

University Support to Regional Development – Process Based Stakeholder Management in Gotland

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Abstract

Universities could be seen to have many customers such as students, future employers, the state, parents etc. Universities normally have two main missions, which are education and research. In Sweden there is an additional requirement of societal co-operation both in education and research. Universities are traditionally not very customer focused, but rather organizations that define what is being done based on an internal focus. One question is to what extent stakeholders and their change needs have been identified and also how these needs are being addressed and used as input. This could be studied applying a process view where the main processes are defined by the university mission. This could be studied from a regional context looking at regional needs and relating them to university support. Gotland is the smallest region in Sweden and it hosts the smallest university. This forms a good base for a study on how the university supports and could support regional development. Regional performance is viewed from a process perspective. Results show that customer focus has not been a core value. Consequently it is not well defined what constitutes quality, neither by the studied university nor by the Swedish authorities. This means that customer and stakeholder needs have not been looked into systematically. It also seems that regional Sustainable Development is not getting the attentions it should. Applying customer focus on the regional level indicates several new interesting opportunities for both universities and the region. A condition for these opportunities to be realised is that there is a thorough discussion of what quality and Sustainable Development mean for universities.

Introduction – regional customers and stakeholders

One of the core values of quality and service management is customer focus. The customer defines what constitutes quality and when this is delivered there is customer satisfaction and there is continued business. With clarity of who the customer is and what is required it is relatively straightforward to work for excellence. Who are the university customers? At a first sight we could say that the students are, but then education in only rare occasions is the end product. The competencies learnt will in most cases be used by future employers who also are customers of the educational process. In many countries the government invests a lot in education. In Sweden higher education is free from tutoring charges with the government paying the bill. The one that pays the bill is also a customer. Universities carry out research that has the research community as customer and to some extent the university management who wants publications. Publication should not be an end product, but a first step in development of understanding and practice with business and society being customers. In Sweden there is a law that requires universities to work with Sustainable Development, which could make local and global development needs to be seen as a customer. Universities have the missions of providing education based on a scientific base and to carry out research. In Sweden there is an additional task which says that there should be cooperation with society both within education and research. In many cases the region hosting the university has expectations on it and the value produced. According to Bergman & Klefsjö (2010) the customer is defined as: “The people or organizations that are the reason for our activities”, i.e. “those for whom we want to create value”. This is equivalent to many other quality definitions focusing on the role of customer. We could view the region as a customer for the university. The Bergman & Klefsjö (2010) definition for customers borders the definition of

stakeholders. A stakeholder can be defined as: “Any identifiable group or individual who can affect the achievement of an organization’s objectives or who is affected by the achievement of an organization’s objectives” (Freeman & Reed, 1983). Customers are normally seen as being part of the larger concept of stakeholders. In ISO 26000 (2010) it says that: “A stakeholder has one or more interests that can be affected by the decisions and activities of an organization. This interest gives the party a “stake” in the organization that creates a relationship with the organization. This relationship need not be formal or even acknowledged by the stakeholder or the organization”. This can be interpreted in also seeing future generations and nature as stakeholders, even if there is no formal group advocating their interests. A stakeholder can be one who can affect the organization, but who at least theoretically is not receiving value and therefore is not a customer. In practical terms there might not be that many who are not receiving any value but only being affected. Even suppliers, authorities, financiers receive some value. For the purpose of this study the question of the region as a university customer is extended to studying the university stakeholders in the region. The purpose is to identify how a university could contribute to regional development by using the customer concept on all main stakeholders in a region.

The research questions are:

- How could regional stakeholders and stakeholder needs be identified?
- How could the process view be used to improve university services to a region?

Methodology

The work is based on a case study for the smallest region in Sweden, the island of Gotland and Gotland University which is the only university in the region. Gotland being an island provides clear regional boundaries. Gotland University is the smallest university in Sweden which makes the overview easier. An important part of the input for the case study is coming from other studies looking at different aspects of University support to regional development with focus on Gotland. An assumption underlying the study is that a region can be viewed as a collective of stakeholders and the university as a supplier of services. This means that common quality management can be used based on values such as customer focus, continuous improvement, focus on processes and decisions based on facts. The region is viewed and studied as a process delivering value to a number of different stakeholders.

