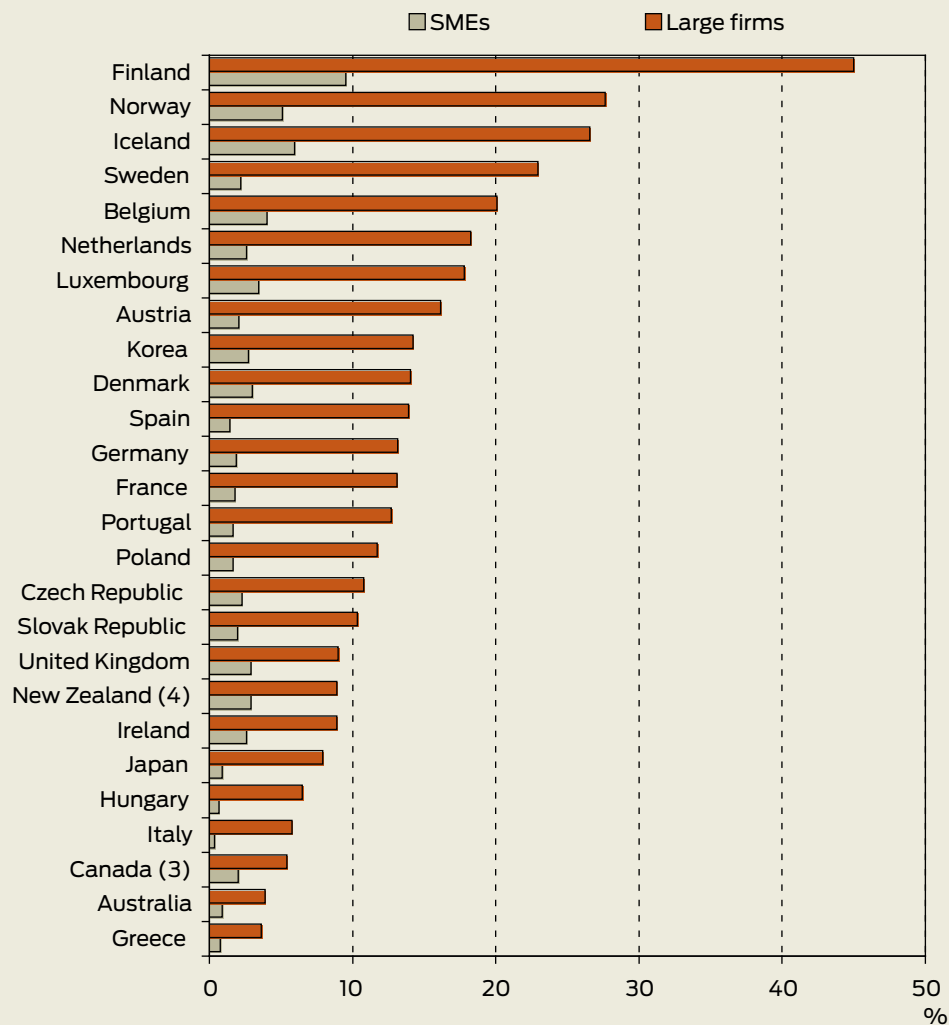
Source: World Values Survey

sions dominate the picture: (1) Traditional/Secular-rational and (2) Survival/Self-expression values. The first dimension reflects the contrast between societies in which religion is very important and those in which it is not. A wide range of other orientations are closely linked with this dimension. Societies with secular-rational values have preferences for open societies and a secular outlook rather than bound by religious traditions and rules. Self-expression values give high priority to environmental protection, tolerance of diversity and rising demands for participation in decision making in economic and political life. These values also reflect mass polarization over tole-

range of outgroups, including foreigners, gays and lesbians and gender equality. High levels of self-expression produce a culture of trust and tolerance.⁴⁰

High levels of trust are a critical condition not only for innovation to take place, but for social cohesion as well as a dynamic economy. In fact, according to the calculations of economists Algan and Cahuc, if France were to achieve the same levels of trust towards their co-citizens as the Swedes (based on the results from the World Values Survey), the French GDP would grow by 5% (almost 1 500 euro *per capita*)⁴¹.

FIGURE 4.4. FIRMS COLLABORATING WITH GOVERNMENT INSTITUTIONS AS A PERCENTAGE OF ALL FIRMS



Source: OECD (2007)

Public-private partnerships (PPP), or collaboration between companies and public organizations and research organisations (higher education or government research institutes) can be an important source of knowledge transfer for the innovation activities of firms. Trust in the professional management of public institutions and transparent decision-making are key enablers in PPP, as is the trust in the business community’s

adherence to highest ethical standards in such collaborations. This is also an area where the Nordic region has a long history of success. The success in PPP was also highlighted by the interviewed experts as a critical factor for the Nordic regions success as research and innovation environment. In OECD’s measure on collaboration on innovation between firms and government institution, the Nordics again dominate the top of the table.

FIGURE 4.5. FIRMS COLLABORATING IN INNOVATION WITH HIGHER EDUCATION INSTITUTIONS AS PERCENTAGE OF ALL FIRMS

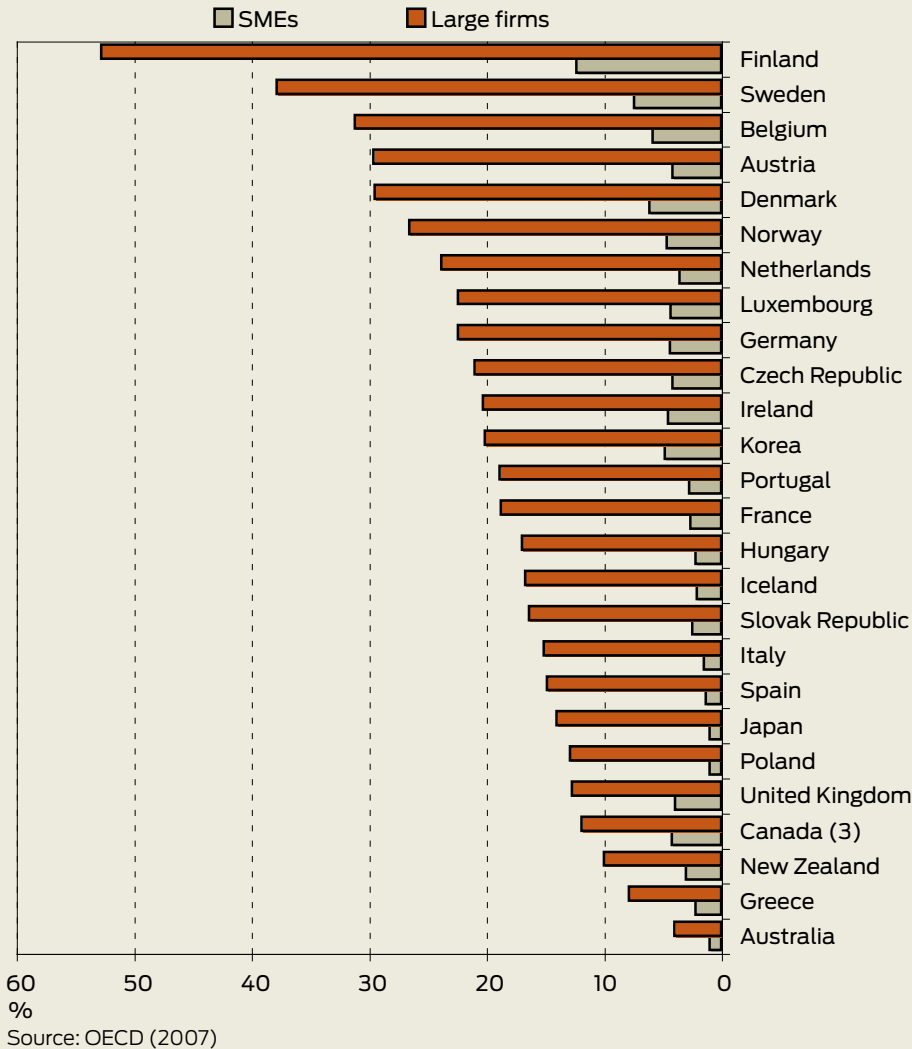
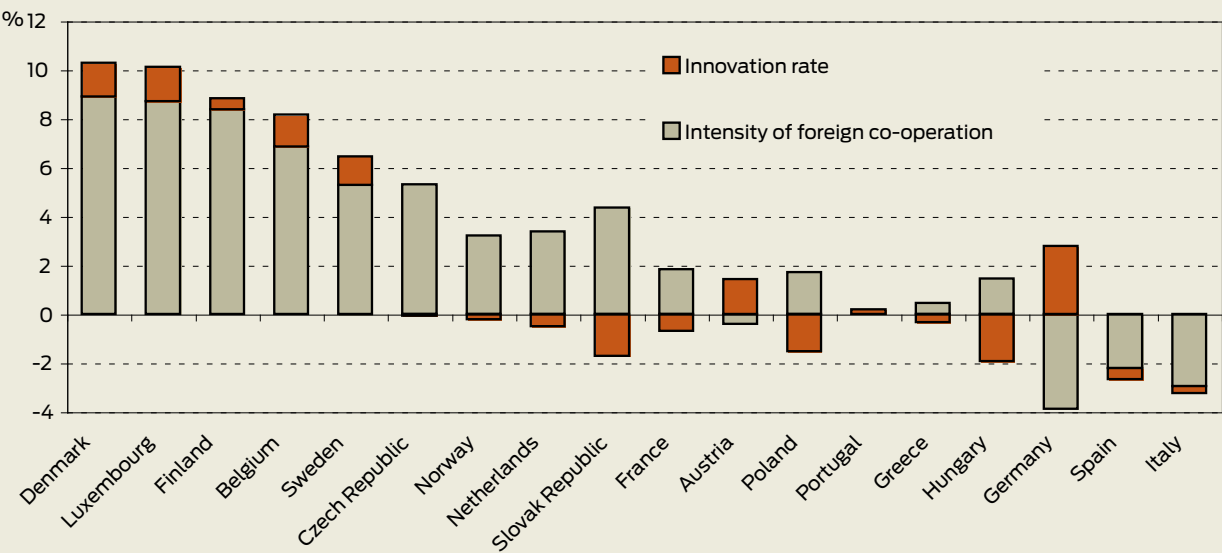


Figure 4.5 and 4.6 illustrate collaboration on innovation between companies and universities and with foreign partners respectively. On both these measures the Nordic countries take the lead. These graphs serve to further illustrate that the collaborative culture has materialized into concrete collaborative relationships within the region as well as internationally.

FIGURE 4.6. FOREIGN COLLABORATION ON INNOVATION WITHIN EUROPE 2002 – 2004, DEVIATION FROM EUROPEAN AVERAGE IN PERCENTAGE POINTS



Source: OECD (2007)

INVENTIVENESS

A creative mindset and an entrepreneurial climate produce unconventional solutions and great inventions.

Trust, openness and short distances of communication are foundations for successful innovation, but also key ingredients in an entrepreneurial climate that encourage people to think in new ways and act on their ideas. In addition to the values mentioned before, this identity dimension captures the **creativity** that is also part of the set of Nordic values that have made the region so successful at research and innovation according to the interviewees. As one interviewed expert put it: “the culture of innovation is tangible”⁴². The Nordic region has been rewarded with an impressive range of world renowned inventors and innovations from the ingenious Viking ships to today’s high technology solutions such as Skype.

The **Nordic tradition of leadership** and organisation is known for its collaborative mode, easy and open communication and perhaps most importantly, **flat hierarchies** (low

power distances). On the indicator for willingness to delegate authority, again the Nordic countries monopolizes the top three positions globally. With Sweden on first place, Denmark on 2nd and Norway on 3rd, Iceland on 6th and Finland on 8th⁴³.

