

University Services for regional Development - Ideas on Stakeholder Based Quality Management in a Region

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Abstract

Background

Regional Development is a permanent activity of change including long range visions and goals. This work includes both continuous and breakthrough change. Quality management practises are used for organisational improvement and could be seen as one way of supporting effective change management. Provided we can view a region as an organisation we could also view it as a process. Dealing with the region as a system of processes might make it possible to use quality management practices to support more effective regional development. Based on an analysis of the presentation of the current state and the visionary state it should be possible to analyse proposed change strategies from a process perspective.

Purpose

The general purpose of the study is to see how universities could contribute to regional development. Specific research questions in this study are:

- For a region how can the present state, the visionary state and the chosen change strategies, be described with Quality Management values and methodologies with focus on the process view
- How do the regional university mission, vision and goals align with defined regional objectives?

Methodology

A literature survey for how Quality Management has been used for regional development is carried out to create a structure for the data collection. The region of Gotland is chosen as an example for a region. The reason for this is that Gotland is a small region consisting of an island providing clear boundaries. There is only one university, which makes it easier to study the links between university and region. Available regional visions are studied as well as main presentation of regional performance with focus on the region of Gotland. The main organizational stakeholders are identified and studied. Data is gathered from web sites and from interviews. The categorisation of information is based on a process perspective using process based system models adapted to the initial literature survey. The current change process is also portrayed. In order to see how the local university performance and plans align with the regional plans the Gotland University web-site is studied for relevant documents.

Main results

Regional performance can seemingly be described using process based system models. The stakeholder approach can in a meaningful way be used to describe main regional requirements.

Keywords

Regional Development; Quality Management; Stakeholder; System processes;

Paper Type

Research paper.

Introduction

It is commonly accepted that the rate of change is acceleration in all fields of society. Change Management is a common topic for private and public companies. Regional Development could be seen as part of this constant change. In Sweden all regions need to define long range goals and strategies. Seeing to the actual and future needs of all stakeholders is a formidable challenge. In most cases universities take part in development of their region. The regional university could be seen as the engine of Regional Development. One of the core values in Total Quality Management (TQM) is customer focus. This is often translated to the expression of having an outside-in perspective. However, universities traditionally could be seen to come from a tradition with more focus on their own knowledge – that is having an inside-out perspective. Universities in Sweden are required to include co-operation with the society both in education and research. This implies that there is a need for customer or stakeholder focus. In an organisational context TQM values and methodologies have been used successfully to improve performance. Often a process view is used where entire organisations can be viewed as processes. A region could be seen as a process that converts input to output in a repeated network of activities generating value to stakeholders. In Figure 1 a proposed generic process model based on common process theory and adapted from Isaksson & al (2008).

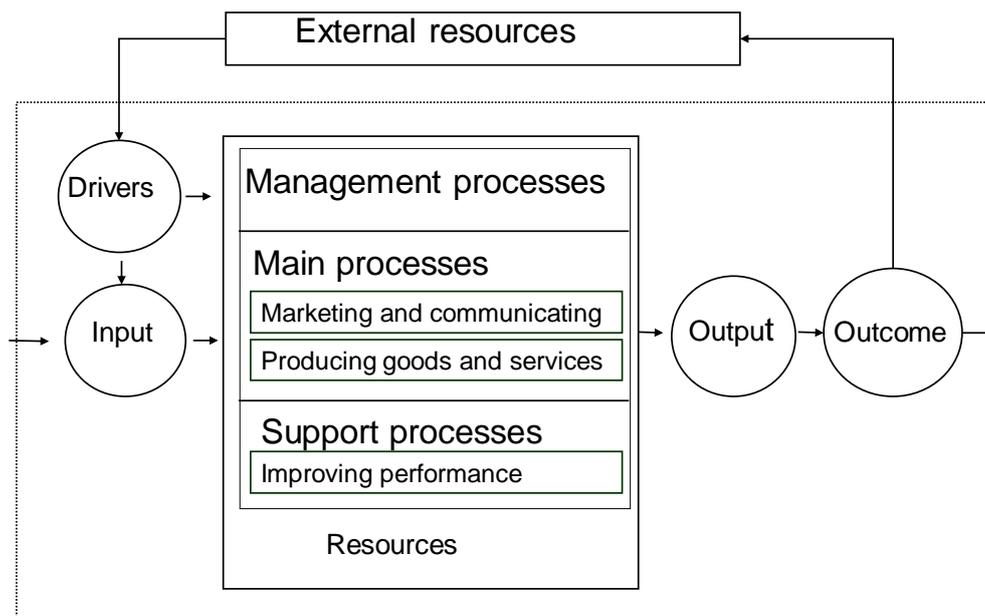


Figure 1. A process based system model proposing some generic main and support processes, adapted from Isaksson et al. (2008).

The general purpose of the study is to see how universities contribute and could contribute to regional development using quality management theory. The specific research questions in this study are:

- For a region how can the present state, the visionary state and the chosen change strategies, be described with Quality Management values and methodologies with focus on the process view
- How do the regional university mission, vision and goals align with defined regional objectives?

Methodology

An initial literature survey for how Quality Management has been used for regional development is carried out to create a structure for the data collection. We also look at general definitions of regional development.

The region of Gotland in Sweden has been chosen for a case study. Gotland is an island situated some 90 km from the Swedish mainland, which makes the regional and geographical limits very clear. Gotland is the smallest region in Sweden and Gotland University is the smallest university in Sweden and the only one on Gotland. This makes Gotland a well defined option for a case study.

