

# ORGANISING FOR SYSTEMIC EFFECTS

*Automation Region 2023-2025*



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# Organising for systemic effects

Since the start, Automation Region have participated in more than 100 projects which have involved more than 1000 companies and organisations. Thousands of spontaneous and facilitated meetings have taken place thanks to the activities arranged and the numbers of members have grown to include over 150 active members and partners. This great interest shows that companies and organisations see the value in the network and realise the benefits of the platform.

Being part of an innovation system does however mean that the effects of our activities must be valued in relation to the totality of efforts undertaken by various parties within a specific area. To ensure that efforts undertaken are always based on real industrial needs, Automation Region continuously work with needs analysis. The aim of this recurrent needs analysis is to identify major trends with a transformative potential and in relation to this identify issues of critical importance that will affect the companies within three to five years. Automation Region conducts qualitative workshops around the country where regional companies are invited to identify challenges and opportunities linked to their growth and development. This is also linked to quantitative surveys that up until now have been conducted with over 1000 small and medium-sized companies throughout Sweden.

The continuous analysis of the industrial needs and the effort of refining the operational model resulted in a consolidation that permeates everything all initiatives and has enabled Automation Region's work as a system integrator. With an overarching purpose of organising for systemic effects Automation Region have made a strategic effort to consolidate the overarching focus, the initiatives engaged in, the parties involved and how to design and use the activities. This effort has resulted in a foundation that drives two primary effects in relation to the strategic vision and goals. The first is an improved ability to take a systemic perspective on why Automation Region should prioritise to do what and for whom. The second is more of a methodological ability to align how and with whom Automation Region should do the things it does to gain scaling effects at a systemic level. Together these two form what is the main aggregated result of phase two of the Vinnväxt programme this far. Table 1 below gives a summary of the starting position of the consolidation efforts and towards what aggregated state the efforts are intended to develop. Thereafter a more detailed and in-dept description follows of the operationalised effects of the focus, initiatives, stakeholders, and activities.

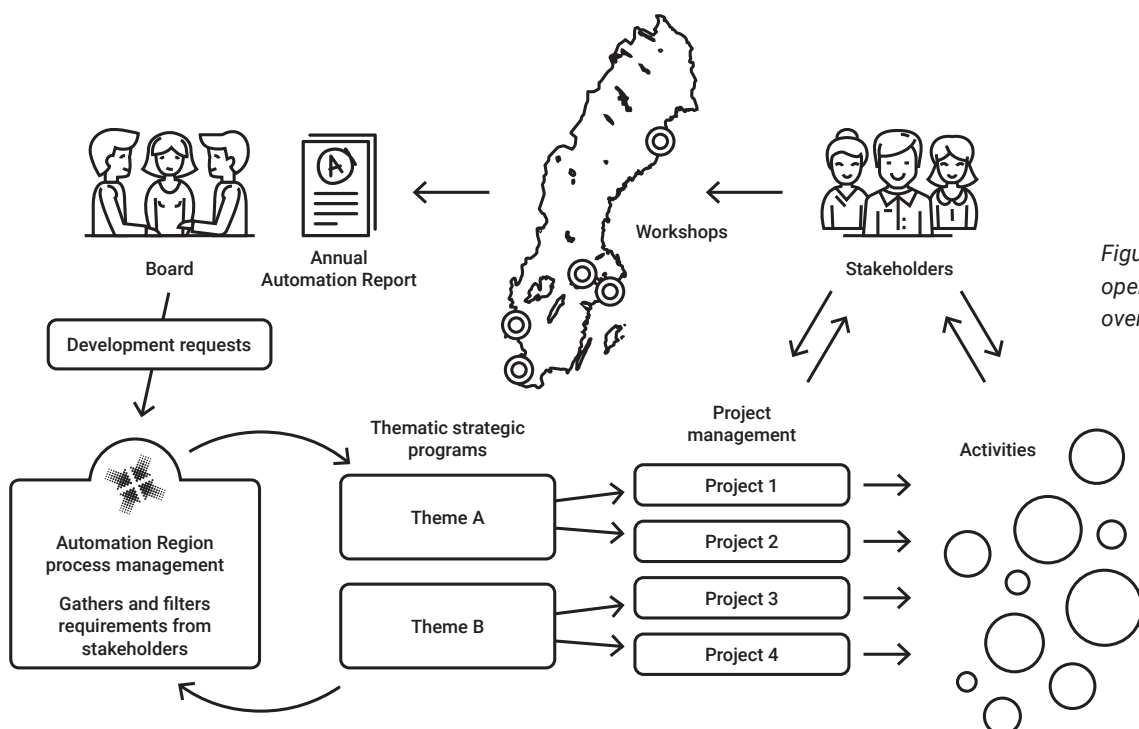


Figure 1. Strategic operational model overview.