The process view applied on a region

There are many definitions for what a business process is with one of the shortest being the one from ISO 9000 (2000): “Any activity or set of activities that uses resources to transform inputs to outputs can be considered a process”. In this paper the definition: “A process is a network of activities that, by the use of resources, repeatedly converts an input to an output for stakeholders”, is used (Isaksson, 2006). When using this definition it is important to remember that the process models used should acknowledge the existence of resources. The process view can be used to improve individual processes and to describe entire systems (Isaksson, 2006). In Figure 1 an example of a system model applied on the region of Gotland. The model is based on a common division of processes into management, main and support processes (Bergman & Klefsjö, 2010). Resources supporting all processes are described with a resource box. Resources are described as nouns and could be such things as equipment, personnel and even departments. A common misinterpretation when describing support processes is to mark them using the functional name as for example the “personnel process”, which in reality does not exist. There is the resource of personnel department that manages and supports processes such as recruiting, paying salaries, developing personnel etc. Processes should always be described as something being done. Resources could also be

abstract ones such as competence and culture. Any system studied exists in a larger context which forms an external resource. In this case the external resource is Sweden. The context has a big impact on the studied system. If the context would instead be for example Afghanistan the conditions for regional development would be rather different as would be the possibilities of the university to support them. The processes presented in Figure 1 should be seen as examples and there would for example be other management processes than managing sustainable change.