The main documents describing visions and strategy for Gotland are studied. Responsibilities for regional development are clarified and people in charge are interviewed. Data is gathered from web sites and from interviews. The categorisation of information is based on a process perspective using process based system models adapted to the initial literature survey. The current change process is also portrayed. In order to see how the local university performance and plans align with the regional plans the Gotland University web-site is studied for relevant documents and persons involved are interviewed.

The regional performance is studied from a process perspective. This identification of processes is mainly done with the help of the official regional vision document. The current performance, the future performance and current improvement initiatives are described using officially existing information. The current state of progress is described and the potential for increased support from the university is identified. This is done by comparing the regional vision, goals and strategy with the university capacity within research and education. Additionally the university mission, vision, goals and strategies are studied to detect existing and possible synergies.

Theory background

The process view and process management are integral parts of Quality Management. The process view is used in many improvement approaches such as 6Sigma and Lean Management. The process view puts focus on value adding for customers and stakeholders. Based on the assumption that we can consider a region to be an organisation we should also be able to describe it as a process. Dealing with the region as a system of processes might make it possible to use quality management values and methodologies to support more effective regional development. Common change management logic tells us to analyse the current state, visualise the future state and then decide on a strategy for change.

The process based system model in Figure 1 could be used to describe current and future state as well as the change process, see Figure 2.

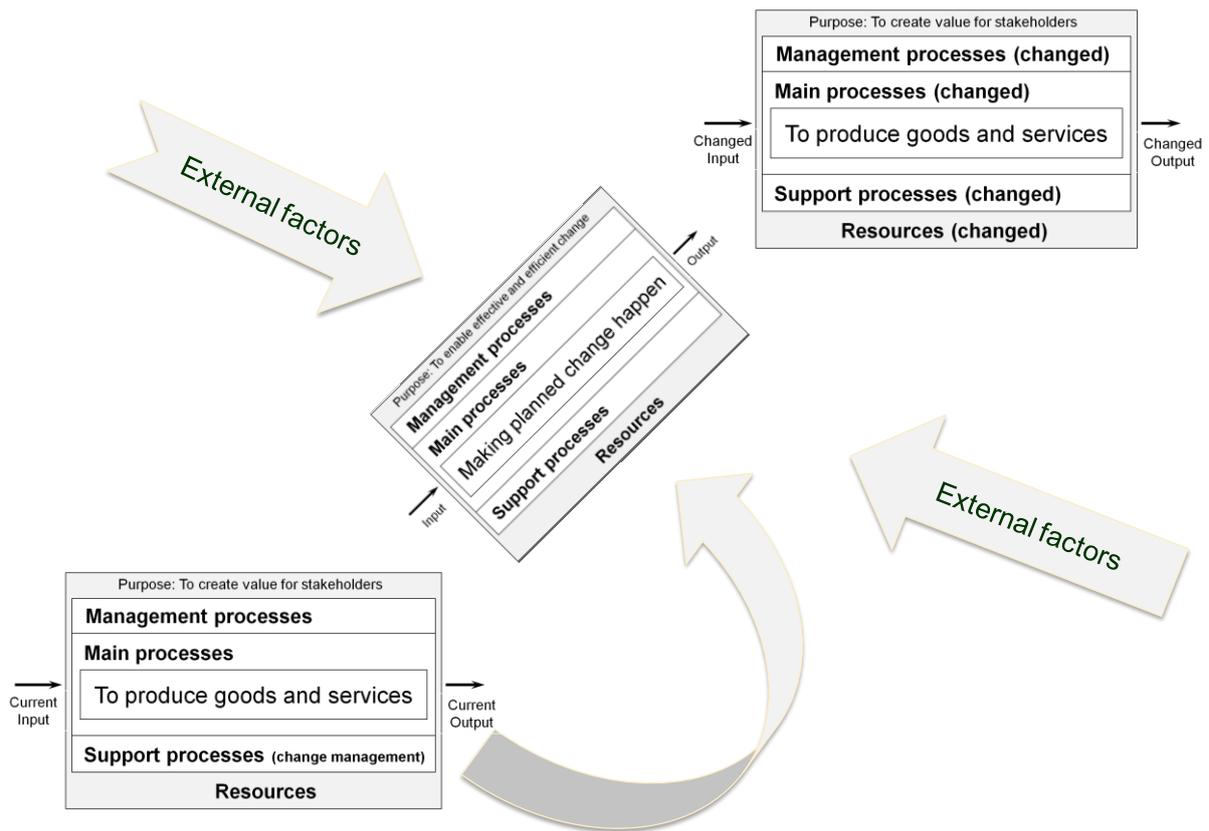


Figure 2. The current state and the future state as well as the change process using generic process models, adapted from Isaksson & al (2011).