Below is a short description of the starting position of our consolidation efforts and to what aggregated state the efforts are intended to develop.

	From	To
<b>Focus</b>	Technology and product focus within automation.	Complex industry-wide automation challenges in the context of operational technology (OT) and information technology (IndTech).
Example	Breakfast meeting with focus on new technology and it's applications.	Seminars and workshops on industry challenges and possibilities and how technology can help solve and meet these.
Purpose	Focus on challenges that cannot be easily targeted by single actors or specific technologies. Stronger solutions by working industry-wide and technology neutral.	
<b>Initiatives</b>	Detached efforts within smaller initiatives.	Integrating efforts within larger targeted initiatives.
Example	Focus on connecting companies and individuals with common goals.	Focus on how IndTech connect excellence from different areas to meet larger challenges.
Purpose	Build momentum, enable scaling effects, and open for larger co-productive initiatives that to a higher extent can integrate industry-wide actors.	
<b>Stakeholders</b>	Regional network of established automation companies.	Regional, national, and international actors that together have the joint capability and incentive to address industry-wide challenges.
Example	Focus on gathering specialists in the automation area, locally and regionally.	Cutting-edge expertise from around the world from different industries.
Purpose	Strengthening the system by bringing together strong actors with access to their own networks and forming a cluster of clusters with joint capability to address more complex challenges.	
<b>Activities</b>	Activities that enable actors to meet, learn, develop, and innovate.	Methods and processes for co-creation of activities that enable learning, development, innovation, and systemic integration.
Example	Focus on awareness and new contacts.	Building structures and methods that can be scaled to several markets and enhance creation of new knowledge and practical implementation.
Purpose	Develop and provide the underlying structure of how value is created and thereby enabling scaling effects.	

Table 1. Consolidation of Focus, Initiatives, Stakeholders and Activities.

## Shifting focus from product to challenges

In the annually undertaken trend analysis several areas that drive development in the industry today were identified. At a more aggregated level three more overarching trends could be identified with the potential to transform the industry; connected industry, intelligent systems, and flexible automation. To give a more refined focus, these three meta-trends have been used to direct most of Automation Region's activities over the past three years. Figure 2 visualise the identified overarching trends in relation to technology drivers and changing conditions.

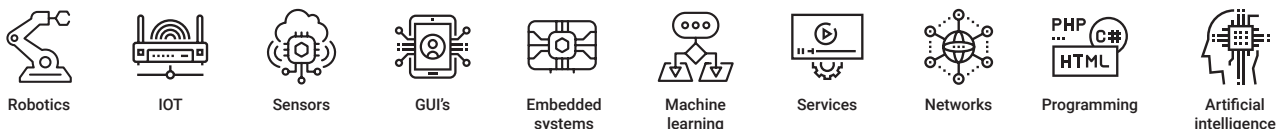
- **Connected Industry.** The industry is connected and generates a large amount of data which has great potential to be used for automation and improvements in e.g., production, quality, and resource use. As the connected industry impacts everything from production to its end users it is also challenging as it often calls for major changes in how we work, design, and understand the things we do.
- **Intelligent systems** are the computer systems that exhibit an intelligent behaviour by adapting this behaviour based on previous interactions. The automated learning and analysis of such systems are often a critical prerequisite required to realise the value of the data that is generated by the connected industry. When starting to use these systems and central technologies such as e.g., machine learning (ML) and artificial intelligence (AI) this often comes with both technical, organisational, and social challenges that need to be identified and addressed.
- **Flexible automation.** Industrial production has long been characterized by low mix - high volume but it is facing a distinct change in demand as customers require adaptation and short series. At the same time, small and medium-sized companies are beginning to introduce automation technology and robots to an increasing degree.