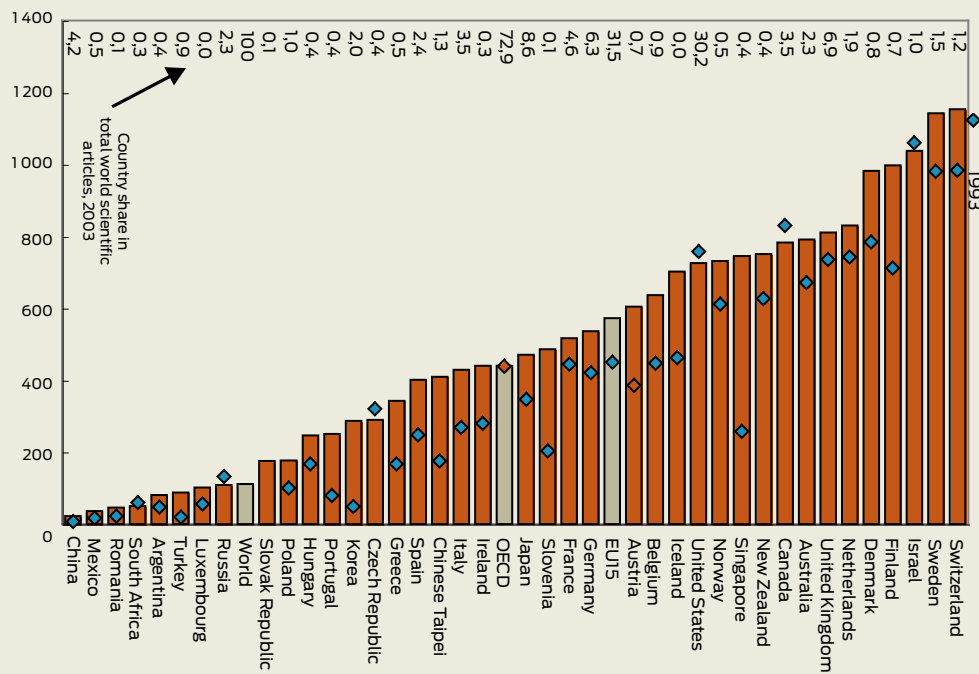
In a recent study of 21 European cities, the *European Cities Entrepreneurship Ranking 2007*, the Swedish city of Göteborg came out on top, closely followed by Stockholm – the only two Nordic cities included in the study. The study is based on entrepreneurs’ satisfaction with conditions put in place by public and private actors – in other words, the study ranks the places where “it is good to start a business”. According to this survey, Northern cities are better at supporting entrepreneurs than Southern European cities. But there are also cultural explanations – there is a tradition of a positive view of the entrepreneur. Furthermore, according to the analysis, a critical reason for the top rank for the Swedish cities was the successful local collaboration between companies, universities and the public sector.⁴⁴

FIGURE 4.7. EUROPEAN CITIES ENTREPRENEURSHIP RANKING 2007



Source: www.ecefr.fr

FIGURE 4.8. SCIENTIFIC ARTICLES PER MILLION POPULATION, 2003



Publication counts have long been an important indicator of the scientific productivity of universities and other research institutions.

It might also be seen as an indicator of the creativity or inventiveness of the academic community.

SOPHISTICATED
LEAD MARKET

With the world’s most technology savvy population, the Nordic region provides a local experimental environment that makes it an ideal place to pioneer innovations.

Companies in the Nordic region benefit from markets of **highly sophisticated users**. Many high technology and knowledge-intensive service sectors make use of the well educated workforce and trend sensitive public in their innovation process and for testing new products. Interviewed experts highlighted that the relatively small and homogenous populations that are easy to access constitute a great research and innovation assets in anything from innovative technological solutions to clinical testing. In this sense, the collaborative culture also extends to the citizens and creates a local **experimental environment**.

There is a long tradition of interest in science and technology and **early technological adoption** within the Nordic region. Already in the 19th century, Stockholm and Helsinki had the highest penetration of telephones in the world. Today all Nordic countries have mobile telephone penetration rates of above 100%⁴⁵. The Nordic countries are often used as test markets as these countries are the quickest in the world at adapting new technologies (with Sweden, Finland and Iceland ranking 1st, 2nd and 3rd respectively, Denmark 5th and Norway 9th).⁴⁶

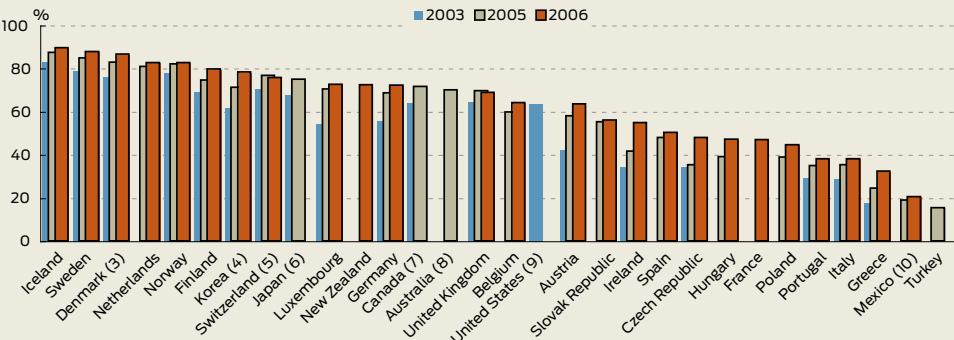
The Networked Readiness Index (NRI), devised by INSEAD and the World Economic Forum, measures countries’ propensity to exploit the opportunities offered by information and communications technology (ICT). Nordic countries dominate the top end of the NRI table. This is perhaps not surprising as companies’ ability to fully leverage ICT depends crucially on the joint effort of the main national actors – notably the government, the business sector, and individuals. They each have a role to play in improving networked readiness. Experience has shown that the most successful countries in ICT have been those in which the government has been able to mobilize business and civil society

FIGURE 4.11.
THE NETWORKED
READINESS INDEX
2006–2007 RANKINGS

Rank	Country/Economy	Score
1	Denmark	5,71
2	Sweden	5,66
3	Singapore	5,60
4	Finland	5,59
5	Switzerland	5,58
6	Netherlands	5,54
7	United States	5,54
8	Iceland	5,50
9	United Kingdom	5,45
10	Norway	5,42

Source: Dutta and Mia (2007)

FIGURE 4.12. INDIVIDUALS USING THE INTERNET FROM
ANY LOCATION AS PERCENTAGE OF ALL ADULTS



Source: OECD (2007)

toward a common ICT development vision and strategy. The actual usage of ICT by the three above actors is greatly influenced and determined by their readiness and propensity to adopt ICT advancements.⁴⁷

Figure 4.12 serves to show more specifically the role of the general population as lead users. The Nordic countries are all in the lead when it comes to internet adoption. This is a critical measure not only for illustrating the technological savviness of the population, but internet usage is also an important prerequisite for the adoption of innovative internet based services.

Sophisticated markets can not only be found in ICT enabled sectors. Studies and the survey conducted for this report indicate a very high ranking of the Nordic population as an environmentally conscious population. The Nordic region also constitutes a lead market with strong national policies and innovators in technologies such as ethanol fuel cells, renewable energy and power generating windmills.

A special feature of the Nordic Region is the level of integration among the countries to act as a virtual lead market of 25m citizens. Further, the systematic integration of the Baltic Sea Region extends this market place into over 100m citizens. Investors further benefit from collaborations with leading corporations, a highly internationalised business community and the leadership of the region as a pioneer for EU market developments and standards.

SOCIALLY AND ENVIRONMENTALLY SUSTAINABLE SOCIETY

The success of the Nordic societal model, based on principles of equal opportunities and gender equality, combining socially, environmentally and economically sustainable goals, has become a role model worldwide and made the region an attractive place to live.

The values that permeate the Nordic culture – and the Nordic research and innovation brand – are also the foundation for the greatly admired Nordic societal model, combining a socially sustainable welfare model with highly successful economies.

For example, several of the interviewed experts pointed out that the Nordic region is more likely to be known for its societal model than for its success as a research and innovation environment on other continents. The basic premise of this model is a great respect for other people and for the environment. For people who share this view of the world, the Nordic region is considered **a great place to live**. In the 2007 version of the UN Human Development Index Iceland has overtaken Norway's spot as the best place in the world to live. A position Norway has held for 6 consecutive years. This year, Norway has to settle for a second place. The other Nordic countries follow closely, ending up at 6th (Sweden), 11th (Finland) and 14th (Denmark) place.⁴⁸ This model could constitute an important asset for attracting talent to the region, sharing Nordic values of a sustainable society⁴⁹.

As mentioned several times already, social equality is a fundamental Nordic value. This is perhaps best exemplified by the approach to **gender equality**. The Nordic region has the ambition to provide the best gender relations in the world, as a social goal in itself but also as a set of practices that provide companies with the opportunity to benefit from the skills and capabilities of all groups in society⁵⁰. As a consequence, the region has become a global role model in gender equality. In the World Economic Forum's Global Gender Gap Report⁵¹, the Nordic countries, this year again, monopolized the top positions.

Another illustration of these values is the **high level of ethics** that distinguish the Nordic region. According to the World Economic Forum, Nordic firms are world leaders in ethical conduct. Finland takes the top position in their ranking, followed by Denmark on 2nd and Sweden on 3rd place. Norway and Iceland follow closely thereafter, ranking 6th and 10th respectively. Among other things, the high levels of ethics explain the reputation of reliability that the region enjoys, mentioned several times above.

Equally, the **low levels of corruption** in the Nordic region in general are a reflection of fundamental Nordic values that pave the way for a sustainable society. The Nordic countries

FIGURE 4.13. THE 2007 GENDER GAP INDEX

Country	2007 rank	2007 score (0.00 = inequality; 1.00 = equality)	2007 rank among 2006 countries	2006 rank	2006 score	Change in score (2007 – 2006)
Sweden	1	0.8146	1	1	0.8133	0.0014
Norway	2	0.8059	2	2	0.7994	0.0065
Finland	3	0.8044	3	3	0.7958	0.0086
Iceland	4	0.7836	4	4	0.7813	0.0023
New Zeland	5	0.7649	5	7	0.7509	0.0140
Philippines	6	0.7629	6	6	0.7516	0.0113
Germany	7	0.7618	7	5	0.7524	0.0094
Denmark	8	0.7519	8	8	0.7462	0.0057
Ireland	9	0.7457	9	10	0.7335	0.0122
Spain	10	0.7444	10	11	0.7319	0.0125

Source: Hausman
et al. (2007)

FIGURE 4.14. GENDER GAP AND COMPETITIVENESS



are dominating the top of the table in Transparency International’s *Corruption Perception Index (CPI)*. The CPI ranks 180 countries by their perceived levels of corruption as determined by expert assessments and opinion surveys. With Denmark and Finland sharing the honourable first place, all the five Nordic countries make it into the global top 10.⁵²

The Nordic region is known for its beautiful nature and vast, untouched landscapes. The region covers a vast area of the size of Germany, France and Italy together and stretches over five time zones. But with a population of only 25 million, the region has one of the lowest population densities in the world.⁵³

BENEFITS OF SMALL SCALE (SMALL AND AGILE)

In spite of its vast area, the Nordic region only hosts 25 million inhabitants. Developing efficient lines of communication and collaboration, openness to the outside world and finding new and creative ways of solving problems has been a condition for survival – and a recipe for success.

Taken together, the 5 brand identity dimensions above illustrate the Nordic Research and Innovation Brand. This section aims to summarize these dimensions into a core identity. As one of the interviewed experts put it; “what it all comes down to, is the benefits of the small scale”⁵⁴. The non-hierarchical approach, the culture of trust and sophisti-

WITH ITS CULTURE ORIENTED TOWARDS TRUST, OPENNESS AND COLLABORATION AND ITS SOPHISTICATED MARKETS, THE REGION PROVIDES A PARTICULARLY SUITABLE BASE FOR OPEN, USER-DRIVEN INNOVATION. INDEED THIS HAS ALWAYS BEEN WHAT THE NORDIC MODEL OF INNOVATION IS ALL ABOUT.

cated infrastructures have ensured efficient communication within and across the region. The relatively small home markets have created greater incentives to export than in larger European countries. Indeed, foreign trade with goods amounts to more than one fourth in the Nordic countries, and Denmark, Finland, Norway and Sweden all have considerably greater exports than imports every year since 1990⁵⁵. As small countries the Nordics have always been open to the outside world and quick to adapt – quick at learning new languages, quick to adopt new technologies and ready to put their own mindsets aside to be able to understand the mindsets of cultures around them. It seems it is no coincidence then that the Nordic region has been so successful at developing and exploiting information and communications technologies.

Against the background of these identity dimensions, the Nordic region's remarkable success in research and innovation is not surprising. Indeed, the values and qualities presented here fit very well into the description of successful innovation environments. The good news are that these dimensions are not just critical to what has made the Nordic region a successful innovation environment in the past. In fact, the Nordic region is exceptionally well placed to take the lead in the future.

In a globalised world, size is no longer critical – instead it is critical to be globally connected and it is critical to be agile to be able to respond to frequent and unexpected changes. The Nordic region is a truly “glocal” place where international networking has always been a natural part of doing business, yet with a clear anchoring in the Nordic value system and traditions. In fact, various potential investors pointed out that the internationalisation of companies and institutions in the region make it a springboard to access a large range of global markets and incorporate global views in innovation processes.