Common change elements can be interpreted using the proposal of Bergman & Klefsjö (2010, 433) as mission, vision, goals and strategies. The mission or the purpose of the organisations sets the scene for the vision. The vision should give a good picture of the future state and it should be desirable and clear as well as easy to communicate, (Bergman & Klefsjö, 2010, 36). A good vision statement could be seen as an organisational resource. TQM could be seen as a management system that has an aim and that consists of Values, Methodologies and Tools (Bergman & Klefsjö, 2010, 419). The objective or aim of the system is to create increased customer satisfaction with less resource consumption (ibid). This objective should also be of help in the context of regional performance improvement as part of regional development. Proposed values in Bergman & Klefsjö (2010, 419) are Top Management Commitment, Focus on Customers, Improve Continuously, Focus on Processes, Let Everybody be Committed and Base Decisions on Fact. Methodologies supporting these values could vary but could include such as Process Management and Policy Deployment. The vision should be clear enough to be broken down in goals. Here the SMART goals system could be used – Specific-Measurable-Accepted-Reasonable-Time set, (Bergman & Klefsjö, 2010, 439). The SMART goals can be challenged like with the Lean Management view of presenting challenging goals that might at least not in the beginning neither be accepted nor seem reasonable. However, as a starting point for an analysis with the purpose to see if TQM theory could be of help in describing and improving the change process the SMART goals are good enough. In order to categorise what to measure in the process we could use the logic of the Triple Bottom Line that divides performance in economic, environmental and social performance.

The customer is the one for whom the process is producing value. In the regional context there would be many customers and there are other stakeholders that need attention.

Additionally success factors and key processes should be identified, (Bergman & Klefsjö, 2010). Success factors should relate to the vision of a sustainable Gotland. Sustainable growth is described as economic development with concern for environment and social aspects (GRI, 2006). Economic performance could be measured as proposed in the GRI guidelines with sales value. Main environmental parameters are such as energy consumption and carbon emissions. Choosing a good social indicator for the region is not obvious. Here, we could use indicators for health, employment and wellbeing indices.

As a summary, existing information that describes the current and future state of the region and Gotland University are analysed based on what a vision should contain, which the guiding values and main methodologies are and how goals appear when using the SMART-approach including Key Performance Indicators for success factors and for key processes.

Results from the literature search

The literature analyses indicate that Total Quality Management (TQM) can be used with success within regional development. These principles and the ways of working with improvements are not limited to work places, but can also be used for improving life in local through collaboration (Brown *et al.*, 1994; Stratton, 1997). One way is through successful cooperation over organizational boundaries, with projects in, among others, the U.S., the U.K. and Sweden. One approach is the community health improvement model. The so-called ASQ/IHI model (American Society for Quality/Institute for Healthcare Improvement) provides a methodology and new approach to addressing important community issues in ten communities in the U.S., for instance, in Dallas (Texas), Denver (Colorado) and Waltham (Massachusetts); see Kinney (1998) and Knapp (1998).

Another example is provided by the community of Tacoma in Washington State, where the residents have worked with concepts from TQM and studied how compatible “The citizen-as-customer model” is to community-wide improvement work. In Tacoma most residents had little faith in institutions and elected officials. One aim of the project was therefore to rebuild public trust in the community as a viable unit for social and civic interaction. Another was to help the residents to find trust in their own capacities, as individuals, to make a difference. (Jaques, 1999).

Toqua village in the state of New York is another major example from the U.S. The programme, for a “total municipality of quality”, started in 1991 when a new mayor was elected. He became a central person in the daily management of the municipality. This programme had, besides a quality and customer focus, also strong efficiency in focus. The municipality established a Village Quality Council (VQC), with the mayor, the municipal department managers and two quality consultants. The Toqua village statement and quality policy were established and gradually accepted by the municipal executive board. (Hagedorn-Rasmussen, 2002)

In the U.S. there are several examples of organizations that have successfully applied concepts from TQM to other segments of society than just the commercial and public ones. The community of Pensacola in Florida has brought together people from different sectors to create a “Quality Community”. The state of Oregon is striving to create a high-performance society through benchmarking and human investments strategies. Communities in California, Wisconsin and Arizona are establishing mutually profitable partnerships among schools, city government and private business; see Osborne & Gaebler (1992) and Brown *et al.* (1994).

These are examples of TQM-based collaborations over sector boundaries, where the community is seen as a system; see also Knapp (1998) and Scholtes (1997).

One example from the U.K. is the “Best Value Programme”, with the residents in focus. It is a governmental initiative in which the users of public services are invited to affect the shaping and the quality of the services. For further information, see www.audit-commission.gov.uk.

There are also examples in Sweden where municipalities work with quality in focus, after initiatives on either national or local levels. The Swedish communities of Gothenburg and Stockholm are two such examples where concepts from TQM have been transferred to community issues. The purpose is to inspire and stimulate quality development with the residents’ best in focus. See <http://www.goteborg.se> and <http://www.stockholm.se> for more information. The Swedish Institute for Quality (SIQ) supports quality work as well in Sweden, see <http://www.siq.se>.

Community work with improvements and the use of concepts from TQM are discussed in Crall (1998), Kinney (1998), Reavill (1999) and Corpuz & O’Hanlon (1999). The systematic approach, the system view and the preventive thinking in TQM can be used also for societal projects with a more limited scope. Examples are: to prevent negative economic and demographic trends; see Helling *et al.* (1998); to prevent domestic violence; see Corpuz & O’Hanlon (1999); and to reduce traffic injuries; see Knapp (1998).

Jacques (1999) cites Putnam (1995) when concluding that factors such as community wealth, educational levels, and political parties might explain why some community projects are successful, while others are not. However, the crucial factors in Tacoma turned out instead to be the skills of the community groups that brought people together for face-to-face conversations about local issues. Events and activities for training and awareness were important means of engaging the residents.

According to Jacques (1999), communication and work in processes are keys to overcoming political barriers in community improvement efforts. Quality professionals involved in community work can contribute with their knowledge of improvement methodologies and system-approach thinking. Jacques refers to Scholtes (1997) when stating that poverty levels, unemployment rates and fiscal deficit are relevant measures for the outcome of the work. All this implies that new ways of thinking are needed to secure a successful outcome of community improvement projects.