To enable the potential value of these three trends it is important to understand that their transformative power is far from merely technical. Besides driving a technical product development, they also drive changes in competence, organisation, value proposition and business models. For these seemingly technology-based trends to create industrial value, these opportunities, challenges, and obstacles must be addressed as one. As a result, Automation Region realised the need to set our overarching focus on the complex industry-wide challenges. The reason is that it is only at this level that these opportunities, challenges and obstacles are acknowledged at a systemic level required to not over-simplify and oversee the critical issues.

The transformative trends of the industry can be summed up by three overarching themes ...



... that are driven by a number of essential technologies ...



... which changes conditions and creates new needs in several areas ...



Figure 2. Transformative trends, technology drivers and changing conditions.

## Automation and IndTech

IT and automation in industry are often described using hierarchical information models. What is known as the automation pyramid is established and supported by the ISA-95 standard. But to meet the industry's needs, the automation hierarchies need to be dissolved in favour of more flexible arrangements that can manage a much broader scope of technologies and competences that historically often are in separate organisational functions. However, the industry's large installed base of older but well-functioning technology means that incremental change is generally more likely than sudden disruptive scenarios. In the short term, therefore, the focus is practical integration between technologies, organisations, and companies. In the long term, interoperability with complete sharing of information based on accepted industry standards is the likely development.

To clearly highlight this industrial need to merge its existing, established and implemented operational production technology (OT) and industrial information technology (IT) with novel digital technology (DT) we will use the term IndTech. IndTech can therefore be seen as a three-way crossing of the industry's operational production technology (OT), the industrial IT area, and the newly developed technology DT. Both industrial OT and IT have roots in the early computerisation of the seventies and both areas are now influenced by new DT such as cloud services, IoT and advanced data analysis.

The conceptualisation of the term, IndTech, was carried out by Automation Region together with SIP PiiA and Blue Institute (Figure 3). Focus of the conceptualisation was to clearly visualise the critical merger of these different established and novel technologies. This highlights how their legacy from being developed in different industries during different time periods comes with different inherited characteristics. When integrated these different characteristics both develop, change, and challenge the conditions for the industry in their digital transformation.

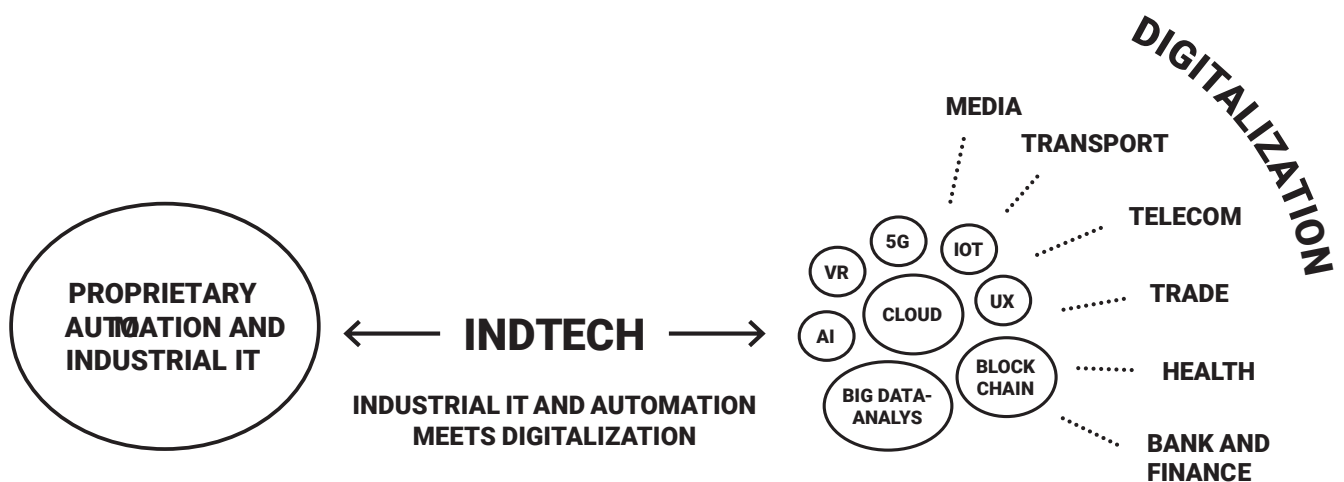


Figure 3. Industrial Technology - IndTech.