With its culture oriented towards trust, openness and collaboration and its sophisticated markets, the region provides a particularly suitable base for open, user-driven innovation. Indeed this has always been what the Nordic model of innovation is all about.



RA

5. The Role of the Global Nordic Research and Innovation Brand

As discussed in Chapter 2 on methodology for branding the Nordic research and innovation area, a brand identity represents an aspiration or the desired image. The survey indicated that whilst the perception of the Nordic region as a source of innovation is relatively strong on a general level, there are perception gaps to the Nordic regions disadvantage when it comes to the more specific research and innovation strengths. In critical areas such as “access to lead customers” or “world leading research in your industry” the Nordic region is perceived as average rather than excellent. In other areas where the Nordic region could claim to be excellent, or world leading, the region is instead rated as “good”. Hence, measures should be taken to rectify (in addition to extending) the brand image of the Nordic region as a world leading research and innovation environment.

It was further noted that the theories, methodologies and practices of branding are only partly appropriate for branding the Nordic region as an attractive destination for investments in research and innovation. Whilst the general concept of brand identity was helpful for informing the description of Nordic Strengths as a research and innovation environment, it is in the process of implementing the brand that the insufficiencies of traditional branding approaches become readily apparent. Some critical special conditions or points of departure for the branding roadmap include:

- **Complexity of Target Groups.** The range of target groups is great, not only in terms of numbers and reach (indeed, the audience is global), but also in the diversity of interests, motivations and decision processes. The attraction factors are fundamentally different for a talented researcher in Poland looking for an interesting place to live and proceed in her career than an American multinational pharmaceutical company, a research intensive Asian SME in the ICT sector or a European research group looking for partners for a framework project. Yet, these groups are all valuable target groups for a Nordic research and innovation brand.
- **Complexity of Nordic Actors involved.** It is often noted in the branding literature that branding is as much about internal as external communication⁵⁶. The more service- and/or knowledge-intensive an organization, the more critical the role of employees in the production and sales process (as it becomes more relationship based), and consequently, the more important that brand values are accepted and “lived” by the employees. In the widest sense, the internal audience of the Nordic region are its 25 million inhabitants. They are all ambassadors for the region when abroad as well as when interacting with foreign investors or visitors/talent at home.

There is also a wide array of actors more or less formally involved in the promotion of the region, and of research and innovation – on a Nordic level or on national or regional levels. These actors all have their own incentives and motivations (or lack of motivations) in the process of branding the Nordic region as a research and innovation environment.

■ **Distributed brand owner.** In addition to the diversity of Nordic Actors to be involved as internal stakeholders, the actual brand owner, and thus brand manager, is not evident. The role of the brand owner is to set the brand strategy and ensure it is implemented. In the case of the Nordic region there are many stakeholders with a profound interest in the Nordic brand, but with only partial influence. Arriving at a final branding strategy therefore has to be a process seeking coherence among actors' interests, and the process for implementing the branding strategy needs to be, at least partially, a bottom-up process driven by the individual stakeholders.

■ **Brand building instruments lacking.** The essence of branding is to ensure the brand identity becomes imprinted in the target groups' minds. This involves creating visibility for the brand, building associations and creating differentiation as well as developing deep customer relationships. To do this the brand strategist usually has a set of tools at her disposal. Traditionally this is based on a communications platform that asserts a clear message and communications strategy to convey the message to the target audience. In the case of the Nordic research and innovation brand, the complexity of the audiences and the message(s) requires a new set of tools and communication channels to convey the desired message effectively to the respective target groups.

Given these special conditions, what could be the role of a Nordic brand for attracting research and innovation investments and activities?

The brand identity was designed with these special conditions in mind – it is broad enough to appeal to all target audiences. But this also means it needs to be complemented with specific messages to appeal to specific target audiences. A clear message from the interviewed experts was that, at least for companies, the factors that make a particular place the most attractive for research and innovation investments tend to be rather specific to a particular company in question. This also means that the brand needs to be complemented with tools to help the internal audiences design and communicate the tailored messages.

The Nordic research and innovation brand proposed here has been conceptualized as a **platform brand**, supporting a range of other brands. It is important to take into account the existing portfolio of brands when introducing a new branding strategy. As a successful innovation region spanning over 5 countries there is already a considerable portfolio of relevant brands. To mention a few:

- Various place brands (nation brands, regional brands, city brands)
- Research institutions (such as Karolinska Institute, International Peace Research Institute in Oslo)
- Innovation brands and symbols (such as Nobel Prize, Stockholm Challenge Award)
- Companies (such as Nokia, Astra, Tetra-Pak, Novo, Decode)
- Inventions and products (such as Dynamite, Skype)
- Individuals or “stars” – successful inventors and entrepreneurs (such as Niels Bohr, Ingvar Kamprad, Carl von Linné)

Note the difference between conceptualizing the brand as a platform and the more common term umbrella brand. In the latter case the brand is conceptualized as an over-arching brand that directs the other brands within a brand family. In umbrella-branding the same

brand name is used for several products and/or services. It is applied so that a unified image is attributed to all involved.⁵⁷ In contrast, the role of the platform brand is to support, reinforce and to create synergies with other (local and already existing as well as future) brands. Hence, the Nordic Brand could be seen as a supporting service to other branding efforts, rather than a top-down, imposed umbrella.

Branding Nordic research and innovation is thus an effort to support and strengthen these other brands by adding a platform in terms of a language or a terminology. The objective is to allow for a more effective communication about the strengths of the Nordic region as a research and innovation destination. However, for a platform brand to be useful it needs to be put into the specific contexts it is to support. An important component in successful branding is storytelling. The Nordic Research and Innovation Brand Identity provides a platform for telling the story about the region as a successful innovation environment. But it only provides the “skeleton” for the story, it proposes a raw storyline in the sense of showing and offering an explanation for the current success of the region as well as why it has the ideal conditions for being successful in the future. For the story to become compelling to the listener it needs to be personalized to the particular context in which it is told (motivations of the target audience, role of the storyteller, geographical and/or industrial focus) and embroidered with examples and justifications relevant to that particular context.

While the task of designing and telling the contextualized story is of course up to each of the Nordic actors involved in the branding process, this is no easy task and support and guidance needs to be provided by a brand manager. To facilitate this process and help motivate the users of the brand a set of **brand building tools** or instruments needs to be developed. In the next chapter a few such tools will be suggested.



THE ROLE OF THE
PLATFORM BRAND
IS TO SUPPORT,
REINFORCE AND
TO CREATE SYNER-
GIES WITH OTHER
BRANDS IN THE
REGION.

6. Nordic Brand Building Instruments

In the previous chapter a lack of brand building instruments was presented as a challenge for the Nordic region, which will be addressed in this section. Four instruments are presented here, that outline operational components to implement the brand. Instruments are presented in outline, yet illustrate the important need to operationalise the brand building process and address what may be organisational gaps in the region.

Some of the instruments presented here, or aspects of them, may appear to duplicate existing structures. It is not the intention of the instruments to duplicate existing structures or services, and wherever possible tasks and responsibilities should be delegated or extended to existing institutions. The intention of the instruments is to highlight activity areas to be delivered.

INSTRUMENT 1: **NORDIC BRAND MANAGER**

Leadership, Organizing the Brand and Coordinating Actors

A premise for the implementation of this branding strategy is that existing Nordic actors act as carriers of the brand. The brand and its supporting instruments need to be developed and continually updated, and actors need to be motivated. Whilst the brand owner is distributed in the sense that there is no single

executive power, but rather a number of key stakeholders, these activities still need to be coordinated and the process needs to be managed in order to be effective.

While the implementation of the brand will to a great extent be a “bottom-up” process driven by the variety of Nordic actors that are somehow involved in attraction of research and innovation investments, it is critical that these actors get the support and directions required for their efforts to be worthwhile. This requires leadership and an operational platform. The Nordic brand has to be translated into concrete branding activities and initiatives. The impetus for such initiatives should be driven by common Nordic interests and policy decisions. An operational unit can become the driver and coordinator of such Nordic initiatives, supported by a strong legal framework and institutional self-interest.

Therefore one existing or newly created Nordic actor should be commissioned to function as the brand owner or Nordic Brand Manager. This is perhaps best thought of as a role rather than an organization, and entails acting as a node in Nordic networks. The role entails acting as the guardian of the brand and supporting the Nordic actors in their efforts to take on the often new perspective of promoting the Nordic rather than national or local dimension. Responsibilities could include:

- Provide the overall brand vision and strategy
- Provide a continuously updated information resource on the brand and branding activities
- Facilitate collaborative efforts among Nordic actors
- Host and coordinate brand building instruments
- Provide training and support to Nordic actors and gradually embed service protocols to assure quality of Nordic branding efforts
- Continually narrow the purpose of the brand and avoid overlap with Nordic actors' institutional branding efforts (e.g. regional, local, institutional, national brands)
- Motivate actors to actively promote the brand, and stimulate collaboration to strengthen the common objectives
- Act as a Networking Platform for in- and external Nordic actors

In the effort to install such a Nordic Brand Manager innovative solutions may have to be explored. Given that branding is a long-term and slow process, the organisational platform has to be designed to adapt to changing conditions and retain a strong mandate. Many regional branding efforts have either been over-burdened by short-term expectations or under-resourcing. A common risk has also been political intervention or neglect, i.e. periods in which the brand might lose consistency or ability to deliver on the promise.

Nordic Brand Manager as Networking Platform. Nordic actors need to collaborate across institutions and across borders. If they are to succeed in their new tasks they will need the support from other Nordic actors and create collaborative efforts.

It is important to recognise, that despite the collaborative culture, Nordic actors are also in a constant competition for inward investments and international visibility. This condition, also emerging in open innovation processes, has by some experts been referred to as “co-opetition”. Few branding efforts have successfully integrated competing entities into a unified brand with a meaningful operational structure. Often, the individual actors cannot recognise the significant

added value and therefore delegate non-critical values to the brand. Further, trust or perception of value can be undermined by a single actor breaking the code of trust and collaboration, for example by elevating a national or institutional interest above the joint branding platform.

In the case of the Nordic region, the point of departure seems to be good, based on the comments from the interviewed experts. The general position was that the Nordic perspective for attracting inward investments in research and innovation was beneficial, if not necessary, for a region with such small countries on the global arena. However, certain scepticism towards implementation of branding initiatives was also expressed.

Experts emphasized that benefits must be clear for actors to take part in pan-Nordic branding initiatives. In recent history two global “co-opetitive” brands stand out as potential references: For both VISA and GSM Association, the success of the brand and collaborative effort among competing actors lay in a clearly defined mutual self-interest. It appears that the precise definition of the national and organisational objectives to join the Nordic Research and Innovation Brand could emerge the decisive success factor.

Strengthen international research networks. Implied in this branding strategy is the need to continue to strengthen international networking of the Nordic region among research and innovation communities and in respect to the different Nordic actors and the global target groups. This also involves organizing Nordic expatriate communities. An example may be to organise Nordic researchers abroad into networks, identify the strongest multipliers and nominate them as ambassadors. Ambassadors could work not only to carry the brand, but as importantly to provide feedback from abroad. This could serve as a basis for Nordic seminars and other events abroad.

Further, Nordic alumni networks not only from Nordic, but in international universities may provide valuable platforms to build and maintain networks in specific communities of relevance to Nordic competences or strengths.

INSTRUMENT 2:
NORDIC COMPETENCE AND
LEAD MARKET NETWORKS

It was highlighted in Chapters 3 and 4 that *competence* was considered the most important dimension for attracting research and innovation investments. The complexity of this issue was also highlighted, including methodological challenges and the lack of a coherent terminology, or of a common understanding of what “competence” means in this context.

Yet, a better understanding of the notion of competence is a critical step towards building the Nordic Brand for research and innovation, as today there are few organised, articulated and officially legitimised Nordic (rather than national) competences. There is no mechanism for actually identifying critical competencies or innovation environments on a Nordic scale. However, this would be required to enable the actors to promote research and innovation on a Nordic rather than national level.

In addition to competences, the survey and research results outlined the strong relationship between inward investment attractiveness in research and innovation and the availability of *lead markets*. A lead market is a (typically) national initiative to create pioneering market conditions for advanced services and products to stimulate innovation, competitiveness and inward investment attractiveness. Examples of lead markets are initiatives in Nordic countries and Germany

to raise environmental regulatory standards, and more recently the announcement of the European Commission to create 6 lead markets (Lead Market Initiative for Europe - LMI) in eHealth, protective textiles, sustainable construction, recycling, bio-based products and renewable energies jointly generating a turnover of up to 300 bn EUR by 2020. Importantly, these lead markets coincide with the perceived Nordic strengths according to the experts consulted in this study.