The community of Åseda in southern Sweden provides another example of a local societal improvement project. It started in mid 1990’s and is carried out with a system approach, with the aim of breaking a negative economic and demographic trend. The Åseda and Seskarö projects are two Swedish examples of the two different approaches, and both were motivated by the same type of negative trends in economy and demography. There was not enough public service, and it was difficult for the local industry to get competent personnel. In Seskarö it was important to develop the local industry and create employment (Fredriksson, 2004).

All these experiences, foreign and Swedish, give clues to a cooperation model based on TQM for organizations in regional development, which was developed (Fredriksson, 2004). In the start-up phase 1, the main issues are the leadership, the communication, the organization of the work, the education, the relations to others and the involvement. In this phase a core group is created, and it is preferable to have persons with experiences of work with Quality

Management, because a systematic approach to improvement work is useful. It is essential that an inner core group is created in phase 1, consisting of representatives from the cooperational organizations, see Figure 3. According to Kinney (1998), community health improvement work benefits when a small group of key actors is established as a core team, then focuses on a specific aim, and acts to implement changes. This flexibility is crucial for success in implementing small cycles of change. The core team must achieve knowledge of customers, either through members or by other means. The membership in the core team should be updated regularly to maintain coherence between activities and membership.

In phase 2 (“establish”) the important factors of distinction and praise are added. The core group is extended with improvement groups and other advisory groups. In phase 3, where the continuous work is established, there might be a change of leaders, and the issue of a “public” mandate should be addressed. Two important factors permeate all three phases: leadership and communication. In the final phase 3 another enlargement is made in order to include other stakeholders in the community. Included here are the personal and professional networks of the core group and of the improvement groups, including the political sector. In each phase methodologies and tools from TQM can be used to systematize and structure the improvement work.

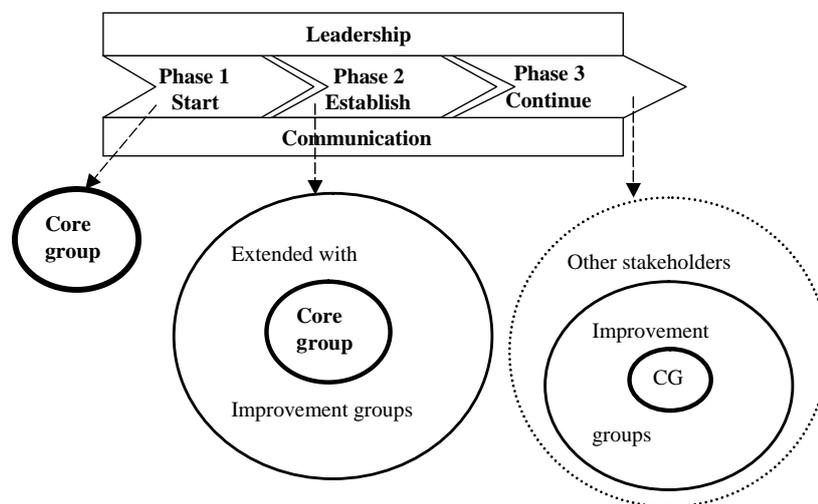


Figure 3. This figure is connected to the ASQ/IHI model (Kinney, 1998), and modified to illustrate how the improvement work in a local society such as within “Progressive Åseda” can be conducted in the three phases. An inner core group is created in phase 1 and extended with improvement groups in phase 2. In the last phase 3 another enlargement is made in order to include other stakeholders in the community (Fredriksson, 2004).

This core team should thoughtfully identify members to create an extended team and actively manage the connections with them. In this model the extended team should include the host organizations for team members, for instance, a public health department if the improvement work is a health issue. Kinney (1998) also suggests that the media and politicians be members of an extended team. The extended team can provide a foundation for sustaining the improvements achieved by the core team.

The model may be applicable to temporary organizations, such as networks, and to non-profit organizations. The model can be used from the municipal perspective, if politicians would like to take initiatives for improvements, or from the perspective of residents, if a “private”

resident wants to do the same. A recommendation in the latter case is that the resident anchors the ideas in some organization, either a “private”, non-profit, one, or in “business”, such as a company or another organization. One conclusion from the case studies is that it might be difficult for a “private” person to get response for such ideas in a local community, if the ideas are not first anchored in smaller circles.

The region Gotland and the vision 2025

Gotland is an Island in the middle of the Baltic Sea. The land area is 3 140 square kilometres and the number of citizens is around 57 000. Agriculture/food, tourism, services and building material industry are the main businesses together with a number of small businesses. Around 26 000 people have employment. The city of Visby is the main city with around 23 000 citizens.

The municipal “Region Gotland” has the responsibility for the development of the region. This is documented and set in progress with the “Vision 2025” approved and communicated 2008. The foundation is a long-term sustainable development based on three interacting dimensions- economic, social and environmental. The Vision 2025 forms the basis for other plans and programs bearing on the development of the region. In order to satisfy overall objectives, a number of goals, brands and strategies have been defined.

Review of the Vision 2025, regional objectives and strategies

“Gotland is the Baltic region's most creative and magic place, characterized by closeness, sustainable growth and full of zest for life.” – Translated from the Swedish original.

”Vision Gotland 2025 is our regional development program”, (Vision 2025, 2008).