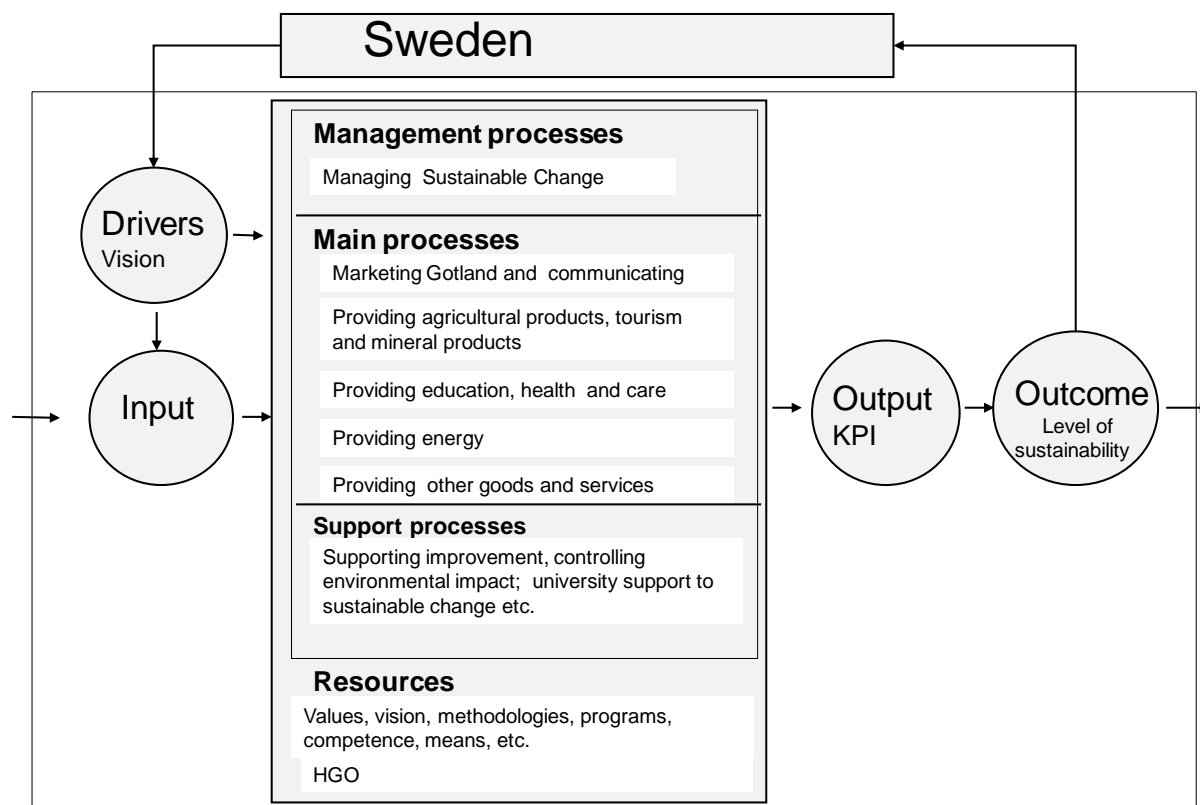


Figure 1. An interpretation of some of the main key processes in the region of Gotland (Abrahamsson & al., 2011).

Output is defined as the output from the process and outcome as stakeholder satisfaction. A common misinterpretation in process presentations is that output is presented as customer satisfaction. This can never be guaranteed. Even if output is according to specifications and the specifications are based on customer needs there could be dissatisfaction by some of the customers. Taking the example of the student as customer the output is the education, grades and exam received. The student then makes an assessment of this and expresses a level of satisfaction which will vary in a student group. If we look at the stakeholder nature the output could be energy used for the university premises and the carbon footprint. The outcome is the effect on for example global heating. Performance indicators as output and outcome can be used to define stakeholder expectations and current performance.

Supporting Sustainable Regional Development

Rockström & al (2009) identify nine planetary boundaries that need to be respected to assure that humanity can operate safely. These are global boundaries defined scientifically with measurable limits. Rockström & al. (2009) note that three limits have already been crossed, these being climate change, loss of biodiversity and the global Nitrogen cycle. The consequences of crossing these limits could be severe and in the worst case lead to a runaway

mode for the plant leading to unforeseen changes threatening the survival of many. The World Business Council of Sustainable Development (WBCSD) depicts in “Vision 2050 – The New Agenda for Business” a few scenarios why *Business as Usual* is bad for everybody including business, (WBCSD, 2010). The report identifies nine human related areas where dramatic change is needed until 2050. The identified areas are: People’s values, human development, economy, agriculture, forests, energy and power, buildings, mobility and materials. Scientists and the industry seem to agree that drastic change is needed and that time is running out. Drastic changes require innovative rethinking which logically should also apply to universities. It could even be expected that universities would be in the lead in terms of supporting innovative thinking for a more sustainable world. Higher education has an essential role in advancing the understanding of Sustainable Development (SD) and in providing society and industries with competent employees (Fien, 2002).

A Swedish government decree states that SD is an overall objective of all Swedish Government policies (Högskolelagen, 2006). The decree stems from a global long-term vision of SD and is related to international decrees and initiatives (c.f. United Nations and European Union). The environmental, social and economic dimensions of SD are expected to be pursued in a coherent manner by all Swedish public authorities and actively influence and shape all policy areas, including universities. This is reflected in the university law (Högskolelagen, 1992) stating that Swedish universities, through their activities shall promote a SD that ensures that both the present and coming generations are guaranteed a sound environment, economic as well as social well-being and justice. This indicates that politicians in Sweden have identified education as a core area for change towards SD.

A university taking its responsibility for work towards SD should relate to the main sustainability aspects both globally and regionally. We would expect that the university vision would indicate how work for reducing carbon emissions and reducing world poverty is carried out and also how Regional Sustainable Development is supported. Many problems, such as the curbing of carbon emissions, need to be solved within the next 10-15 years to avoid the risk of uncontrolled heating. The “safe” temperature increase is set at 1.5-2C above the historical average. Goals based on the vision should be such that major change is achieved within the next 10-20 years. It is the generation receiving their education now that will have the responsibility for making SD happen.