# An emerging joint meta-cluster

Automation Region has historically had a strong focus on supporting the established companies, and an important part of this is to facilitate the development and access to the correct competence and expertise. Capturing the value and coping with the challenges of the transformative trends that the industry is facing often requires expertise that can be found in other industries, academia, or start-ups.

Therefore, Automation Region has a dual focus on also creating beneficial conditions for both the established companies and other actors such as e.g., start-ups that can provide critical and sometimes hard to find expertise. Sometimes the expertise is held by young start-ups, other times by large international companies or groups in research institutions or universities. Making it attractive for these to make their expertise available for Swedish companies to accelerate their development has therefore been essential for us during these three years.

Taking a more systemic perspective on which partners we must team up with and to act in a methodical way, we have started from a model that further develops the Triple Helix model. Figure 4-5 below shows the composition of our partners and members in a regional, national, and international context. Throughout the second phase we have actively increased the involvement of both government and investors, and we will continue to do so to address the need for investment in IndTech.

The role of Automation Region in this has been to both function as the platform and to borrow a word from neuroscience, be the signal transmitter which enables the transmission between different actors. Our role is therefore twofold: first to identify, or enable others to identify, how the needs of various interest groups are interrelated and secondly to design initiatives and activities where different actors can be integrated in joint efforts that can address more complex challenges. Focusing on industry-wide challenges we have to a great extent involved and collaborated with actors from outside the automation companies. Allowing larger co-productive initiatives with their base in industry-wide challenges have also attracted more participants from outside the traditional automation companies.

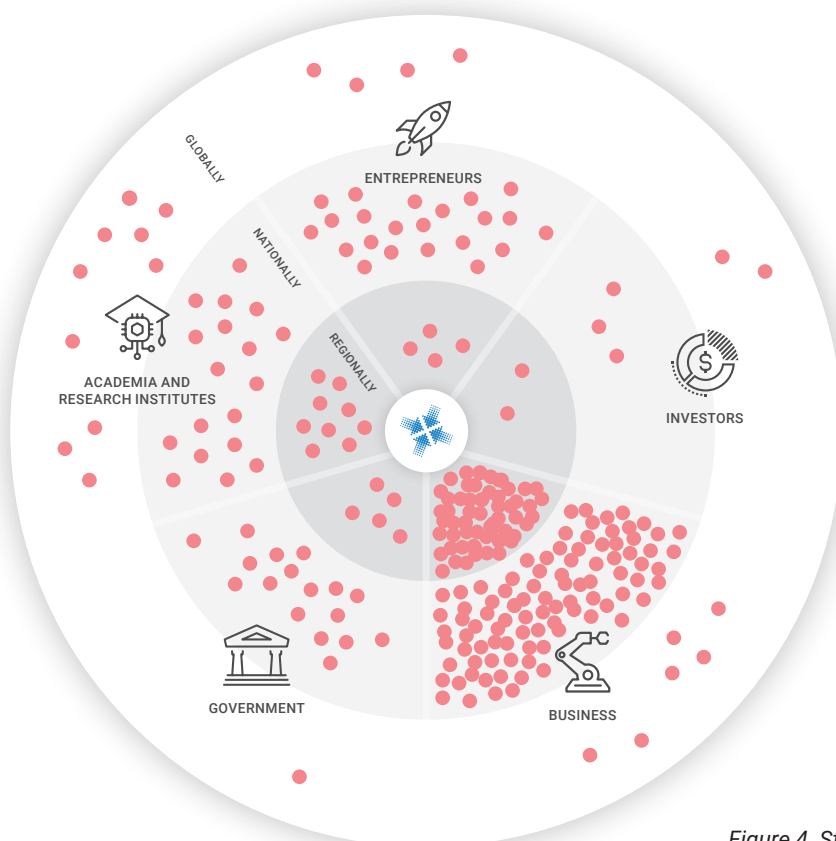


Figure 4. Stakeholder mapping.

The vision for Automation Region in the Vinnväxt assignment has been a pronounced international imprint that is described as follows: “Automation Region will be Europe’s leading innovation environment in automation”. The shift from the regional to the international has therefore been a central focus during the last three years. Focusing on collaboration to address complex industry-wide challenges within IndTech has taken Automation Region from a regional automation cluster to a leading part in several international initiatives. Automation Region have strived to make the efforts and collaborations scalable and have deliberately focused on developing methods and processes when building collaboration. In addition, Automation Region have focused on establishing collaboration with other clusters and networks, slowly merging us into a meta-system consisting of several subsystems.