The creation of a lead market typically involves regulatory instruments, strategic public procurement, development of standards, research and innovation investment and a special cross-sectoral commitment. It is proposed that *Nordic Lead Markets* could be coupled with *Nordic Competences* to create an internationally unique value-proposition.

What would Nordic Networks of Competence and Lead Markets encompass?

In broad terms, research and innovation are the two main dimensions of the *Nordic Competences* to be branded. After a review of the large number of clusters, networks and competences in the Nordic region it is recommended that a dedicated instrument is created to identify clusters of world-class research, high-quality workforces, lead markets and supporting innovation environments. These four factors extend the typical cluster evaluations, and may provide complete packages to be branded as Nordic competences, or sub-groups such as world class research.

WORLD CLASS RESEARCH / COMPETENCE

- In the dimension of world-class research, respondents give disappointingly low ratings.
- These perceptions should benefit from specific achievements and evidence of specific world-class activities through a “Competence Mapping” as proposed in this instrument. Further, related rankings would help perceptions improve.

NORDIC LEAD MARKET

- Specifically in environmental sustainability the Nordic region appears to be widely perceived as a leading market and society. Yet, generally access to lead customers is rated poorly, despite high ranking of public institutions and cross-sector collaboration.
- This instrument should systematically highlight specific lead markets and their opportunities.

HIGHLY QUALIFIED WORKFORCE

- The Nordic Region generally ranks highly on the highly qualified workforce in studies, and clearly in the perception of survey participants. Further, the overall education system is deemed excellent.
- This instrument should present the availability in specific clusters or industry and service domains, which is proposed in this instrument.

INNOVATION ENVIRONMENT

- Fairly strong rankings in the survey and very strong World Economic Forum and Innovation Scoreboard Rankings make this an important dimension.
- This instrument will need to survey and communicate specific industry and service domains.

The instrument should identify and present Nordic competences in a coherent manner. This is important both as an “internal” tool for supporting Nordic actors that may not have an overview beyond national borders as well as an “external” tool for presenting the Nordic region as a comprehensible offering. In addition, such an instrument would:

- Encourage a bottom-up process of organising and consolidating clusters across the Nordic Region by offering the incentive of official legitimacy, branding support and funding / organisational support. This would enable the Nordic Region to effectively self-organise itself rather than attempting the impossible task of conducting an exhaustive survey of all assets.
- Position cluster leaders as direct contact points for inward investment opportunities and as brand carriers towards global target groups and Nordic actors.
- Address the globally over-crowded marketplace for cluster messages and inward investment promotions.

- Embed the Nordic Brand in the awareness and conduct of participating cluster members. In addition, this instrument can serve to actively support and engage subsidiaries of foreign innovation-intensive business units as a conduit for inward investment.
- Support policy-makers in defining and prioritising national and Nordic Lead Markets.

In the Nordic region, inspiration could be taken from the German experience to launch a first survey of cluster initiatives and networks of competence that seek to form part of the Nordic Brand and receive, in return, the official legitimacy of being a “Nordic Cluster of Excellence”. A number of considerations should be added, to adapt such an instrument to the Nordic condition and branding objectives:

1. **Not just competences but markets also.**
Focus should not be placed solely on the research and competence output, but also the market and innovation factors. To most inward investors, the most valuable Nordic clusters would be those that combine world-

A PRECEDENT IN BRANDING NATIONAL RESEARCH AND INNOVATION COMPETENCES – GERMAN “KOMPETENZNETZE”

An inward investment and branding instrument has been implemented by the Federal Germany Government under the brand “Kompetenznetze” (Competence Networks) since 1999. The stated objective of the initiative is to internationally market outstanding competences in research and innovation.

The aim of the initiative was to create an expert panel reviewing applications by regional and national clusters to become branded national competences. This created a bottom-up movement, self organising networks to provide information, consolidate and nominate leaders. Calls are conducted for clusters or networks with more than 120 clusters active today and covering a wide spectrum of technology fields presented via different media channels.

Accepted clusters receive the legitimacy and brand of being a nationally recognised excellence cluster, and further receive support services in cluster development (excluding financing). Contact persons listed in the directory do not receive special training on inward investment protocols or German research and innovation branding efforts but are trusted as experts in their respective field to professionally deal with requests.

<http://www.kompetenznetze.de/>

class science with a dynamic lead market, a qualified workforce and a dynamic innovation environment including advanced financing instruments.

Operationally, this means that each cluster of excellence should be reviewed for its potential to act as a component of a lead market. In addition, awareness of Nordic competences should be translated into broader policy action, such as bold sustainability targets, healthcare service reform etc.

2. **Services and not just science and technology based innovation.** The global trend towards technology enabled services innovation rather than an exclusive focus on technological products should be embedded in the evaluation of competence clusters. Many initiatives in the Nordic region aim to meet the service innovation markets, including research. The Nordic Brand has an opportunity to become a pioneer in positioning the region as a front-runner in broadening the scope of Research and Innovation to include services and business development.
3. **Small is beautiful.** This applies not only to the Nordic Region, but also to the credible number of world-class competence clusters. The large number of German clusters may not in all cases represent world-class excellence, and measures are now underway in Germany to consolidate clusters and award the true top-performers. Hence, a mechanism to insure excellence should be incorporated to avoid overloading the message.
4. **Active training and collaboration of actors.** By nominating cluster leaders as inward investment contacts for world-class Nordic competences, these individuals and organisations will require support to adopt the Nordic Brand and effectively use relevant Nordic Actors to build teams in response to inward investment opportunities. Hence, the role of the cluster leader should incorporate an inward investment role and resources to enable professional management.

5. **Integration of investment efforts.** In the Nordic region integration of actors and initiatives should be achieved to ensure that all relevant competences are activated as inward investment attractors.

How could Nordic Networks of Competence and Lead Markets be implemented?

The brand owner could kick-start the mapping of world-class resources and competences in the Nordic Region by launching a Nordic Networks of Competence and Lead Markets (“Nordic Networks of Excellence”) programme. Drawing on international experiences, some features could be:

- **Adequate resources.** Not only should the “Nordic Networks of Excellence” have adequate resources to operate effectively, but should also gain sufficient momentum to become an aspiration for all relevant cluster leaders in the region. This entails sufficient resources for reporting, methodologies, marketing, communication, training, motivation. Further, it is likely that cluster leaders will benefit from additional resources to take up their role as inward investment actors.
- **Expert advice.** In a 5-country consortium it is important that expert advice is beyond any professional doubt and interest, and must be recognised as excellent peers. The experience of the German Elite University selection process (Excellence Initiative⁵⁸), in which a small number of universities and research clusters were chosen as national beacons, showed the significant public, regional and local pressure on such a process. International expert participation can professionalise processes and add new dimensions to the selection process. The makeup of the advisory board should reflect both the research and innovation objectives.
- **Strong anchoring.** Unless integrated into a strong community of supporting public agencies (and potentially private / institutional stakeholders), the initiative may end-

up being toothless. The objective is to brand the Nordic region by offering true opportunities for research and innovation investments, which requires institutional agility and commitment to action from a variety of associated actors. Equally, the results of the “Nordic Network of Excellence” need to be communicated to these actors.

- **Legitimacy.** “Nordic Networks of Excellence” must be legitimised both by public leaders, private sector actors, and peer communities of those that are to apply for acceptance. It is important that the initiative forms part of a broader regional research and innovation policy vision.
- **Geography.** Whilst “Nordic Networks of Excellence” should present the best of the 5-nation partnership, it is important that quality, critical mass and international relevance rather than territorial considerations dominate the debate. Hence, careful consideration should be given to the aspect of whether “Nordic Networks of Excellence” have any minimum transnational requirements (e.g. participants from a minimum of 2 or 3 countries). Such transnationalisation may be delivered across the different dimensions such as qualified workforce, lead markets or innovation environments.

INSTRUMENT 3: NORDIC & GLOBAL GROWTH OBSERVATORY

The instruments and studies outlined in this report and the branding process should be anchored in existing competences, organisational structures and regionally shared values. Yet, the Nordic brand should also draw on world-class thought-leadership to continually discover global trends, and provide mid- to long-term perspectives to policy-makers.

The observatory proposed here should act as a bold provider of such concepts, insights and growth models that can help the region to remain in the lead and spot trends early. As an intelligence unit, it should follow target groups, markets and emerging opportunities. For example, the develop-

ment of Nordic Lead Markets as a strategic policy attached to competence mapping (Instrument 2 in this chapter), requires a long-term vision on future growth opportunities.

While the observatory should have a global outlook, it is also important that the Observatory is firmly grounded in the Nordic research and innovation brand and take its value dimensions as point of departure for the initiatives and activities. As discussed earlier, the Nordic success in research and innovation sets itself apart from other regions due to the fundament of a socially and environmentally sustainable society, based on values promoting gender equality and a collaborative culture. Such values are not only important factors for the success enjoyed today, but are also expected to become increasingly critical in the future context of global innovation. This is a competitive advantage today and the observatory could play an important role in exploring how this advantage could be further exploited in the future.

As such, the Nordic & Global Growth Observatory could provide the following services:

- Continually monitor target groups and their related markets to discover and expose trends early for policy-makers and Nordic actors alike.
- Support the Nordic Brand Manager (Instrument 1) in building arguments and value-propositions for Nordic actors, as well as medium- to long-term inward investment scenarios supporting the Nordic value-proposition.
- Provide methods and insights to evaluate leads and actors in the target groups and their potential value as international partners or inward investment targets.
- Define global view on priority regions for the Nordic inward investment efforts, as well as emerging players and growth markets.

In addition, the interviews with the experts revealed a knowledge gap concerning attraction factors for talent. While the general view was that this is a critical dimension for inward investment in research and innovation, experts also pointed

out that we know very little about what attracts highly qualified researchers and workers to the region. This critical issue should be addressed by the observatory and may well be considered as an integrative part in all services pointed out above.

Such an observatory can be a decentralised network of excellent Nordic research centres, and other public and private actors. Institutions capable of delivering such a function may already be present in the region, and hence creation of this instrument may involve a careful selection process as well as a framework definition for its operation.

INSTRUMENT 4: INNOVATION ENVIRONMENT INDEX

As a leading global competitor for research and innovation, the Nordic region needs to continually stay ahead and benchmark performance. The broadening of the concept of innovation influences its future measurement. Today there is no comparable, reliable and harmonized data to show how the Nordic regions are performing in respect of innovation. Yet, this is a gap that needs to be filled in order to develop new regional innovation policy instruments⁵⁹.

This instrument outlines the proposal to create (or orchestrate) a centre in which methodologies are continually refined to evaluate innovation environments. The purpose is two-fold: To address the need to adequately measure the region's performance (a service provided to the branding effort), but also to establish a globally accepted methodology and standard on evaluating regional competitiveness.

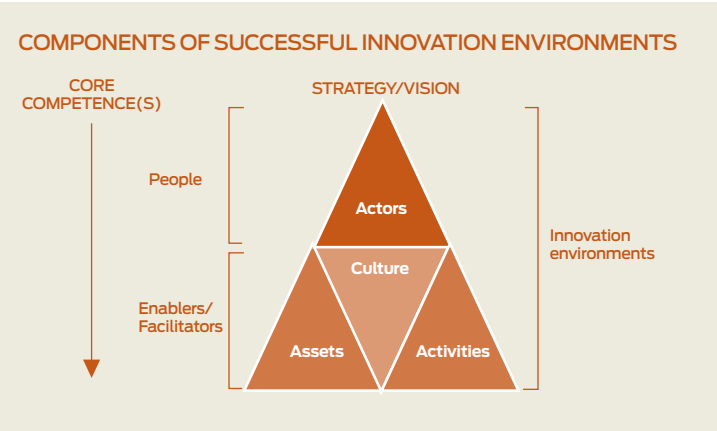
It has long been recognized that the research and innovation metrics used in the dominant innovation indices, such as those used in this report, are incomplete and at times misleading. The ongoing transition towards user-driven, service oriented, and open innovation poses many challenges on measuring the performance of actors and economic entities at regional, national or international level (such as the Nordic Region). There are several initiatives underway attempting to devise new innovation metrics in the US as well as in Europe⁶⁰. Several of the experts inter-

viewed also complained about the inadequacy of current research and innovation metrics and the resulting biased picture they produce. The region has a tradition of producing high quality statistical frameworks such as the Oslo manual and the Nordic statistical group on innovation and has the opportunity to take the lead in the development of new innovation metrics.