Sustainable Development is both a complex and a simple issue. There are many aspects from different disciplines involved and the time spans are long indicating that understanding of complex systems is required. On the other hand it is simple, if we continue doing things as before, carrying out only minor changes, we gamble with the future of humanity. As described above SD is not only an issue for natural science but one which according to people working with SD affects everybody and every topic taught in universities (Isaksson & Johnson, 2011). In all cases there are many possible issues within work for SD and seemingly in all cases there is a component of regional work for SD. Viewing the region and its stakeholders as customers and looking at their perceived and actual needs for SD could be seen as standard procedure for all universities.

Figure 1 could be used to describe the situation. There are apparent needs on the level of stakeholder satisfaction. Nature and global health are at peril. This should normally mean that there is a strong signal back that becomes a driver for the universities. However, this signal has to pass through the external resource of “Sweden”. The interpretation for this situation is that the external resource consists of the Swedish National Agency for Higher Education

(HSV) and the current practise in Sweden of how to work with SD in universities. Isaksson & Johnson (2011) indicate that one of the problems could be that HSV is not following up how the intentions of the law requiring work with SD is being carried out in universities. The indication is that HSV considers measurement to be too difficult. If HSV is not putting pressure on the universities to do more with SD then the signal from stakeholders is not translated to any strong driver. Isaksson & Johnson (2011) conclude that: "From a business management point of view the situation for vision and goals on SD seems to be poor. Even if one problem for universities could be the fact that the concepts of mission, vision, policy and strategy are not always fully understood by (university) employees the main problem could be lack of management commitment for change towards sustainability." The management could in this case be seen to be the university management but also the national management executed through the HSV. University management needs to focus on those directives given and since drivers for work with sustainable development are seemingly not very strong there could be less attention on SD.

Stakeholder based Quality Management in Gotland

This review is mainly based on work from Abrahamsson & al. (2011) who study if Quality Management can be applied on the regional level. Their assumption is that if we can view a region as an organisation we can also view it as a process. In Figure 1 their proposed result that identifies key processes for regional development. The results have focused on defining the main processes as based on the main activities in the region. The regional vision for 2025 has been studied as has the ongoing change work. The interesting part here is to see to what extent the region follows best practise for change work.

Abrahamsson et al. (2011) have reviewed the Gotland Vision 2025 document and compared it against 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

Abrahamsson & al. (2011) also summarise an analysis of the vision 2025 and its parts and how this could relate to Gotland University:

- 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
 - The Gotland University department of Business Administration has basic higher education that would fit in well with what the regional organizations need to fulfil the vision. Still, regional co-operation is limited. Quality

Technology and Management has evaluation models and development models for Organization Excellence (MBNQA, EFQM and the Swedish SIQ), but nothing of this currently used.

- 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. Some co-operation is taking place with training of university management in Lean.
- 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. The Swedish International Centre of Education for Sustainable Development (SWEDESD) is a department of Gotland University and could work as an important competence resource. Quality Management competence could also be a support for environmental improvements.

The general impression is that there would be a number of rather simple improvements in clarifying the main element of improvement work and in bringing all participants up to a certain level. Gotland University has been part of the vision-work at least formally, but even if the university in the regional documentation is mentioned as the engine of development there are few visible results on the practical level. The lecturer competence within relevant areas such as marketing, business development, quality management and knowledge management has not been used to any greater extent in the vision work or in co-operation with society within education and research. The impression from the critical review of the regional change work from a Quality Management perspective is that there seems to be considerable improvement potential in working more effectively with change. The vision work is supposedly open and information is presented on the regional web-sites. Even if more than three years have elapsed of the vision project no results for progress have been found on the web-site. In the view of the importance of making Sustainable Development happen at all levels it is worrisome that regional change work towards a visionary state is slow.

The Gotland university vision from 2010 states: "Gotland University 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."

There is a mention of a clear regional linkage, which should mean focus on regional development. The concept of Liberal Education with focus on practically related education giving students a broad view and learning them critical thinking should be well suited for increased educational contacts with regional organisations. However, there are no clear goals linked to the vision that can be found on the university web-site.