Figure 5. Automation Region’s footprint.

In this meta-system every cluster or sub-system will become a potential hub for collaboration in their area of expertise and depending on the focus of the initiative – Automation Region will take on a national and international position as an emerging hub of IndTech. Even though the trends might be tech-driven it is important that we in our role also explore, raise awareness, and develop understanding about how humans, society and the environment are affected. Therefore, Automation Region have also taken an active role in involving with people and organizations outside the industry. This broader perspective has given an important input to us when designing our activities. Below follows an exemplification of important regional, national, and international initiatives, collaborations and projects.

## Regional

### East middle Sweden

Automation Region is considered one of the key players in the network for smart specialisation in the region of east middle Sweden and holds an active role in various strategic development dialogues between players in the five regional organisations and national authorities.

As part of common initiatives with the regions of east middle Sweden Automation Region aims to strengthen the competence and position in the labour market for the manufacturing industry. This highlights the importance of coordinating regional support and initiatives around innovation, automation, and digitalisation. By sharing expertise, development environments and other resources between the regions, companies gain access to the best possible support for industrial transformation.

### Node North

Automation Region has strengthened its national focus by establishing a regional node based in Skellefteå to increase the presence in Västerbotten and Norrbotten. Automation Region has collaborated with the municipalities in Skellefteå for the past three years, which was established in conjunction with Northvolt choosing to locate its production in Skellefteå and Västerås. Skellefteå municipality expressed a need for a local network such as Automation Region and asked if Automation Region could establish a node in Skellefteå to contribute with its expertise and experience of gathering actors in business, academia, and authorities. With funding from Skellefteå municipality, Automation



Region appointed a project manager to coordinate the local network to meet the challenges Skellefteå had in connection with the major expansion that is currently taking place in the region.

The operations at Automation Region's new node in Skellefteå will include activities aimed at disseminating knowledge, strengthening networks, and facilitating the development of innovations, production, and business models. The activities are coordinated and conducted in close collaboration with the business community in Västerbotten and Norrbotten.

## **National**

### **iHubs Sweden**

To gather the regional strengths within Vinnväxt and turn them into national resources, Automation Region has initiated and formed the foundation iHubs Sweden. iHubs Sweden is a national platform for collaboration which aims to support regional nodes to continue to grow to promote Sweden's competitiveness as a nation. The focus is on regional strengths that create dynamic innovation environments. iHubs Sweden stands for smart specialisation and the development of industry through innovation. One way to do this is by collaboration, system innovation and system acceleration to bring together organisations and groups from different expert areas. This means that areas of strength from different regions can draw inspiration from one another and thus become more competitive. Innovation hubs are already an established concept in many regions of Europe today. These iHubs are often based on smart specialisations to enhance the region's areas of strength, a method initiated by the European Commission. As a result, iHubs Sweden is part of a well-established European network. In this way, Swedish regions can find a path to international partners and Swedish companies can reach out to a global market. iHubs Sweden supports and drives innovation projects that lead to resource-efficient and sustainable processes and supply chains.

### **Clusters of Sweden**

As part of Automation Region's increased national involvement, it has chosen to accept the assignment of member of the Board of Clusters of Sweden. Clusters of Sweden brings together Sweden's cluster organisations in a common network and offers a neutral link between decision-makers, companies, academia, authorities, entrepreneurs and various industries at Nordic, European and international level. Together, they represent the interests of 500 member organisations in the private sector, the public sector and academia - including more than 1200 small and medium-sized enterprises.

### **addAI.org**

addAI.org is a Swedish think tank exploring the human and societal perspective of AI and smart algorithms. The organisation is a non-profit, private initiative consisting of academic and industrial experts from various fields such as law, innovation, tech, organisation, and sociology. Collaborating with addAI Automation Region have been able to tap into a wider network of individuals and organizations of more than a 1000 people representing civilians, large corporations, policymakers, scholars, public sector that that in different ways have actively participated in arranged activities, discussions, workshops, and conferences. Enriching our trend- and foresight activities through cutting edge discussions from a national, European, and international perspective on the very forefront of technological development; organizational transformation; contemporary legal, policy and regulatory issues. Through addAI and in collaboration with Novus, Automation Region have undertaken a large quantitative survey of the Swede's opinion on AI. Automation Region and addAI have during the last three years collaborated actively, supporting, and participating in each-others' activities. The collaboration with addAI have provided important perspective and input to the design of our initiatives and activities.