Taking a lead in creating an innovation environment index would allow the region to take a lead in defining what is required for successful innovation environments based on the "Nordic model" as described by the Nordic research and innovation brand. This would entail including measures reflecting key features of the Nordic brand values such as gender equality and trust.

Other new components of indices could include aspects of the user perspective on innovations and their services / business propositions, including demand and openness to new ideas and products. Further, new metrics on openness of innovation systems to external actors through open financial, services or collaboration instruments can benchmark and highlight Nordic strengths. Finally, the territorial dimension of such metrics is important, in which not only national but also cluster or regional level data may strengthen a number of emerging hotspots or networks.

The overall conceptual model (see below) underlying this Nordic branding strategy may serve as an indication of dimensions to be considered. Further, new lines of research are devising new metrics on research and innovation inward investment and collaboration performance.



A Nordic commitment to devising a new framework for innovation metrics would be timely, in a period when Nordic countries are considered the benchmark region for innovation and competitiveness. The standardisation of a set of statistical tools into an Innovation Environment Index could strengthen the authenticity of the Nordic system in a diffuse market-place and set up the framework for continued benchmarking, and hence improvement.

A Special Opportunity: Service Sector Innovation. Europe has experienced continuing shifts away from the manufacturing industries towards services throughout the development towards a knowledge-intensive economy. According to a recent study by the European Centre for the Development of Vocational Training (Cedefop), this trend is set to continue. While EU25+ (including Norway) is estimated to lose well over 2 million jobs in the primary sector and half a million in manufacturing, the real growth will be found in services. By 2015, the economy as a whole will generate more than 13 million jobs⁶¹. Conversely, innovation policies are not keeping up with the pace of this development, leading to a bias towards manufacturing firms in areas such as demand from public procurement and support from innovation programmes. The full extent of the inability of innovation policy to adequately serve the needs of service sector firms is however difficult to assess due to the concern that current innovation indicators do not properly capture services innovation⁶².

This bias in research and innovation metrics may be partly the reason for Norway's relatively low position as compared to Sweden and Finland in various innovation rankings. Norway, together with Denmark, has a particularly high proportion of private R&D conducted in the service sector (33% and 40% respectively)⁶³. Given the future positive development of the services sector as opposed to manufacturing, indicators on service innovation may become more relevant for understanding future competitive advantage. Already today this Nordic experience in service innovation constitutes an as yet unexplored asset in terms of research

and innovation investment attraction. As noted by several of the interviewees, many of the globally successful Nordic companies (including consumer brands such as H&M and IKEA) are in fact good examples of process and service innovations. Others suggested that among the strengths as a region are the organizational skills that have led to successful service concepts in the home markets. Yet others pointed to the importance of innovation in services also for traditional high-tech firms in the emerging innovation landscape that was briefly outlined in the introduction, marked by rapid rates of change and interdisciplinary collaborations. As the interviewed expert from Ericsson put it: "service innovation is the key to success [for Ericsson] in the future"⁶⁴. Furthermore, there are several research projects in the region in the area of service innovation that could be drawn upon in such an effort⁶⁵.

The importance of understanding attractiveness to talent. Finally, the research conducted for this report as well as the expert consultations have raised the lack of systematic research regarding attractiveness to talent of the Nordic region and their role in the Nordic innovation environment. This gap should be filled as a fundamental basis for the Nordic brand strategy and implementation and become an integral factor of the Innovation Environment Index.

7. Brand Building Roadmap: Target Groups and Nordic Lead Actors

Chapter 2, in its outline of the methodology, emphasized that a core task of branding is to **establish and develop relationships** with the target audience. Providing a basis for building relationships with the various target groups has also been the main driver of this branding strategy. As discussed in chapter 5, the Nordic research and innovation brand represents a highly complex offering to a diverse target audience and the value proposition needs to be further tailored to each specific investor. The Nordic research and innovation brand as a platform brand should therefore complement other relevant brands, and draw on concrete brand building instruments as illustrated in the previous section.

NORDIC BRAND SUCCESS: A REAL LEAP IN INVEST- MENT PRODUCTIVITY

Ultimately, the Nordic research and innovation brand should add most of all to the performance of the target groups. Already today the region is considered a very good investment environment, i.e. a highly productive innovation region. The measures outlined in this report could build on the excellent quality, reputation and entrepreneurship of the Nordic region as a research and innovation environment to deliver a new form of investment support.

If public and private Nordic actors can join efforts and resources to attract and deliver on

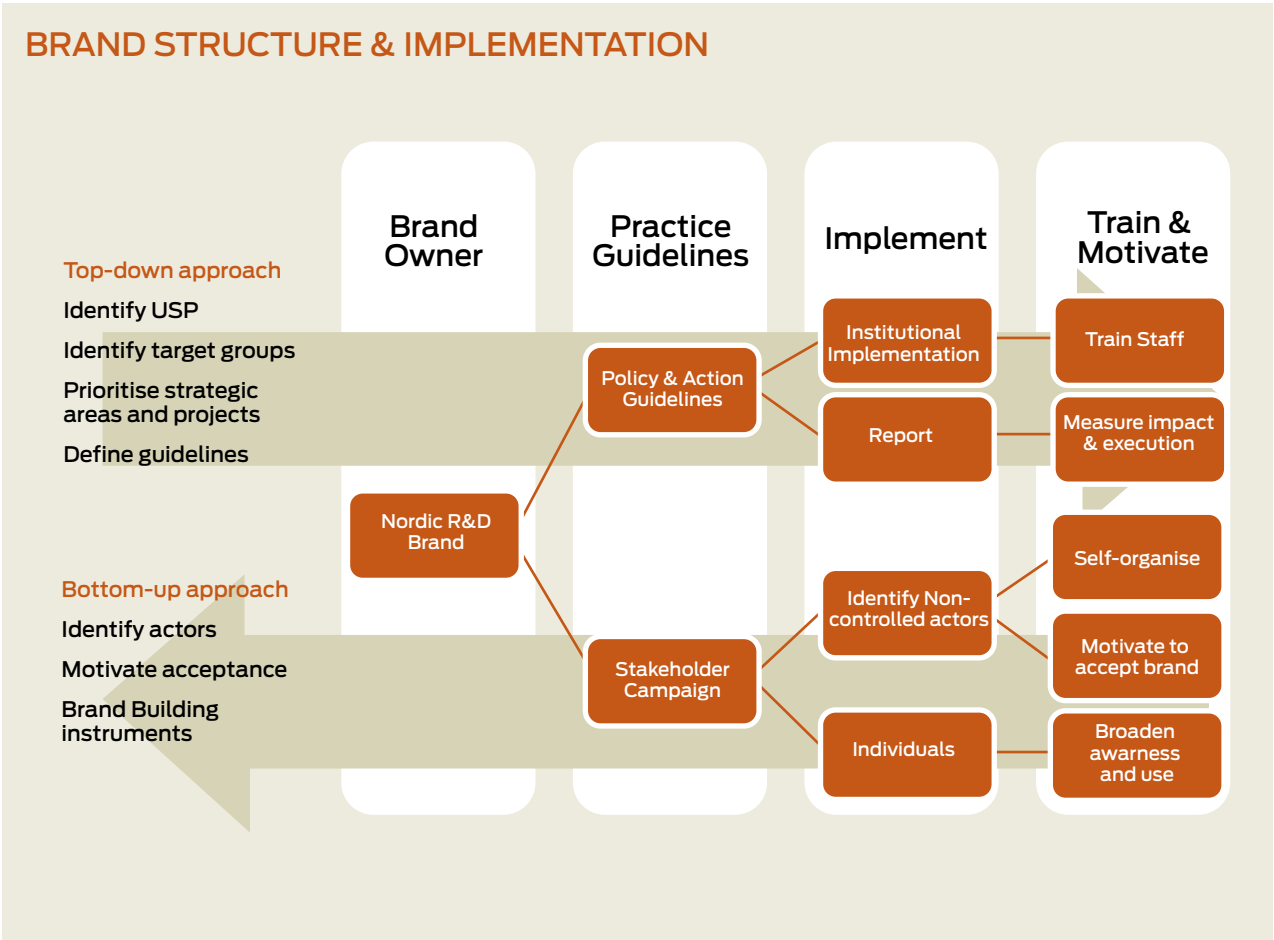
foreign investment, entirely new propositions are conceivable. The region might become the first global full-service environment, linking to strategic markets and partners across the world and mobilising a full range of human, financial, business and scientific resources to solve challenges more effectively.

As an example, Nordic financial institutions could actively support the attraction of both talent and inward investments by providing co-investment, partnering, market-intelligence and other services to target investors. This would not only be an attractive (and internationally quite unique) proposition to the investor, but an early business opportunity for a Nordic actor. Hence, the value creation as a brand action lies in communication and mobilisation of joint interests.

As seen in the summary of interviews, experts consulted for this report underlined that there are already a large number of actors involved in the attraction of foreign investments in research and innovation to the Nordic region. Rather than creating a new separate Nordic structure they suggested developing Nordic projects and mechanisms for building on the positions and activities of current national actors.

The roadmap that follows is therefore designed as a process and service to support current Nordic actors. As indicated in the schematic below, streams of work need to be conducted in parallel: on the one hand, a top-

BRAND STRUCTURE & IMPLEMENTATION



down approach from the perspective of the Nordic Council of Ministers and the Nordic governments is required to align branding initiatives with the overall vision and policies for Nordic research and innovation. On the other hand, a bottom-up approach to support and motivate the diversity of actors is critical for the implementation of the branding strategy. Successful branding entails making the values and objectives of the brand an integrated part in the everyday activities of the actors.

The following pages will provide an overview of the *Global Target Groups* and *Nordic Lead Actors* after an overview of the roadmap. In Appendix 3, the Nordic actors, their objectives, the target groups they do or could relate to – as well as their potential contribution to the Nordic research and innovation brand are described in greater detail.

It is important to highlight that the roadmap outlined here, with its proposed set of actors, target groups and instruments, is intended as

a basis for discussion; to inform policy makers in a high-level reflection on advancing the Nordic research and innovation branding efforts. Hence, it provides a picture of a possible approach to implementing the Nordic research and innovation brand. Significant further research and consultation is required to arrive at a roadmap that is sufficiently feasible and anchored in the stakeholder communities.

NORDIC RESEARCH AND INNOVATION BRANDING ROADMAP AT A GLANCE

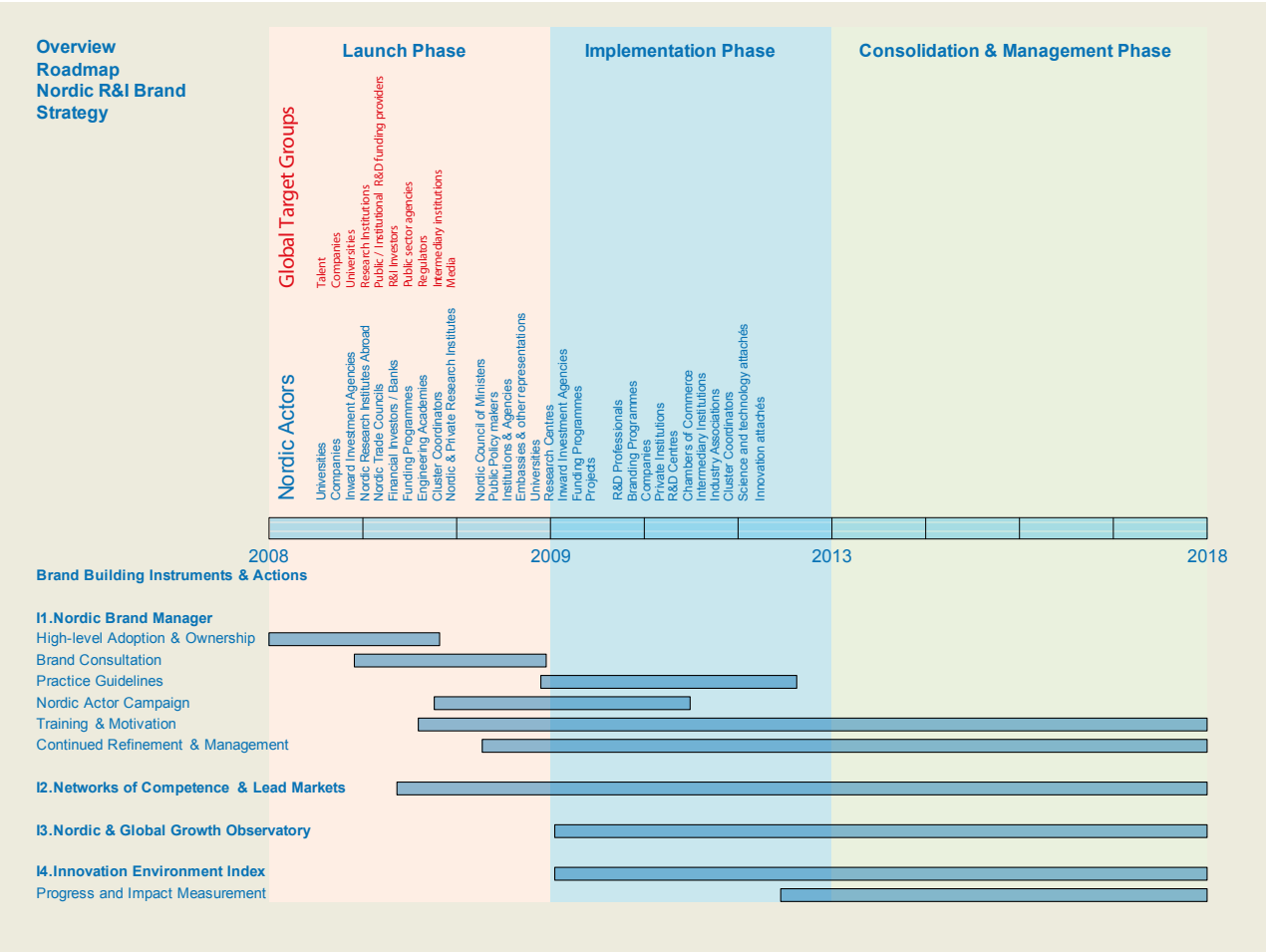
Three major action periods organise the roadmap which, although overlapping, identify the launch phase of the brand, the implementation and the mid- to long-term management of the Nordic Research and Innovation Brand:

- Year 1: **Launch Phase.** Ownership building, Stakeholder Consultation and Campaign, Launch of Competence and Lead Market Networks
- Years 2-5: **Implementation Phase.** Practice Guidelines, Implementation, Training and Motivation
- Years 6-10: **Consolidation & Management Phase.** Measurement of results, motivation, consolidation, careful refinement

The timeline outlines the evolution of the brand building process from an initial launch phase through the implementation phase and its longer-term consolidation and management phase. During the launch and implementation phase, a number of actions take place to motivate Nordic Actors and launch brand awareness, whilst establishing the instruments that will sustain the brand.

INWARD INVESTMENT TARGET GROUPS AND NORDIC LEAD ACTORS TO CARRY THE BRAND

A basic conclusion of this report is that inward investment in research and innovation into the Nordic region should not be limited to corporate investments in R&D facilities. Taking current global trends in research and innovation as well as challenges and opportunities for



the region into account a broader definition is required. Outlined below is an overview of the proposed target groups for the Nordic research and innovation brand, which indicate a variety of investments ranging from risk capital and innovation financing, business investments, public agencies and regulators, to talent seeking entrepreneurial or professional growth.

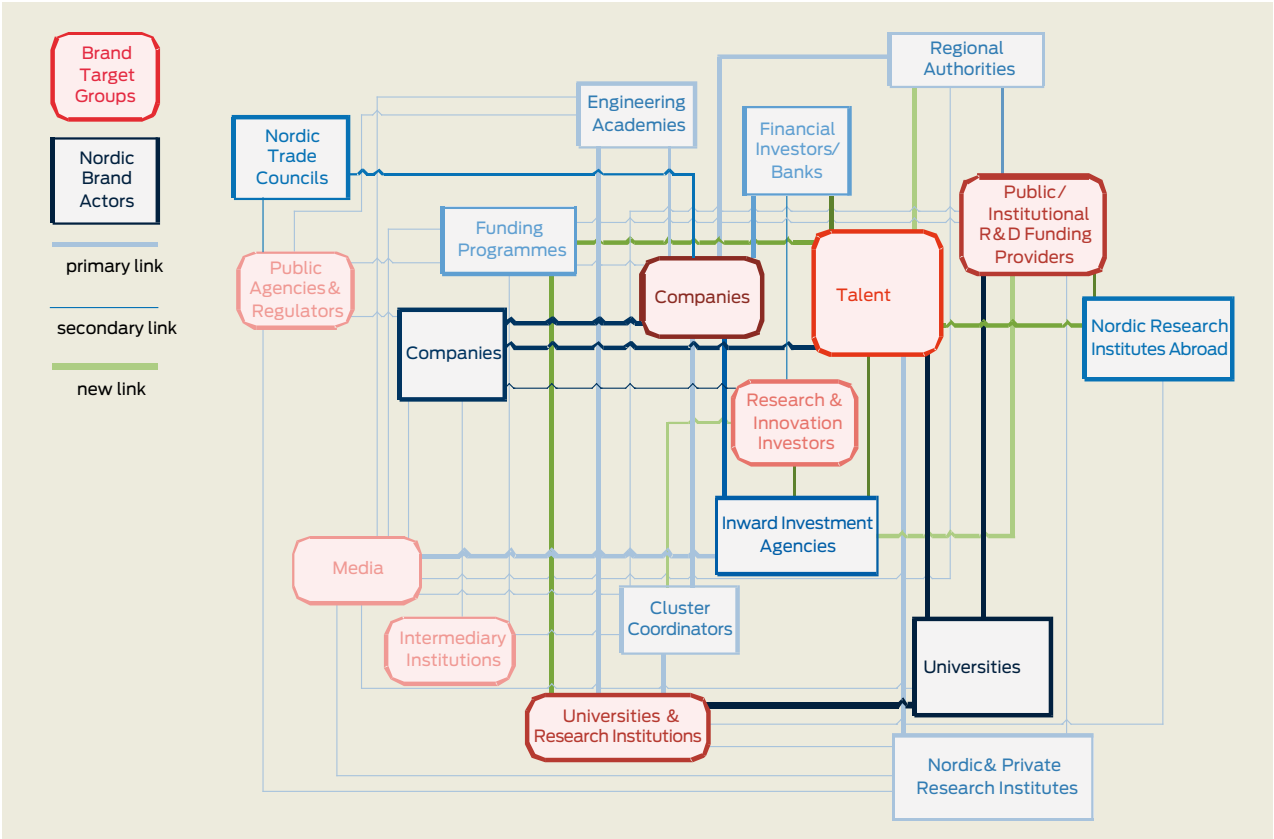
It is important to note that the choice of target groups and the suggested linkages presented in the figure below can only be considered a first reflection to be further elaborated through in-depth consultation with the critical stakeholders. Given the size and diversity of the target audience as well as the potential areas of investment, this process has to be conducted in line with the overall research and innovation policies of the Nordic region.

PRIORITISING TARGET GROUPS AND NORDIC ACTORS (BRAND CARRIERS)

In the formulation of the roadmap, attention has been paid to identify those regional actors that are best positioned and easily activated to become “brand carriers” to reach the target groups effectively. Priority has been given to what may be seen as the minimum critical line-up of actors to launch the brand in Year 1, followed by a broader network of actors to be activated in Years 2–5.

The schematic below illustrates the interaction between Nordic actors and target groups:

The **target groups** for the brand are shown as **red boxes with rounded corners** in the schematic, the most critical, or primary one highlighted with a **darker colour** while the other target groups are paler. Similarly, the **Nordic actors**, the carriers of the brand, are pictured as **square blue boxes**, with the key actors highlighted in **deeper blue**. The linkages between actors and target groups are shown as lines between the boxes, the primary links being



thicker. Emphasis should be placed on the primary linkages and self-interest of the various Nordic actors. Yet importantly, **new linkages (in green)** or targets are suggested for a number of Nordic actors. These new targets imply a new or extended role in the inward investment process by a number of Nordic Actors. For example:

1. Inward investment agencies to systematically focus on talent attraction as well as recruitment of innovation funders such as VCs and business angels.

Companies that finance innovation have an important role in determining localisation of activities and should be motivated to consider the Nordic region a highly productive innovation environment. This applies not only to locating international teams or projects, but also to working with entrepreneurs already in the Nordic region.

2. Research and Innovation funding programmes to increase their openness to international partners such as universities, and specifically to play a role in talent attraction.

Entry-barrier for inward investors can be significantly lowered if no pre-requisites with regards to local subsidiaries or partner firms obstruct participation in research and innovation programmes. This would give Nordic actors a significant boost in attracting international investors and provide an important early incentive to consider the region.

3. Cluster coordinators to systematically build interest by international innovation financing actors such as VCs and business angels in their specific cluster areas.

Relating to the focus by inward investment agencies on innovation financing providers, cluster coordinators provide an important “on the ground” perspective on hot deals, developments, funding needs and opportunities.

4. To engage Nordic financial investors / banks systematically in attracting talent to the region, e.g. through openness to financing innovation projects.

Nordic banks do not currently feature systematically as partners to inward investment efforts which are usually backed by direct or indirect public subsidy programmes. By offering the combined expertise, Nordic market insight, interest in early stage deal-flow and growth opportunities, a great potential is seen that Nordic banks play a significant role in attracting inward investments.

5. To engage Nordic research institutes abroad in recruiting R&D funding from their respective regions. Several Nordic research institutes can be activated abroad as both brand carriers and R&D funding recruiters via existing social and professional networks. This is an under-utilised resource that could be activated to link into interesting target markets for investment.

The schematic further prioritises early stage target groups (talent, companies, R&D funding providers, universities and research institutions, research and innovation investors). These were prioritised according to their expected direct investment potential, multiplying effect towards investors or talent, relevance to the Nordic brand objectives and ease of activation. Prioritisation does not imply neglecting other target groups, yet resources should be assigned effectively to achieve results.

Corresponding to the *target groups* are the *Nordic actors* with the highest expected impact as brand carriers. These are prioritised according to their ability to access the target groups, indicating also the new linkages to be established. In the initial phase, the prioritised Nordic actors are universities, companies, inward investment agencies, Nordic research institutes abroad, funding programmes and financial investors / banks. *The respective roles of the key actors in building the brand are further elaborated in Appendix 3.*

8. Summary and Conclusions

Nordic Strengths in Research and Innovation

The Nordic Region is remarkably well positioned to take a leading role in the emerging new context of Globalized competition for investments in Research and Innovation. With an exceptionally highly qualified workforce and the world's technologically most advanced user communities, the Nordic region is at pole position on the two most important factors for choice of research and innovation investment localization. Nordic culture is distinguished by a tradition of inventiveness and collaboration, based on values of reliability and trust in people, companies and public institutions, factors which have been instrumental in the historical success in research and innovation. However, these features are likely to become even more important in a future characterized by global competition and increasingly open innovation.

Challenges and Opportunities

The greatest challenges for the Nordic region can be expressed in terms of perception gaps. Most importantly, the region is not well known for its research and innovation environments outside of Europe in the target groups. Furthermore, when known, perceptions of Nordic research and innovation are positive, albeit often not as positive as the region actually deserves.


Availability of talent is the most critical factor for choice of research and innovation

investment location. The Nordic region is already experiencing a shortage of talent in certain sectors and this is experienced as the greatest bottleneck in expansion of research and innovation activities. Attracting talent therefore becomes instrumental to any research and innovation investment strategy.

The Nordic Research and Innovation Brand

Building on the Nordic strengths, the Nordic research and innovation brand is constructed around shared Nordic values. The extended identity dimensions highlight the culture of collaboration and inventiveness, involving also sophisticated lead users in the innovation system, and the values underpinning the sustainable societies. The core identity explains the Nordic Strengths in terms of the benefits of small scale. Being agile is a prerequisite for succeeding in the new globally connected innovation landscape characterized by rapid change.

The role of any brand is to support the establishment and maintenance of relationships with the target audience(s). In the context of branding the Nordic region as an attractive destination for research and innovation investments, the target group is defined broadly, including companies, funding bodies, universities and research institutions as well as talent. Given the diversity between as well as within these groups, branding activities have to be concrete and tailored to the specific needs of each target group. The Nordic



research and innovation brand is to be conceptualized as a platform brand that supports the promotion of other (place, corporate and innovation) brands offered by the region as well as specific targeted brand building activities.

Motivating Nordic Lead Actors and Developing Brand Building Instruments

In order to address the challenge of branding the region on a global scale to a diverse set of target audiences effectively, the branding strategy is built around efforts to mobilize and motivate Nordic actors that currently interact with target audiences to take on a (new) role of promoting the Nordic region as an attractive research and innovation environment.