Abrahamsson et al. (2011) conclude that provided interest the regional vision work structure could be considerable strengthened using quality management practices and it could be visualised more clearly using process models. They also conclude that with the current scope of curricula in Gotland University there would be good opportunities for increased collaboration between the university and the region that could support regional development. In the analysis of different curricula and their relevance to regional development particularly the topics of Business Administration, Quality Management, Energy Technology, National Economy, Biology, Teacher training and Social Geography seem to be of interest.

Regional development is a broad task involving many activities. It could be support given to SMEs, public planning and permission giving processes, focus on particular areas of functional competence such as tourism, education, health care, wind power, agriculture, financial services etc. These activities should be of interest for many types of students but at least for those from the topics mentioned above. Problem based learning with focus on adding value to the host organisation might be a win-win solution. Students would get much appreciated practical exposure and organisations could get support in their development. This could be viewed as corresponding well to the Gotland University dedication to Liberal Education. Provided these activities are done in a larger context of improvement, which also is the focus of studies, it could be possible to combine problem based learning with action research as part of regional development.

University Stakeholder Quality

As part of a research project studying the needs of Gotland SMEs within manufacturing the preliminary results indicate that there is need for increased support within logistics, management systems and engineering competence. However, it seems that there is no recent survey actually asking what SMEs on Gotland would need. Generally there seems to have been no systematic identification of stakeholders and their needs from the part of Gotland University. This could be related to the fact that the customer concept in Swedish Universities is not very clear. When studying the web-site for the Swedish National Agency for Higher Education (HSV) there is no explicit definition of what quality is or who the customer is (Ljungblom & Isaksson, 2011). An example of a common quality definition is “the quality of a product is its ability to satisfy, or preferably exceed, the needs and expectations of the customers” (Bergman & Klefsjö, 2010). A customer can be defined as: “The people or organizations that are the reason for our activities”, i.e. “those for whom we want to create value” (Bergman & Klefsjö, 2010). However, it seems that HSV has neither defined quality nor customer. On the official HSV web-site – www.hogskoleverket.se - an extensive list with several hundred entries of how different expressions are defined is without any mention of customer or quality. HSV refers to European Guidelines that describe Quality Assurance (ENQA, 2009). However, we have not found any definitions on who the customer is and how quality is defined. This issue needs further research in the form of interviews and document studies. Provided the first indication is correct then there could be a serious problem in that the lack of understanding the basics of quality and customer focus would mean that directives for universities are not very clear. Swedish authorities require that universities have an environmental management system based on ISO 14001 but there is no similar requirement involving ISO 9001.

Gotland University has not defined who the customers are. The expression is not even used. To the extent anybody is viewed as customer it is the student. This could be qualitatively explained looking at Figure 1. The main drivers could be seen as directives from the state and

HSV. Since the apparent needs for regional development are not translated into drivers there is a problem in the feedback loop from the level of stakeholder satisfaction back to drivers. This could at least partly be because the external resource of “Sweden” or more specifically in this case the culture and common understanding of what is quality does not identify key stakeholders and their needs and cannot translate sustainability needs into operational directives. In practical terms this means that the external drivers for Gotland University in working with regional stakeholders and with sustainable development are weak. Provided lack of internal drivers there is limited interest in asking the question: “How could Gotland University help Sustainable Development in the region?”

When this question is of interest we can identify who the customers and stakeholders are and what they perceive as quality. For the university, important customers are all the organisations in the region, both private and public. They can be customers directly by co-operating within education and research or indirectly by employing students and benefiting from research done. Figure 1 describes some of the main organisational groups that could be customers. Finding out requirements here could be done with surveys and interviews. This would clarify the feedback loop from the current level of stakeholder satisfaction – the process outcome – and relating it to university capabilities. Ljungblom & Isaksson (2011) look at educational quality by looking at requirements from students, employers, state & HSV and university management. It seems that the follow up is mainly on those areas where it is mandatory, like measuring the student perceived quality with course evaluations. Whether topics taught are relevant is not assessed. How the employability is and if students are satisfied with what they learnt after they have started working is not measured regularly. Arguments for not measuring are such as that it is too difficult and that employability is not a good measure. HSV does not require the measurement of employability or employer satisfaction even if employers could be considered to be important customers for university services. This can be seen to support the indication that the authorities controlling quality – HSV – might not have fully understood the quality concept.