## **Industrimötet Sverige™**

Industrimötet Sverige (the industrial meeting Sweden) is a continuously ongoing initiative by Automation Region. Through the initiative Industrimötet Sverige, Automation Region bring companies, organisations, and investors together in conversations about development and critical growth factors in industrial technology. Purpose of the initiative is to meet local actors at their context to build improved understanding of how regional strengths to a higher degree can become nationally accessible resources. Local companies and organizations are invited and participate in a workshop that follows the following methodological structure: Explore → Define → Delimit → Conceptualize.

The workshop series is ongoing, and the aim is to identify different developmental needs, ways to address these needs and concrete ways to assess the progression of forthcoming activities. Discussions are summarized in filmed conversation with representatives from local companies, organizations, and authorities. The methodology is documented and continuously improved with focus on the workshop's arrangement, undertaking, documentation, and dissemination.

## **Learning and Capacity for innovation and transformation**

The program is aimed at process leaders and innovation leaders. It extends over eight months and comprises a total of eight training days that are carried out at IVA's conference centre in Stockholm. The various modules are designed for participants to build up knowledge in, for example, cross-industry ecosystems and change processes, while at the same time being allowed to work with concrete challenges within their respective organizations. The program stage one was performed with 21 participants, 17 process leaders and 4 externals. Next stage involves 75 participants, from 10 Vinnväxt and SIP (strategic innovation programs) in different areas (Ex Smart Textiles, Paper Province, AgTech.) From the process leaders to include business developers and innovation managers in the organizations stage 3 focused on small-and medium sized enterprises, intrapreneurship for change, 15 persons participated in the course.

## **Mikrofabriker**

The project Mikrofabriker (Micro factories) is a project initiated in collaboration between Automation Region, Science Park Borås, iHubs Sweden and Smart Textiles. Together these actors formed a project to investigate how automation and digitalization can be used to make textile and clothing production become more flexible and sustainable. The challenge to the textile industry is to curb the negative climate impact that the fashion and textile industry has, why production needs to be closer to the market. If production takes place close to the consumer, several benefits are achieved, such as reduced transport and minimized overproduction of clothing.

As a decreased environmental impact can be achieved through local production of less adaptable scale when based on a flexible value chain. The goal of the project is to develop technology and manufacturing processes for circular flows and production concepts. In the project, actors from the textile sector collaborate with automation companies and develop concepts such as micro factories - small, flexible production units with a high degree of automation. Together they develop manufacturing processes and business models that can promote a sustainable circular economy and new business opportunities that can decrease the environmental impact. Among others, companies such as ABB, Textilfabriken, Guringo Designstudio, Gina Tricot, XV Production, PapeTale, Atacac Fashion Studio, IRO and E. Samuelsson are participating in the project.

## **Automation Region Research Academy – ARRAY at MDU**

The Array Industrial Research School is an industrial post-graduate school at Mälardalen University (MDU) that contributes to increased competence and development in selected scientific areas that are of strategic relevance to the Swedish industry. Within Array, 14 doctoral students are active within five different research tracks - built-in systems, control technology, and optimization, security, testing

and verification, and automation applications. They are carefully selected to match the industry's strategic priorities and challenges. Among the participating companies are several of Automation Region's members. The companies included in the graduate school are currently ABB, Alten, Bombardier Transportation, First Control Systems, Kanthal, MITC, Rise, Skanska Sweden, and Volvo Construction Equipment.

### **IndTech Industrial Technology Graduate School at MDU**

With support from Automation Region, the IndTech Industrial Technology Graduate School was established at MDU. The graduate school, which offers advanced education in industrial digitalisation, will train future research leaders to strengthen Sweden's industrial competitiveness.

The graduate school focuses on the implementation of the smart industry and applied AI for production systems. The goal is for the industrial doctoral students, who are employed by the participating partner companies, to defend their theses and thereby strengthen Sweden's industrial competitiveness.

## **International**

Pilot projects for the US market have been designed to develop the ability to act as an international platform and system integrator in an international context. Purpose of these pilots have also been to develop methods and processes for international collaboration. Successful pilots have contributed to developing a scalable model for international collaborations that will now be implemented in new markets such as Canada and Germany.