To enable the Nordic actors take on this new role the brand needs to be complemented with incentives and instruments for attracting research and innovation investments and talent on a Nordic scale. To this end a number of instruments were proposed. While these are new roles, it was also emphasized that to the extent possible the instruments, and the entities responsible for them, should be anchored in existing competences, organisational structures and regionally shared values. The suggested instruments were:

- **Nordic Brand Manager.** A tool to provide leadership, organize the brand and coordinate Nordic actors
- **Nordic Competence and Lead Market Network.** A tool to enable target groups as well as Nordic actors to identify and present excellent research and innovation clusters on a Nordic scale
- **Nordic & Global Growth Observatory.** A tool to provide intelligence and thought-leadership to help the region remain in the lead and spot trends early
- **Innovation Environment Index.** A tool to make it possible to assess and compare Nordic research and innovation environments on a local level as well as to easily communicate the success of the Nordic Region in Research and Innovation





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Appendices

APPENDIX 1. LIST OF INTERVIEWS

Barchan, Margareta. International business advisor and entrepreneur

Christensen, Thomas Alslev. Head of Centre for Innovation Policy, Danish Agency for Science, Technology and Innovation

Edge, Gordon. Prof. Founder Cambridge Consultants, PA Technology, Scientific Generics, Board member of several Scandinavian High-tech companies and R&D policy adviser to the UK government

Gland, Micah. Director, Business Development, Helsinki Business Hub

Hammerich, Kai. Director General, Invest in Sweden Agency

Hedin, Sigrid. Senior Research Fellow, Nordregio

Helander, Elisabeth. Åbo Akademi University, previously Director DG Regional policy, European Commission

Hetland, Per. General Director, NIFU STEP

Isaksen, Søren. Group Executive Director, NKT Holding Denmark

Kulkku, Seija. Director of Center for Knowledge and Innovation Research, Helsinki School of Economics

Lange, Lene. Head of Institute of Molecular Biology, University of Copenhagen, previously Director of Research, Novozymes A/S

Langergaard, Jesper. Senior advisor, Cirius

Laurila, Tatu. Greater Helsinki Promotion Agency

Lindberg, Alf. Prof. CEO Nobel Web, previously VP of R&D Sanofi Pasteur, member of Nobel Committee

Madsen, Ole Frijs. Director, Invest in Denmark

Mengu, Moses. Chief Consultant, Danish Technological Institute, previously Deputy Director of WAITRO

Nyctelius, Hans. R&D strategy adviser to international Life Science Firms, previously CEO of SwedenBIO

Ruutu, Kari. Programme Director, Foreign R&D Investments, Tekes

Svensson, Roger. Managing Director, Swedish Foundation of International Cooperation in Research and Higher Education

Storvik, Kjetil. Managing Director, Nordic Innovation Centre

Thorgrímsson, Sveinn. Ministry of Industry Iceland

Wahlberg, Ulf. Vice President Industry and Research Relations, Ericsson

Walhovd, Kristin. Prof. Department of Psychology, University of Oslo

Waumanns, Hermann. Director Oracle EMEA Public Services

Wigzell, Hans. Prof. Chair of Karolinska Development, previously Dean of Karolinska Institute

APPENDIX 2. THE GLOBAL COMPETITIVENESS REPORT 2007–2008, WORLD ECONOMIC FORUM. OVERVIEW OF THE RANKINGS PRESENTED IN THE REPORT

Measure/Rank (out of 131)	Denmark	Finland	Iceland	Norway	Sweden
Global Competitiveness Index 2007–2008	3	6	22	16	4
Institutions	2	1	5	8	6
Efficiency of legal framework	1	4	13	8	5
Transparency of government policy making	2	3	6	11	7
Ethical behaviour of firms	2	1	10	6	3
Higher education and training	3	1	8	9	2
No. of procedures to start a business	4	4	10	7	4
Financial market sophistication	6	17	18	16	9
Technological readiness	5	11	2	8	1
Availability of latest technologies	5	2	3	9	1
Mobile phone subscribers	20	19	12	15	18
Internet users	15	14	1	11	2
Broadband Internet subscribers	4	7	1	8	9
Willingness to delegate authority	2	8	6	3	1
Innovation	10	3	20	18	6
Capacity for innovation	6	5	21	15	2
University-industry research relations	11	4	20	17	3
Business Competitiveness Index (of 127)	5	3	16	13	4

APPENDIX 3. DETAILED DESCRIPTION OF NORDIC ACTORS

Universities			Global Target Groups
Institutional Objective	<p>Nordic Universities are the key to attracting talent to the region, by having direct access to Talent and international R&D Funding Providers.</p> <p>The Nordic Brand should support Universities institutional objectives by supporting the processes of globalisation, talent attraction and benchmarking as well as their continued efforts to establish their own brands.</p> <p>Finally, Universities follow strategies to become more entrepreneurial e.g. through executive, international MBA, training and other programmes.</p>		<p>Talent</p> <p>R&D Funding Providers</p> <p>Universities</p> <p>Research Institutions</p> <p>Media</p>
Contribution to Nordic Brand	<p>Universities can make a significant contribution to the Nordic Brand as carriers, multipliers and content-providers. In particular, they can help attract and carry messages to talent with a self-interest much in line with the overall region: to attract highest quality staff, researchers and students.</p> <p>Further, by increasing the offering of world-class research programmes, Nordic competences continue to be built as core attractor dimension. Incentives should be provided to Universities to improve diffusion of knowledge which is an indirect, yet very effective branding channel in which Nordic Brand values can be incorporated.</p>		

Companies			Global Target Groups
Institutional Objective	<p>Companies are the natural linkage to international investment, business partners and markets. Nordic companies have, in certain sectors, experienced talent shortages (e.g. ICT engineers) and in consultations expressed significant concern about availability of talent. Further, economic trends through globalisation and the changing nature of innovation away from technology-push to interactive service innovation have changed also the demand towards more entrepreneurial and internationally connected talent</p> <p>Companies would endorse a Nordic Brand that strengthens their attractiveness to investors and talent, by systematically presenting the region's commitment to excellence and the associated Value-Dimensions. Further, a Nordic Brand indicated further integration of the Nordic markets – in itself an inward investment argument.</p>		<p>Companies Talent Research & Innovation Investors Intermediary Institutions Media Public Agencies Regulators</p>
Contribution to Nordic Brand	<p>Companies can significantly strengthen the Nordic Brand by not only acting as an important carrier but adopting the values, exemplifying the brand and creating remits. Such practicing of the brand further legitimises it – an internationally distinguishing factor compared to most innovation place brands that are not anchored in a truly innovative business community.</p> <p>Further, as shown in the survey, many corporate brands are among the associations with “Nordic” today – which should be systematically exploited in the future showcasing of success stories.</p>		
International Experiences	<p>Like perfumiers in Paris co-brand their products with the place, Apple brands all products with a “Designed in California, made in China” tag-line. Such a synergy of internationally successful place and product brands adds significant value.</p> <p>Further, the more recent setting of environmental / carbon emission goals in California have boosted the development of Plug-in cars, funded and invented by leading regional firms and global partners. Here, the strategic orientation of the region to stand out as a sustainable community is also recognised by all actors as a major boost to business development and innovation.</p>		

Inward Investment Agencies			Global Target Groups
Institutional Objective	<p>A Nordic Brand with associated value dimensions and motivated Nordic Actors can add significant value to the Nordic inward investment efforts to target more knowledge and innovation-intensive inward investments. Investment attraction is handled quite differently in each Nordic country, and this diversity could be positive. Yet, clearly a common platform brand would help position the regional resources as an integrated, critical mass with a well articulated (and delivered) value-proposition.</p> <p>Importantly, inward investment agencies need the facts to present the value proposition, communicated in line with each target groups requirements.</p> <p>A major new objective, as argued in the previous pages, is for inward investment agencies to consider talent attraction as a core activity, as well as increased emphasis on attracting early stage and other research and innovation investors (e.g. VCs).</p>		<p>Talent (NEW) Companies Research & Innovation Investors (NEW) Public / Institutional R&D Funding Providers Media</p>
Contribution to Nordic Brand	<p>Inward investment agencies are often the pioneers in building value proposition and an international brand, as well as securing the execution of an inward investment opportunity. With a focus on research and innovation investments, in itself an important branding decision, inward investment agencies need to be given the tools to promote the brand and deliver services in line with the brand dimensions and services.</p> <p>If applied correctly and consistently, the impact on the Nordic Brand can be substantial. Not only as a carrier, but as a feedback mechanism from the market can inward investment agencies provide important feedback on the resources and policies required to strengthen the value-proposition (e.g. lead markets, innovation procurement, R&D financing, personal tax).</p>		
International Experiences	<p>The Nordic inward investment agencies are already pioneers in research and innovation inward investment attraction, yet several international regions have effectively focused on this strategic market segment. The focus on excellent service and consistency, as well as the ability to follow-through across agencies can be inspired by the Irish Development Agency. Further, the North Carolina Research Triangle (RTP) has operated strategically and with significant resources to recruit innovative international companies.</p>		

Nordic Research Institutes Abroad		Global Target Groups
Institutional Objective	<p>As often inter-disciplinary research institutes, the focus for activities tends to be on regionally related research and connecting the scientific and academic communities and networks. Rarely is the inward investment perspective made apparent – the objective tends to be to provide an inspiring environment for Nordic researchers. It is proposed here that a function as brand carrier towards a number of target groups is actively encouraged through adequate incentives. Nordic Research Institutes Abroad would in this sense not be seen as active recruiters, but brand builders and building contact with regional top talent and public / institutional funding providers to identify strategic opportunities and communicate Nordic Strengths.</p>	<p>Talent (NEW) Public / Institutional R&D Funding Providers (NEW) Universities & Research Institutions</p>
Contribution to Nordic Brand	<p>As regionally well-embedded institutions, the main external role is to manage and maintain networks and carry the brand message into expert communities as a multiplier and entity embodying Nordic Values. As institutions that are embedded in local communities they constitute an excellent platform for facilitating relationships among Nordic and local researchers. It is also a natural point of contact for local researchers interested in the Nordic region. Feedback on perceptions is an input in the continued assessment of Nordic Brand impact. Contact experience with Nordic Institutes Abroad can significantly impact on the perception, e.g. openness to adapt to relevant cultures, active pursuit of opportunities, supportive environment, excellence and other values. In an equal way, the branding effort can be undermined if such networked regional actors do not carry the message or systematically correct perceptions not in line with Nordic realities.</p>	
International Experiences		

Nordic Trade Councils		Global Target Groups	
Institutional Objective	Supporting primarily the internationalisation of Nordic companies, the Nordic Trade Councils build a natural meeting place for expatriate communities abroad. Variations exist as to the extent of local engagement and inward investment activities, but the Nordic Brand should strengthen activities and programmes.		Talent (NEW) Companies Public Agencies Regulators
Contribution to Nordic Brand	Nordic Trade Councils are often well embedded into expatriate communities, local agencies and other actors. Trade Councils could adopt a stronger innovation agenda in addition to the market-entry support. In any case, the networking effects are significant and could be a valuable support to the branding efforts. Finally, feedback and views on Nordic efforts, regional resonance and monitoring opportunities are all useful aspects to support the brand development.		
International Experiences			

Financial Investors / Banks			Global Target Groups
Institutional Objective	<p>Investment companies and banks in the Nordic region are traditionally associated with providing financing to build the Nordic market and are less accustomed to operate as an Inward Investment agent.</p> <p>It is proposed here, that these actors take a proactive role in working with inward investors to get early-stage access to deal-flows, act as partners to inward investors and even enable research and innovation investors / actors to enter the region.</p> <p>Talent is typically not considered a target group for investors, yet it should be considered as an indirect instrument to enable increased international entrepreneurship. Whilst public research and innovation support agencies (and funders) tend to be internationally known, private investors are not typically associated with the Nordic region.</p>		<p>Companies Talent (NEW) Research & Innovation Investors</p>
Contribution to Nordic Brand	<p>Making private investors visible is an important brand dimension in its own right, especially to make the region attractive to new innovative ventures. Further, investment providers help to broaden the range of instruments available to incoming investments, as well as build a stronger understanding of partnering possibilities among the other Nordic Actors.</p> <p>The Nordic Investment Companies' role in building a regional market (and their intelligence) is a valuable asset to help inward investors in managing their risks.</p>		
International Experiences	<p>Dubai in recent years has utilised regional investors as the strategic instrument to attract global activities. Scale of investment, as well as the ability to take decisions quickly have made Dubai an attractive and competitive hub.</p>		