University Knowledge Management

Ljungblom et al. (2011) define Knowledge Management (KM) as a six stage process:

- 1) Identifying the knowledge that needs to be managed
- 2) Acquiring the identified knowledge
- 3) Refining and processing the acquired knowledge
- 4) Storing the processed knowledge
- 5) Sharing the knowledge
- 6) Applying the knowledge in processes and products

For any organisation it is important to know what the core knowledge is that needs to be managed. University knowledge management strategies could at least partly be based on what stakeholder needs there are in the region. The knowledge management process above could be introduced into the process based regional system model (Ljungblom et al. 2011), see Figure 2.

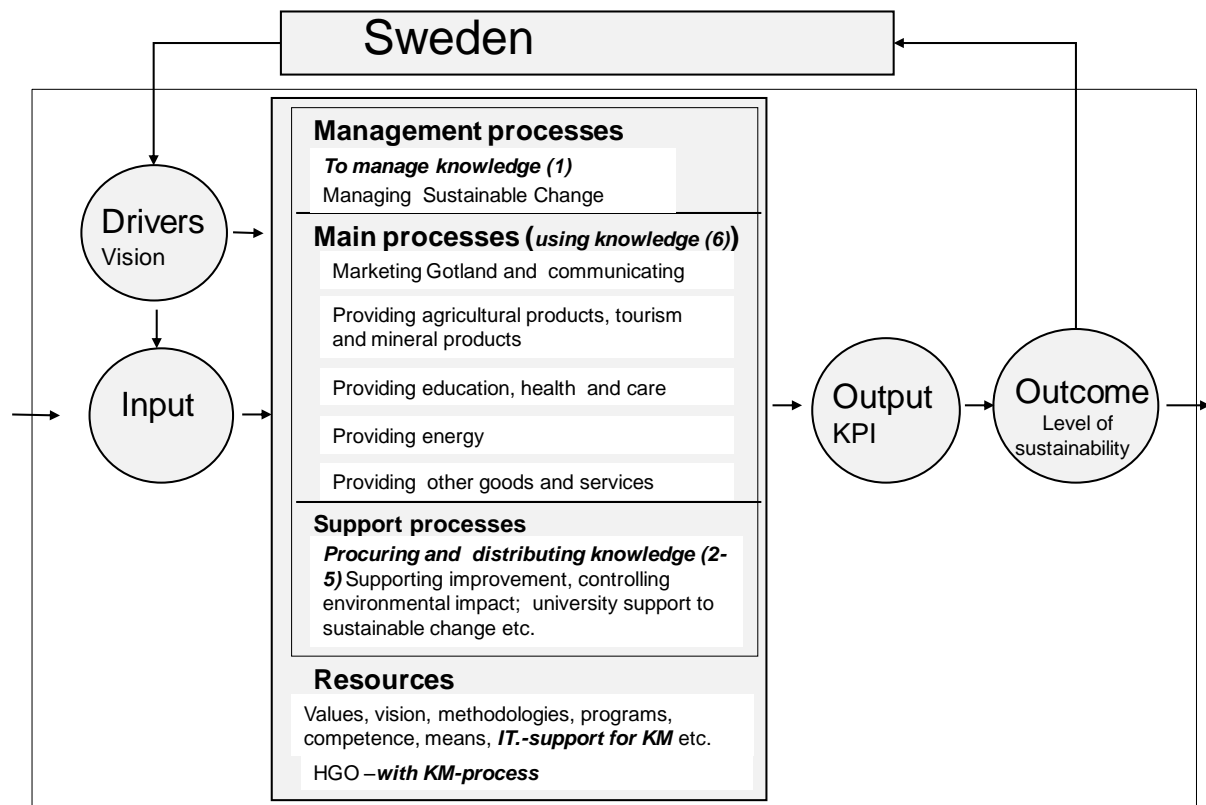


Figure 2. The region of Gotland described as a system of processes where key processes and resources have been identified and linked to the steps in a Knowledge Management process. Ljungblom & et al. (2011) and adapted from Abrahamsson et al. (2011).