### **Swedish IndTech**

Vinnova's Silicon Valley office has together with the board of Nordic Innovation House Silicon Valley consisting of representatives from Vinnova, Innovation Norway, Innovation Center Denmark, Consulate General of Iceland, and Business Finland decided on a few focus areas called Strongholds. The purpose of these Strongholds is to have a strong and united presence in Silicon Valley by bridging the gap between the Nordics and Silicon Valley within areas where we are extra efficient in the Nordics. IndTech is one of two prioritized areas for Vinnova in North America and for Nordic Innovation House alongside with Future Mobility.

In close collaboration with Vinnova and Silicon Valley - Nordic Innovation House these actors have together decided to bridge the gap between Nordic need owners within automation and the technological forefront in Silicon Valley. The individual actors' networks and ecosystems are combined and integrated in various projects and activities.

*"My collaboration with Automation Region is linked to the IndTech investment in Silicon Valley. This initiative is very successful, and my assessment is that it is due to Automation Region's abilities, such as connection/collaboration with relevant actors from industry and academia and deep knowledge of the area. Most important are Automation Region's speed, flexibility, responsiveness, and lack of big ego, combined with long-term and strategic thinking - qualities that are crucial to international collaborations' success. For almost two years, Automation Region has succeeded in creating credibility and partnerships in Silicon Valley and outlining the conditions for long-term and sustainable collaborations. This can only be achieved by a mature and well-functioning innovation environment with strong leadership."*

### **Inger Gustafsson, Vinnova, Silicon Valley**

These international projects aimed to develop methods, processes, and infrastructure to stimulate collaboration and strategic partnerships between leading technology companies in the Nordic region and Silicon Valley. The purpose is to establish a methodology to increase the digitalisation in the Swedish industry, as well as to stimulate the conversion towards a greener industry through increased awareness of new technology.

## **ISPIM – the International Society for Professional Innovation Management**

Taking a more systemic perspective on Automation Region's role, the focus throughout the innovation pipeline needs to be far from merely technical. Independently of whether raising awareness and prime for laggards to change, support incremental development, or support the organisations whose innovations will disrupt our future. The focus, initiatives, actors, and activities need to be addressed from the perspective of innovation – both in terms of how to design the undertaking of them and how to design them to fit the innovative aim and ability of the receiver.

For this purpose, Automation Region has actively engaged with ISPIM - the International Society for Professional Innovation Management. ISPIM is the world's largest and oldest global network for professional innovation management that brings together people from research, industry, business, and the public sector. Within ISPIM, Automation Region have actively engaged in establishing and driving a special interest group on AI & innovation Management. Through the group, Automation Region have in close collaboration with international universities, tech start-ups, large corporations, consultants, the public sector, and other large clusters, arranged discussions, workshops, webinars, panel discussions, conference activities, and more. From a shorter perspective, this has allowed Automation Region to establish an entirely new field and drive an increased understanding of the relationship between AI and Innovation Management.

The work has resulted in new international collaborations, conference articles, industrial cases, and an edited book with 27 authors from 8 countries published by World Scientific. In a longer perspective, Automation Region have established a strong relation to the central ISPIM organisation and a global network with over 2000 individuals and organisations, opening for future collaborations on innovation management subjects also outside AI. The collaboration with ISPIM enhance trend- and foresight activities and provide important perspectives and input to the design of initiatives and activities.

# Sustainable innovation

The global sustainability goals (SGDs) according to Agenda 2030 are integrated into Automation Region's daily work and include all activities, processes, and projects. The achievements described above are also closely related to the achievements of the five SGDs (SGD 3, 4, 5, 9, and 12), exemplified below.



Figure 6. The global sustainability goals.

## Enhanced skills and equal opportunities

The CompCor project is an example of an initiative to strengthen the skills and the position in the labour market for staff in the manufacturing industry. The goal is for all employees to be offered the same opportunities regardless of gender, gender identity or expression, ethnicity, beliefs, disabilities, sexual orientation, or age.

## Focused support initiatives for sustainable industrial development

Automation Region has developed a digital tool that leads the way through the sometimes-tricky process of automating and digitising. The tool is open for everyone to use and includes a step-by-step process to increase the level of knowledge. Companies and individuals can use the tool to keep track of what is required and to enhance the skills set of the entire company – a way to optimise resources and create better results.