The Region Gotland has defined plans and programs according to a summary of objectives, strategies and activities for a specific area to achieve the vision / desired level.

The Vision 2025 document specifies the following overarching goals:

- At least 65 000 residents living on Gotland
- Gotland’s prosperity is among the best in the country
- Gotland is the natural place for rendezvous in the Baltic Sea Region
- Gotland has a population with good health who experiences the highest wellbeing in the country
- Gotland is a world leading island-region of environmental and energy issues

The Specific programs and plans listed in the Vision 2025 are the overview, the growth program, the rural development program, the program for supplying apartments and houses, the health program, the cultural program, the plan for infrastructure, the energy plan and the environmental program.

The “Region Gotland” Balanced Score Card is used to follow up and inform citizens about the progress (Lindskog, 2011); (Region Gotland, Strategic plan and budget 2011–2013).

The Vision 2025 is assessed and evaluated against the elements in TQM according to Bergman & Klefsjö (2010).

- Values Have not been identified and communicated
- Vision Has been approved and communicated 2008

- Missions Partly described in Vision 2025 and described in the special programs.
- Goals Partly described in Vision 2025 and actions plans
- Critical success factors Partly described in actions plan
- Key Processes Not identified
- SMART - Metrics Suggested metrics in Balanced Score Cards for some of the goals

The work that resembles work with values is the “learning map” that has been used in the implementation of the vision for the regional management and politicians, see Figure 4. We do not interpret that work as identifying and communicating values.

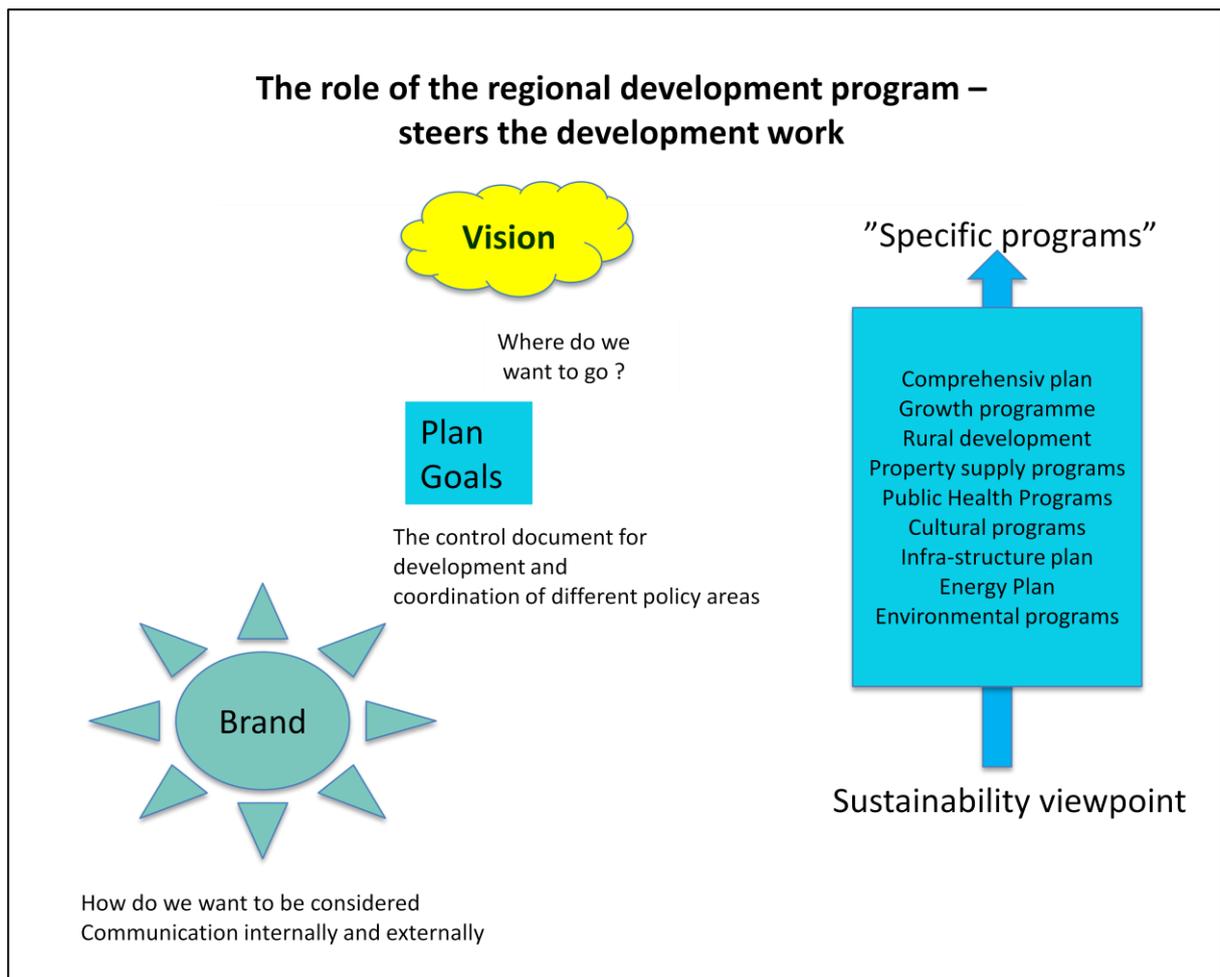


Figure 4. Overview of the Vision 2025 structure, (Vision 2025, 2008).