Funding Programmes		Global Target Groups
Institutional Objective	<p>Nordic research and innovation funding programmes aim to build strategic competences, lead to societal advancement and inward investments. The implementation varies across national strategies. Funding programmes tend to be closed to foreign participants unless they have a subsidiary in the respective funding country. Opening the market to Nordic and international partners would send a significant signal to the internationalisation of the Nordic research and innovation environments. Survey results explicitly highlight the demand by foreign actors. Opening funding programmes would further improve competitiveness of programmes, increase mobility, and be a major attractor of international talent in both location and collaboration. Resulting projects could attract additional foreign co-funding and reach a critical mass.</p>	<p>Universities Research Institutes (NEW) Talent (NEW) Public / Institutional R&D Funding Providers Media Public Agencies Regulators</p>
Contribution to Nordic Brand	<p>The most direct impact of funding programmes can be to incentivise adoption and communication of Nordic brand values through funded projects and recipients.</p> <p>By opening up Nordic research and innovation funding to international partners, the region would become one of the world's most attractive destinations for highest quality research and innovation activities. Not only would the quality of projects be raised by globalisation, but also the research and innovation environment would take an important step in opening up in line with the regional markets. Partnerships on research and innovation would become significantly simpler, especially to participation of foreign institutes, talent and innovative SMEs that would otherwise confront entry barriers. The focus on talent would provide arguments for including foreign universities and research institutions in the main target groups.</p> <p>An additional contribution could lie in the combination of research and innovation support and positioning the Nordic Region as a pilot or lead market for product and services development.</p>	
International Experiences	<p>A prime example of globally research and innovation funding are the National Institutes of Health (NIH) in the US. World-class research is sourced globally, leading even to permanently co-financed institutes abroad and a variety of European Nobel Prize winners operating from Europe funded by NIH grants creating a globally quite unique talent-pool.</p>	

Cluster Co-ordinators			Global Target Groups
Institutional Objective	<p>Cluster coordinators are challenged continually to show results in a complex network activity. The Nordic Brand should provide an important platform to take a proactive role in shaping Nordic Networks of Competences and linking these to global resources. It can be expected that a European consolidation of clusters will take place hence identifying excellence across the Nordic region is an important step to build critical mass early. From 2003 to 2008 the number of clusters has globally grown from 500 to 1500, indicating the competitive market in which cluster coordinators operate. A Nordic brand can provide legitimacy in such a crowded marketplace.</p> <p>A new programme to motivate cluster coordinators to consolidate across the region and present Nordic Networks of Competences should become a key instrument in identifying, mapping and internationally showcasing Nordic Strengths.</p>		<p>Companies Universities Research Institutions RESEARCH & INNOVATION Investors (NEW) Public / Institutional R&D Funding Providers Media Intermediary Institutions</p>
Contribution to Nordic Brand	<p>Cluster coordinators can provide results in the form of successful inward investments that strengthen the brand. Success stories motivate in- and external target groups and actors and help to promote the cluster.</p> <p>A second dimension is to incentivise a bottom-up approach to identify globally significant Nordic competences. These may emerge over time, but should act as the “Yellow Pages” of excellent resources.</p>		
International Experiences	<p>Germany operates an important national initiative under the international brand of “Kompetenznetze” which over the past 9 years has grown to 120 clusters approved by a scientific expert panel. Cluster coordinators are named as direct inward investment contacts eliminating intermediary layers that might not be familiar with specialist areas.</p> <p>An illustration of the importance of cluster leadership can be found in the early phase collaboration of a variety of actors in Sophia-Antipolis (France) may also serve as an example which has led to the establishment of a core high-tech cluster in southern Europe.</p>		

Regional authorities			Global Target Groups
Institutional Objective	<p>Regional Authorities face an increasing global pressure to deliver a highly attractive inward investment environment, broaden their market potential and internationalise their outlook. A Nordic brand can serve to integrate regional markets across the Nordic region, thereby increasing their attractiveness. Further, a Nordic brand can strengthen their goal to become players in the international environment, by supporting them to build networks (both in the region and beyond) that may be based on clusters or other competences.</p> <p>The overarching goal is the creation of high-end employment and to meet the regional business community's demand for talent. Talent demands for services, integration and opportunity are often most creatively solved at regional level through special programmes that can be strengthened and legitimised by Nordic branding programmes.</p>		<p>Talent (NEW) Companies Public / Institutional R&D Funding Providers Media</p>
Contribution to Nordic Brand	<p>Regional Authorities can, like the specific clusters of competencies, add distinctiveness to the brand and generate the actual environment in which initiatives, projects or investments take place. "Winning" actors can be supported to promote excellence and the Nordic Region presented as a primary market place extending the national boundaries.</p> <p>Focusing on talent means that specific regional instruments and services can be mobilised and prioritised to meet target groups' interest.</p>		
International Experiences			

Nordic and private research institutes			Global Target Groups
Institutional Objective	Nordic Research Institutes as well as Private Research Institutes are already actors with an embodied Nordic branding dimension. A Nordic Branding programme would strengthen their role in providing world-class resources, opportunities and support to a variety of target groups. Becoming a Nordic Brand Actor could strengthen Nordic Research Institutes further, by consolidating resources across the region and supporting international activities.		Talent Public / Institutional R&D Funding Providers Media Public Agencies Regulators
Contribution to Nordic Brand	Various Instruments could strengthen the Nordic brand via Nordic and Private Research Institutes such as the systematic provision of stories, incentives and lobbying. Leading by example, these institutions can invent and pilot new forms of conducting regional projects with an international dimension.		
International Experiences			

Engineering Academies			Global Target Groups
Institutional Objective	Engineering Academies can be strengthened in their activities, and benefit from a Nordic Brand dimension. A platform brand could provide additional instruments to internationalise projects, strengthen associated lobbying activities, support creation of lead-markets and excellence in research.		Companies Talent Media
Contribution to Nordic Brand	Engineering Academies represent leading Nordic actors and competences in a unique forum. Extensive experience, methodologies and networks add to the importance of activating this platform to carry the brand and act as a multiplier motivating individual actors.		
International Experiences			

Other Nordic Actors		
	Nordic Council of Ministers Public Policy makers Institutions & Agencies Embassies & other representations Universities Research Centres Inward Investment Agencies Funding Programmes Projects	R&D Professionals Branding Programmes Companies Private Institutions R&D Centres Chambers of Commerce Intermediary Institutions Industry Associations Cluster Coordinators Science and technology attachés Innovation attachés

Endnotes

- 1 UNCTAD (2005)
- 2 European Commission (2007) Green Paper on ERA
- 3 European Commission (2007) Competitiveness Report
- 4 European Commission (2006) Aho Report
- 5 The definitions in the sidebars are taken from the Frasacti Manual (OECD 2002) for R&D and the Oslo Manual (OECD 2005) for innovation, which provide guidelines for measurement of R&D and innovation respectively. These definitions and guidelines have provided the basis for many of the statistics reported in this report.
- 6 OECD (2005) Oslo Manual
- 7 Nordregio (2008)
- 8 Arnold *et al.* (2006)
- 9 These emerging trends are described in a wide range of European policy documents. For an overview, see e.g. Montalvo *et al.* (2006) and European Commission (2007) Competitiveness Report.
- 10 Montalvo *et al.* (2006)
- 11 European Commission (2007) Competitiveness Report
- 12 European Commission (2006) Aho Report
- 13 Cooke *et al.* (2007)
- 14 European Commission (2007) Green Paper on ERA
- 15 European Commission (2007) Competitiveness Report
- 16 Randall (1997)
- 17 Aaker and Joachimstahler (2002)
- 18 Rainisto (2003)
- 19 Jaffe and Nebenzahl (2006)
- 20 Csaba (2005)
- 21 Kotler *et al.* (1999)
- 22 Aaker and Joachimstahler differentiate between core identity and brand essence, the latter representing a single thought that captures the essence of the brand and they also have a slightly different description of the layers of the brand. We have adapted the concept here to better suit the purpose of branding Nordic research and innovation.
- 23 Key source is LocoMotive study conducted 2007, interviews with 70 European R&D managers, including Denmark and Finland. LocoMotive was a project carried out under the “Regions of Knowledge” programme of the EU Commission in 2006–07. Additional sources are European Commission’s survey on Business Trends in R&D Investment (2006), Innovasjon Norge/Norges Forskningsråd (2006), Deloitte Perspective’s study on Finland’s Competitiveness from the Viewpoint of American Firms (2007).
- 24 LocoMotive was a project carried out under the “Regions of Knowledge” programme of the EU Commission in 2006–07.
- 25 Deloitte Perspective (2007)
- 26 Florida (2004)
- 27 cf. also Invent in Norway study
- 28 Notably United Minds (2007) in Sweden and UNI-C (2006) in Denmark. In these studies the themes as above correspond to the themes extracted from the responses from the experts on attraction factors, though the context is different. For example, *Quality of institution* is important in choosing location (e.g. based on international rankings) though quality of education and contribution to career prospects are emphasized more in the studies of students. Economic factors refer primarily to (absence of) tuition fees and to some extent cost of living. These studies also indicate that attraction factors differ between home countries. Broadly speaking, Asian students are more focused on career prospects while North American students more often rank lifestyle and culture as important for choice of location.

29 Roger Svensson. This corresponds to the results from study on foreign students in Sweden (United Minds
2007).

30 European Commission (2008) *European Innovation Scoreboard 2007*

31 http://www.economist.com/markets/rankings/displaystory.cfm?story_id=10050677
The framework has been designed to reflect the main criteria used by companies to formulate their global
business strategies and investment location decisions. The overall scores (on a 1–10 scale) and rankings are
based on scores for 91 indicators, grouped into ten categories of the business environment.

32 Deloitte Perspective (2008)

33 Birkinshaw (2005)

34 Huset Mandag Morgen A/S (2005)

35 World Economic Forum (2007) For a table showing all the rankings from the World Economic Forum's
Global Competitiveness Index included in this report, see Appendix 2.

36 The study looks at regional data for the EU member states and for Iceland, Norway, Switzerland and
Turkey.

37 Meri (2008)

38 OECD (2007)

39 Dahl (2008)

40 <http://www.worldvaluessurvey.org/>

41 Algan and Cahuc (2007)

42 Alf Lindberg

43 World Economic Forum Global Competitiveness Ranking 2007

44 www.ecer.fr, Dagens Industri, 17th December 2007, p. 8, "Göteborg i toppen" and [http://www.emarketing.fr/
Breves/ConsultBreve.asp?ID_Article=22828&t=Les-villes-preferees-des-entrepreneurs__](http://www.emarketing.fr/Breves/ConsultBreve.asp?ID_Article=22828&t=Les-villes-preferees-des-entrepreneurs__)

45 OECD (2007) STI Scoreboard

46 World Economic Forum (2007)

47 Dutta and Mia (2007)

48 UNDP (2007)

49 As suggested by Seija Kulkki based on experiences of recruiting top talent to Finland.

50 Ketels 2008

51 Hausman *et al.* (2007)

52 For full report on the survey, see www.transparency.org

53 Agerskog (2007)

54 Sveinn Thorgrímsson

55 Nordic Statistical Yearbook 2007

56 Kapferer (1995)

57 Jaffe and Nebenzahl (2006)

58 www.bmbf.de/en/1321.php

59 Nordregio (2008)

60 See e.g. The Advisory Committee on Measuring Innovation in the 21st Century Economy (2008), European
Commission (2008)

61 Cedefop (2008)

62 European Commission (2008)

63 Kallerud (2006)

64 Ulf Wahlberg, Vice President industry and research relations, Ericsson

65 See e.g. www.vinnova.se or www.fi.dk

As markets are opening up and capital, talent and other resources are becoming more mobile, the competition for investments in research and innovation has become increasingly fierce and continues to intensify. Along with the development of specialized local innovation environments competing for global resources, a geography of research and innovation is emerging that is increasingly reorganized around globally connected local clusters (or hubs) of excellence.

Against this background, a case can be made for initiating a joint Nordic effort aimed at profiling the region in the global marketplace in order to attract foreign investments in research and innovation. On a global market, the individual Nordic countries are very small and may find it difficult to make their voices heard. At the same time, the region has a long history of regional collaboration and several collaborative projects and Nordic initiatives are already underway to address the challenges of globalization. While there are certainly differences among the countries, in a global context the similarities are far more important.

Hence, the ambition of the NordForsk policy brief “Branding the Nordic Research and Innovation Area” is two-fold; Firstly, to create a branding methodology which takes the special conditions of the Nordic region and the notion of research and innovation investments as point of departure. Secondly, to put forward a suggestion for a branding strategy, firmly grounded in Nordic strengths and set within the emerging global context of research and innovation investments.

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