## Initiatives in education and skills supply

Making research results and resources available is an important development area for the industry in Sweden. Compared with many other countries, research projects in Sweden are less commercialised. To create better conditions for making this type of research available, work is required at several levels. Automation Region acts as an intermediary between both Swedish and international universities to increase collaboration between researchers and to build research networks. This aims to contribute to increased collaboration for disseminating research results, but also open for new research domains that can enable sustainable solutions for the industry.

## Opportunities to develop local, sustainable production

The Mikrofabriker project develops flexible and circular textile production using automation and digitalisation that can be used to make textile and clothing production become more local, flexible, and sustainable. A decreased environmental impact can be achieved through local production based on a flexible value chain.

# Going forward

Automation Region is built around the industries of the future with the purpose of accelerating transformation and driving innovation at the system level on a large scale. We work to develop new strategies based on today's needs to build competitive and sustainable industries of the future. By creating a trust-based collaboration platform, the network's members jointly create great value for each other. Together, we educate, train, coach and develop the ability to innovate at the ecosystem level. With a high level of trust and personal contacts, we can identify shared challenges and develop a common ambition to solve these challenges.

Automation Region has the strength to lead and operate complex networks at the system level. The way forward for Automation Region will therefore be to leverage its strengths to act at the system level and function as a player which can bring together Sweden's regional areas of strength and turn these into national resources.

Over the next three years, Automation Region will focus on establishing itself as a national player that brings together not only companies but also other cluster environments in a network of clusters. Automation Region has the experience, competence, and trust to lead this type of organisation that can manage complex issues at the system level. Therefore, Automation Region will gear up and bring together other cluster environments that share a common goal, and which can share resources that strengthen the whole.

Automation Region's focus going forward will be to function as a system integrator in an international context that brings together those who CAN and WANT to be involved to solve complex challenges in a smart and sustainable industry. To become the leading innovation environment in automation and industrial technology, Automation Region cannot act alone.

## Strategic priorities

Automation Region's strategic areas for 2023 are the basis for the projects and activities that are planned and implemented in collaboration with partner organizations and other stakeholders.

### Increase R&D investments in Sweden

Sweden is one of the world's most innovative countries, but the competition is intensifying, and it is not time to sit back. The number of companies that are positive about the conditions for R&D investments in Sweden is decreasing, and thus the risk of companies locating R&D operations in other countries is increasing. Therefore, increased public R&D investments, an effective innovation system and competitive market conditions and regulations are required for companies investing in R&D in Sweden

### Strengthen the competence development

Access to skills is one of the industry's biggest challenges. Business is undergoing a strategic transformation marked by climate change and the possibilities of digitization, which requires new knowledge at all levels. The education system needs to maintain both high quality and relevance, and individuals need to have the opportunity for learning and education throughout their working life. A clear mission is required for the higher education institutions to provide high-quality education and further training in collaboration with the business world.



## **Facilitate conditions for the industry's climate transition**

Sweden is to become the world's first fossil-free welfare state by 2045 at the latest. Today, industry accounts for a third of our greenhouse gas emissions, and therefore its transformation is crucial. Automation solutions and new industrial technology are a prerequisite for a climate-smart electrification of industry. Electricity use is expected to increase exponentially from already high levels, which places demands on a stable electricity grid and access to affordable and emission-free electricity. At the same time, the use of electricity must become smarter and more efficient.

## **Increase the pace of digitalisation**

The overarching goal of Sweden's digitization strategy is to be the best in the world at using the possibilities of digitization. Swedish industry is in the midst of two major changes – a new wave of digitization with AI as a guiding light, and a transformation towards increased sustainability. Both transformations are only in their infancy but have already begun to generate new products, services, and business models. Therefore, it is crucial to change the pace and increase the investments, for example through the expansion of the 5G network, to ensure that Swedish industry can continue to benefit from the new opportunities.

## **Guiding principles**

1. We will further develop the strong Swedish industrial and innovative tradition.
2. We assist companies, entrepreneurs, investors and decision-makers with the right knowledge and tools to take advantage of the great opportunities that automation, digitalisation, and new industrial technology create for a sustainable industry and strong Swedish competitiveness.
3. We want Sweden to be the world's most highly regarded industrial nation!

## **Join the IndTech Movement!**



Funding:



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