The expressed goals are not all corresponding to SMART requirements (Region Gotland, Balanced Score Card 2008-11-24), see Table I. The evaluation is carried out applying a positive interpretation, but even then we can see that 10 out of 24 goals are interpreted as not specified. Four out of 24 are not measurable and four out of 24 we do not interpret as reasonable. Most of the goals that are following SMART are goals connected to national goals and measurements. They are made specific by setting the level to average that of Sweden in general. From the goals in the Region’s Balanced Score Card we can also see that environment has few goals compared with the other overarching goals? This could be due to the fact that the overall responsibility for environment is divided between the region and the local government board.

Table I. Evaluation of the measurements in Region Gotland's Balanced Score Card against the definition for SMART goals

Overarching goals	Specific	Measurable	Accepted	Reasonable	Time set
At least 65 000 residents living on Gotland	Yes	Yes	No	No	Yes
<ul style="list-style-type: none"> • More registered residents. • Reached targets for the number of homes 	No Yes	Yes Yes	Yes Yes	No Yes	Yes Yes
Gotland's prosperity is among the best in the country	Yes	Yes	Yes	No	Yes
<ul style="list-style-type: none"> • Share of employees (in private & public sector) in line with national average • Business environment in line with national average • New enterprises in line with national average • Increased growth • Increased share of the business in alternative form • Increased tax capacity • Education in line with national average • Grade 9: Percentage approved in line with national average • Improved education outcomes • Percentage who go on to university in line with national average • Proportion of foreign-born in employment in line with national average 	Yes Yes Yes No No No Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes No Yes Yes Yes No Yes Yes	Yes Yes Yes Yes No Yes Yes Yes Yes Yes Yes	No Yes Yes Yes No Yes Yes Yes No Yes	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
Gotland is the natural place for rendezvous in the Baltic Sea Region	Yes	No	No	No	Yes
<ul style="list-style-type: none"> • Increased number of travelers • More destinations • Maintain frequency, capacity, time and price for communication to mainland • Number of nights spent in hotels, etc. • More meetings 	No No Yes No No	Yes Yes Yes Yes No	Yes Yes Yes Yes No	Yes Yes Yes Yes No	Yes Yes Yes Yes Yes
Gotland has a population with good health who experiences the highest wellbeing in the country	Yes	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> • Citizen experience in line with the national average: Region / 	Yes	Yes	Yes	Yes	Yes

Municipality / influence					
• The proportion of rural residents shall be maintained	Yes	Yes	Yes	Yes	Yes
• Equality indexed in line with national average	Yes	Yes	Yes	Yes	Yes
• Perception of security	No	No	Yes	Yes	Yes
• Public health figures (including perceived health) in line with national average	Yes	Yes	Yes	Yes	Yes
Gotland is a world leading island-region of environmental and energy issues	No	No	No	No	Yes
• Green key figures in line with national average	Yes	Yes	Yes	Yes	Yes

From the official web page of the region we have not found any systematical follow up of the goals. The vision was set in 2008 and three years have now passed which is more than 15 % of the time to reach the goals. Some of the activities should have produced results, for instance the increase in residents, see Figure 5.

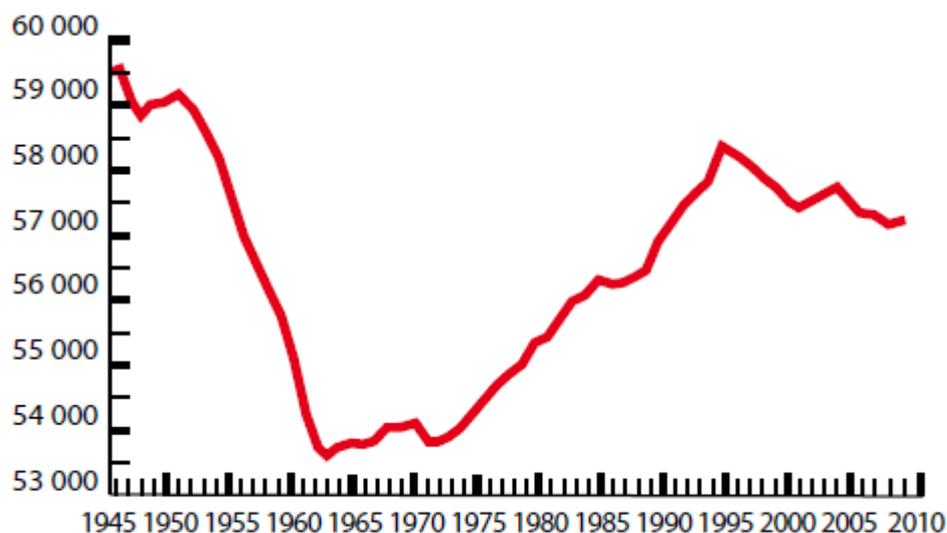


Figure 5: The number of residents in the region of Gotland from 1945 to 2010.

At the official web page (www.gotland.se) we have not found any sign of process related activity or a general approach to collect and merge measurement from different areas and programs.

No key processes have been identified.