Gotland University currently hosts a centre for Wind Power information, which could be seen to be a knowledge management process (Ljungblom et al. 2011). The focus in the Ljungblom et al. (2011) study is on how to carry out knowledge management of change management. Considering the requirements on change indicated in the Gotland Vision 2025 there should also be a need of using the best available knowledge on how to manage and lead change. Ljungblom et al. (2011) present the idea of creating a centre of Change Management information emulating the centre of Wind Power information. Currently the competence and research generated within quality and change management is not easily available for regional stakeholders. Technically it is not very difficult to make relevant information accessible. However, the challenge is to make step 6 in the knowledge management process happen: “Applying the knowledge in processes and products”. This requires that the stakeholders concerned see the value of the knowledge and that they are able of converting it to practical use. This is another issue that would require that there is customer and stakeholder focus from the part of the university.

Conclusions

All answers to the research questions are indicative and need further research to be confirmed. Based on the first review and reasoning some preliminary answers can be suggested to the questions:

- How could regional stakeholders and stakeholder needs be identified?
- How could the process view be used to improve university services to a region?

It seems that the process view can be used to describe regional stakeholders by using a process based system model. It also appears to be possible to use a basic customer based

quality definition to find out which the main needs are. When there is an acceptance of seeing identified stakeholders as customers, work could be done rather easily to describe main stakeholders and their needs. Organisational needs could be defined as employment needs and needs for particular areas. Many of the companies on Gotland are very small and would logically need support with different types of competency.

The second question of how the process view could be used to improve university services to a region has a similar answer as the first question. The customer concept needs to be defined and understood. Customers are those that receive value from the university processes. Employability is sometimes criticized as a too narrow objective for university education. There should also be something which can be described with the German word “Bildung”, which is more than just education. One Swedish interpretation is that the students should have learnt critical thinking and be able to manage in different contexts. Another is that Bildung is related to a classical education. In the Gotland University version with Bildung in Liberal Education this means that students have to take courses from different topics to broaden their horizons and to have increased contacts with working life. Irrespectively of what Bildung is it could be argued that there should be a customer for this, which should not only be the student itself. Bildung should be detectable by others including employers. If Bildung cannot be detected by others, then the question is how we can know that it exists? How, would we know if this contributes to regional development? One possibility could be for the university lecturers and researchers to engage in the local debate in controversial issues, for example relating to Sustainable Development reviewing how the planetary boundaries as well as the industrial challenges identified could be handled by the region. Here, lecturers and researchers could all be part in supporting society in translating complex global demands into topics for practical discussions and practical solutions with people in the region.

As for education, for research, there should be customers. It should be possible to assess how the region has benefited from research carried out. This would require following research results beyond the scientific publications to see how the knowledge has been used. The process view can be used to identify regional customers and customer needs with the purpose of improving the work done for the region.

Discussion

The working hypothesis that emerges from the research is that the Swedish National Agency for Higher Education (HSV) has not defined what quality is and who the customers are based on existing research. There is therefore the risk that the word is used with different meanings and that directives to universities are not very clear. The customer definition could be broadened to stakeholders and issues relating to Sustainable Development, which would enable improved focus on Sustainable Regional Development. However, at this level directives from HSV are vague, possibly because like quality, the concept of sustainable development has not been clarified and translated to the operational level. Ljungblom and Isaksson (2011) discuss different quality concepts with focus on the user and the value based concepts. The value based relates the customer perceived user value to the cost of it. This could be further worked with and related to sustainability as value per harm (Isaksson and Steimle, 2009).