In Figure 6 some of the main value adding processes in the region have been identified and introduced to the model template in Figure 1. The vision could be seen as an interpretation of drivers. The strength of the drivers is depending on the feedback from stakeholders in the Swedish context where Gotland exists. Out of the 26000 people employed some 7500 work in public services, some 1500 in agriculture, forest and fishing and the rest are in private business or as self-employed. Due to the large number of people active in these processes they could be considered key processes. Tourism is a particularly important business with Gotland being one of the main Swedish tourist locations in summer. Gotland has 25% of its electricity

generated by wind. This is more than ten times the Swedish average. In a sustainable future energy production is a key process. Gotland is the region with the highest per capita carbon foot print measuring about 33 t CO₂/person and year. This is five times the Swedish average. The reason for this is the limestone based industry and mainly the large cement plant situated on the island. This is the reason for having identifying “providing mineral products” as a separate process.

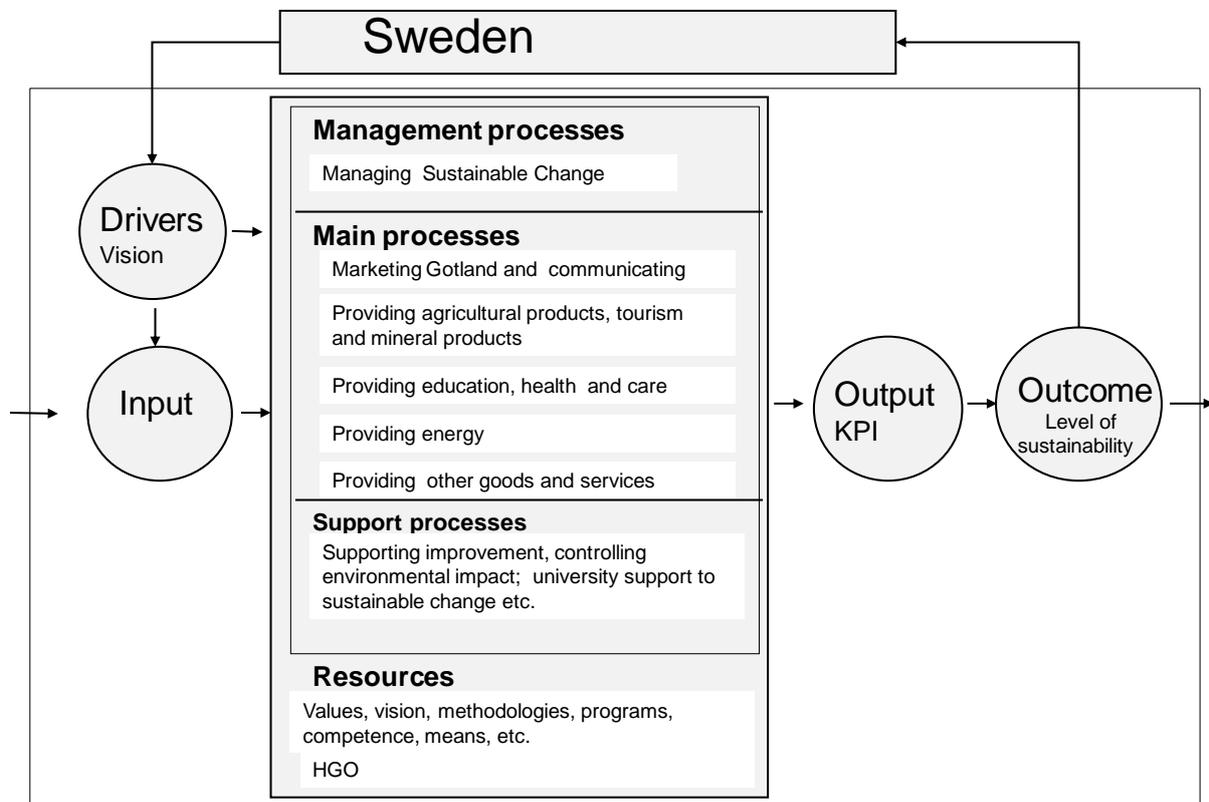


Figure 6. An interpretation of some of the main key processes in the region of Gotland based on Figure 1.

Current state of Gotland compared to vision

The current state is reviewed based on the main objectives of the Vision 2025 document.

- Population from 57000 to 65 000 residents in 17 years which means an increase of some 470 persons per year
- Gotland’s prosperity – Incomes per inhabitant lower than average for Sweden
- Gotland is the natural place for rendezvous in the Baltic Sea Region – No measurements or indication of status
- Gotland has a population with good health who experiences the highest wellbeing in the country – National figures show both good and bad results in different areas.
- Gotland is a world leading island-region of environmental and energy issues - Currently world level in Wind Power generation

Evaluation of change strategies

The vision has been active for three years and more than 15% of the time has passed. No systematic follow up of performance has been found in web page searches. Population has increased two years in a row with some 30 persons per year which is less than 10% of the objective. It is unclear how the strategy looks to increase population. Employment is

occasionally available but it is practically impossible to rent a permanent apartment and day care is struggling to cope even with current demand.

The first indicative results are that there is no “clear” connection from the vision to any type of SMART-goals that would be followed up. The main impression from how the current change process is working is that there are many opportunities for improvement.

Evaluation of the University mission, vision and goals

The University of Gotland is Sweden’s smallest University with around 7 000 students studying fulltime or part time. Converted to fulltime students the number is about 2500. The courses are given both at Campus Visby and as distance education. Seven out of ten students are using the distance option. The University of Gotland can also supply special customised courses that can be bought by organisations.

Vision of Gotland University

The latest vision for Gotland University was prepared and launched during 2010.

“The University of Gotland is a small university with a big idea. We are the leading university for modern education, Liberal Education. The quality of our training is strengthened by the link to our multi-disciplinary research environment and by our clear regional and international linkage.