This pilot work based on Gotland and Gotland University creates interesting hypotheses and highlights possibilities for increased support from universities to Sustainable Regional Development. Several interesting research opportunities emerge. As a start a web-survey of private and public organisations followed up by some interviews could help to define regional

needs and regional expectations for the university. Since the region of Gotland is small with 57000 inhabitants the work should be manageable. Primarily different stakeholder groups and their needs should be identified and then matched to current and future university capabilities.

References

- Abrahamsson, S., Fredriksson, M, and Isaksson, R. (2011). University Services for regional Development - Ideas on Stakeholder Based Quality Management in a Region. *Proceedings of the International Conference- Quality and Service Sciences*, 14th QMOD Conference, August 29-31, San Sebastian, Spain.
- Bergman, B. & Klevsjö, B. (2010) *Quality from Customer Needs to Customer satisfaction*. Studentlitteratur, Lund.
- ENQA (2009). Standards and Guidelines for Quality Assurance in the European Higher Education Area. Downloaded July 1, 2011 from [http://www.enqa.eu/files/ESG_3edition%20\(2\).pdf](http://www.enqa.eu/files/ESG_3edition%20(2).pdf).
- Fien, J. (2002) Advancing sustainability in higher education – Issues and opportunities for research. *International Journal of Sustainability in Higher Education*, (3)3, 243-253.
- Freeman, R.E. & Reed, D.L.(1983). Stockholders and Stakeholders: A New Perspective on Corporate Governance. *California Management Review*, (25)3, 88-106.
- Högskolelagen (1992). Chapter 1 § 5 Högskolelagen 1992:1434 (In Swedish). Downloaded July 8, 2011 from <http://www.riksdagen.se/webbnav/?nid=3911&bet=1993:100>
- Högskolelagen (2006). Regeringens skrivelse 2005/06:126 (In Swedish). Downloaded July 8, 2011 from <http://www.sweden.gov.se/content/1/c6/06/06/92/5ff0d494.pdf>
- Strategiska utmaningar – En vidareutveckling av svensk strategi för hållbar utveckling
- Isaksson, R. (2006). Total Quality Management for Sustainable Development – process based system models. *Business Process Management Journal*, (12)5, 632-645.
- Isaksson, R and Johnson, M. (2011). Sustainable Development in Universities – The power and role of visions and goals. *Proceedings of the International Conference- quality and service sciences*, 14th QMOD Conference, August 29-31, San Sebastian, Spain.
- ISO 9000 (2000). Quality management systems - Fundamentals and vocabulary. www.iso.org
- ISO 26000 (2010). *Guidance on Social Responsibility*. www.iso.org.
- Ljungblom, M. & Isaksson, R. (2011). Educational Value in Distance and in Campus Education seen from a Stakeholder Perspective – The Case of Sweden. *Proceedings of the International Conference- Quality and Service Sciences*, 14th Toulon-Verona Conference, September 1-3, Alicante, Spain.
- Ljungblom, M., Isaksson, R. and Hallencreutz, J. (2011). University Services for Regional Development – The case of Knowledge Management of Change Competence in Gotland. *Proceedings of the International Conference- quality and service sciences*, 14th QMOD Conference, August 29-31, San Sebastian, Spain.
- Johan Rockström, Will Steffen, Kevin Noone, Åsa Persson, F. Stuart III Chapin, Eric Lambin, Timothy M. Lenton, Marten Scheffer, Carl Folke, Hans Joachim Schellnhuber, Björn Nykvist, Cynthia A. de Wit, Terry Hughes, Sander van der Leeuw, Henning Rodhe, Sverker Sörlin, Peter K. Snyder, Robert Costanza, Uno Svedin, Malin Falkenmark, Louise Karlberg, Robert W. Corell, Victoria J. Fabry, James Hansen, Brian Walker, Diana Liverman, Katherine Richardson, Paul Crutzen, and Jonathan Foley. (2009). *Ecology and Society*, 14(2):32
- WBCSD (2010). *Vision 2050. The New Agenda for business*. www.wbcsd.org.