The university is leading in flexible forms of teaching. Curiosity and a shift in perspective is the driving force for students and employees in accordance to the University's motto, "Passion and science".

Mission

The university law “Högskolelag” (1992:1434) defines the mission which can be expressed as:

Universities shall provide higher education and research that is based on scientific knowledge or art education and development which is based on proven experience.

The university’s task will also be to interact with the surrounding society and to inform of university activities and to ensure that research from the university will benefit society.

In the Research strategy 2010-2015 (2010-06-10 Dnr D11-2009/873) Gotland University has one goal for cooperation and interaction with the society.

Objective: High-quality research at the university should have noticeable effects outside the University

- The university will develop productive research collaborations with government agencies, associations and industry
- The university will contribute to knowledge transfer and long-term sustainable development regionally, nationally and internationally.

Goals

We did not find any connection between the goals and the vision. This could be due to the fact that the vision is rather new (February 2011). More worrisome is the indication we have found that almost none of the goals comply with the criteria for SMART. The goals in the

investigated plans were mostly described as directions and improvements with no specified goals or measurements.

Identification of potential for HGo to participate in the work with Vision 2025

Education and research

The University of Gotland has several fields where education and research are carried out. A matrix is prepared comparing currently taught topics in Gotland University with five areas of importance for regional development, see Table II. The Triple Bottom Line logic has been used to identify Economy, Environment and Health and Care (Social) as being important and covering the main processes in Figure 6. Additionally management has been identified as a key area. The strength of the connection between the University topics and the identified core areas are rated from 1 to 5 with 1 as a weak connection and 5 as a strong connection. The rating has been done by the authors. The rating indicates the potential strength of the connection, not the actual situation. However, current activity has partly influenced the rating in practically indicating what is possible. For example training of Health and Care management in leadership by quality technology clearly demonstrates the possible strong connection.

Table II. Gotland University topics and an assessment of their connection to areas important for the regional development.

	Economy	Management	Health and Care	Education	Environment
Archaeology & Osteology			1		
Biology	1			2	5
Building Conservation	1		1	1	3
Cross-Cultural communication		2	2	1	1
Energy technology	4			3	5
English				1	
Etnology		1	1	1	
Business Administration	5	4	2	3	3
Geography	1			1	2
Geo science				1	4
History		1	1	1	
Law		3		1	2
Art history			1	1	
Quality technology	3	4	3	3	4
Teacher training		1		5	1
Mathematics	2		1	2	1
National economy	4	2	1		4
Software engineering			1	1	1
Renaissance studies					
Social geography	1		1	1	4

Game development	1		1	1	
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The conclusion we can draw from the matrix is that Quality technology and Business Administration are the fields with the strongest connection to the core areas identified for regional development. The same relevance is assessed to exist with the goals and work with Vision 2025.

A summary of the result from the perspective of the overall goals for the Vision 2025:

- At least 65 000 residents living on Gotland
 - This is not really a pure vision, but the strategy that the region has chosen for achieving the vision. The unspoken assumption is that with more people there will be more tax money to pay for the public administration. This means that actually what is looked for is a higher earning potential. A direct link to the existing education and research fields could not be found.
- Gotland prosperity among the best in the country
 - Business Administration has basic higher education that fits in well with what the organization needs to fulfil the vision. Quality Technology and Management has evaluation models and development models for Organization Excellence (USK, MBNQA, EFQM)
- Gotland is the natural place for rendezvous in the Baltic Sea Region
 - This is not really a pure vision, but the strategy that the region has chosen for achieving the vision. A direct link to the existing education and research fields could not be found.
- Gotland has a population with good health who experiences the highest wellbeing in the country
 - Developments in health are clearly linked to the development of activities in service and the service sector. Lean in healthcare is the most obvious link for this. Quality Technology has higher education that fits in well with what the organization needs to fulfil the vision
- Gotland is a world leading island-region of environmental and energy issues
 - Environmental and climate issues are represented in several courses at HGO. Wind Power and Biology are among the topics that fit in well with what the organization needs to fulfil the vision. SWEDESD and Quality Technology can provide good support in sustainable development, environmental management and monitoring and evaluation systems.

Research and knowledge transfer

The university has good facilities to perform research. The support from the combined university and regional library is good. The university should have a good possibility to encourage students to do their thesis work with issues relating to Vision 2025. We have not been able to find any examples of work that systematically builds on these connections, neither in Gotland University nor in the region. There probably are examples but the indication is that much remains to be done on the system level.

Conclusion

Using basic quality management practice and the process view enables to describe the region as a system based process. A review of the main elements of mission, vision, goals, strategies, critical success factors, key processes and metrics reveals that a good part of the basic elements cannot be found in planning documents. The objectives defined in Vision 2025 have not been translated in the SMART goals and there seems to be no systematically follow up.

Provided interest the vision work structure could be considerable strengthened using quality management practice and using a cooperation model based on TQM. The conclusion is that for a region the present state, the visionary state and the chosen change strategies could be visualised more clearly using process models and quality management elements.

The Gotland University mission is defined by the state. The vision partly focuses on regional work, but it is difficult to find any clear objectives for this and there is no identifiable strategy.

Even with the current scope of curricula there would be good opportunities for increased collaboration between the university and the region that could support regional development.

Discussion

Both the vision 2025 and the University of Gotland has identifies the potential in co-operation between the region and the University. In a few groups and areas the work has been started and is in progress but we have still a lot unexplored identified common fields to work in.

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