SIQ Management Model

Manual

VERSION 2022:2

SWEDISH INSTITUTE FOR QUALITY SIQ

SIQ Management Model – a management model for leading for success in a turbulent world

Uncertainty, instability and demands for change are on the agenda in all sectors of society, and practitioners and researchers alike would no doubt agree that we live in an uncertain and turbulent world where the wheels are turning faster and faster. Traditionally competitive companies are increasingly being overtaken by much younger, digitalised competitors, and social systems are changing rapidly, creating new conditions for business. We have an ageing population where fewer taxpayers will have to support more and more people, which requires development and new ways of working.

To manage and lead organisations in this fast-changing world, we need new management models that ensure an organisation's current stability while developing an ability to adapt and innovate to quickly address societal challenges and keep pace with rapid technological change - while maintaining a steady focus on economic, environmental and social sustainability.

FOCUS ON THE FACTORS THAT LEAD TO SUCCESS

The SIQ Management Model represents an important step in being able to provide a management model adapted to lead towards success in this new changing world. For almost 4 years, researchers and practitioners have contributed to the development and testing of the model we have today. We are very grateful for all the efforts and for the financial support we have received from the Swedish Agency for Economic and Regional Growth, the Swedish Agency for Innovation and the SIQ stakeholder association with currently 128 members. The focus in the continuous development of the SIQ Management Model is on the factors that lead to business success. How is success achieved?

First of all, we can say that all organisations, whether private, public or in civil society, exist for the very reason that they are there for someone. Creating value together with these customers, users and stakeholders is a good first step. Focusing on leading towards a sustainable future is the foundation of a successful business. Coworkership becomes even more central, with skilled, motivated and equal coworkers stepping forward and taking responsibility for the whole, even beyond traditional roles. Establishing a way of working and a culture where value-creating processes are constantly improved, transformed and developed then becomes the foundation of the organisation's ability to adapt. This culture must also encourage an openness, willingness and courage to try new things in major innovative steps in order to develop the innovations in products, goods, services and processes that the organisation needs and that customers and stakeholders demand.

CULTURE, STRUCTURE AND SYSTEMATICS

The SIQ Management Model builds on a culture and success factors and also provides the structure and systematics needed to strategically develop the business. The model is adapted for use in all types of operations, such as private companies in the business sector, public organisations, civil society, large, small, global or local player. To facilitate the use of the model, we have developed this manual.

MANUAL - SIQ MANAGEMENT MODEL

The first version of the SIQ Management Model was launched on 22 January 2018 and during 2018 - 2021 the model has been successfully used in the framework of both the Swedish Quality Award - Sustainable Success and the Better Schools Quality Award. In 2021, we have received tips and ideas on how to improve both the model and the manual.

UPDATES ON SUSTAINABILITY AND STRATEGIC RATIONALE

At the beginning of the year, SIQ published several scientific papers on excellence models in the international journal Total Quality Management and Business Excellence. This new knowledge, together with feedback from users of the model, has contributed to a number of updates to the 2022 version of the SIQ Management Model - together developing the rationale for sustainable success in the fifth quality wave - Quality 5.0.

Among other things, the model now asks for more clarity about prospective customers' expectations and wishes and how strategic work can make this clear. Proactivity and collaboration with partner businesses are elements that are also highlighted more clearly as important components in leading and steering towards sustainable success with economic, environmental and social sustainability. In this, it is also important to have consensus on what process management means in practice, with both trust-driven and detail-driven processes. Finally, this year's updated version also aims to develop support for the development of the importance of coworkership for sustainable success - what does it mean for an organisation to lead through coworkership?

At the same time, we know that the model can be made even better, so please continue to give us feedback and suggestions for improvements in 2022, and we'll take it with us into 2023. Please contact us at siq@siq.se. SIQ exists for those organisations that want to improve and we look forward to working together to achieve sustainable success for your business!

GOTHENBURG/STOCKHOLM JANUARY 2022

ANDERS FUNDIN
Director of Research,
SIQ – the Swedish Institute for Quality

GÖRAN LUNDVALL
CEO,
SIQ – the Swedish Institute for Quality

Definitions SIQ Management Model

ADAPTABILITY: An organization's ability to adapt to change both quickly and efficiently.

AIM: Used by some organizations instead of either a business idea and/or vision.

BUSINESS IDEA: A statement that describes the aim or raison-d'être of an organization.

CONTINUOUS IMPROVEMENT: The constant improvement of processes that helps the organization reach ever-higher results through gradual change.

CREATIVITY: The generation of ideas for new or improved products; i.e. goods, services and processes.

CULTURE: Assumptions, values/success factors and behaviours shared by the people in an organization. Assumptions and values/success factors govern how people interact with each other and with other stakeholders.

CUSTOMER: The customer is who the organization creates value for. The customer is one of the organization's stakeholders and success is facilitated if customers are consulted when developing offerings.

DIVERSITY: The extent to which the employees in the organization recognize, appreciate and utilise the properties that make individuals unique. Diversity can relate to age, ethnicity, sex, faith, physical capacity and sexual orientation.

EMPLOYEE: A person employed by the organization (full-time, part-time, including volunteers), including leaders/managers on all levels.

EQUALITY: The equal and fair treatment of all people regardless of gender, age, ethnicity, nationality, religion, disability or sexual orientation.

INNOVATION: The practical transformation of ideas into new products; goods, services and processes. Innovation is a broad concept and includes product, process, marketing and organizational innovations (OECD, 2005).

MANAGER: A person who coordinates and balances interests and activities for everyone who has an interest in the organization.

PARTNER: An external party with whom the organization strategically chooses to cooperate to achieve common goals and provide long-term mutual benefit.

PARTNERSHIP: Permanent cooperation between the organization and a partner that creates and shares greater value for both parties. Partnerships can be formed with, for example, suppliers or customers. Strategic partnerships support the organization's strategic goals in a given way.

PROCESS: A network of activities repeated over time and the aim of which is to create value for an external or internal customer (Bergman & Klefsjö, 2020). There are three types of processes: management processes, support processes and main or 'core' processes.

PRODUCT: A product can consist of goods and/or services which are the result of work performed.

QUALITY: Among many definitions of quality, the SIQ Management model is based on the following definition based on a customer perspective: The quality of a product is "... its ability to satisfy, and preferably exceed, customers' needs and expectations" (Bergman & Klefsjö, 2020).

SELF-EVALUATION: Self-evaluation refers to a comprehensive and systematic evaluation of the working methods of one's own organization and the results are compared to a model such as the SIQ Management Model. Self-evaluation helps the organization to identify where its strengths lie and what can be improved. Using self-evaluation, improvements can be planned, implemented and monitored.

SERVICE: An activity or function that delivers value to a recipient.

SOCIETY: The social infrastructure outside the organization that can be affected by the organization.

STAKEHOLDER: Stakeholders are all those who have some interest (a stake) in the organization, its activities and performance. Examples of stakeholders include: customers, employees, owners, governing bodies, suppliers, partners, authorities and society in general. A successful organization considers its stakeholders' needs, demands, requests and expectations, balances them, and evaluates its performance in relation to its stakeholders.

STRATEGIC WORK: Continuous interplay between three related activities - conceptualisation, enacting and coordination - enabling organizations to implement strategies by means of collective actions in collaboration with stakeholders (Weiser, Jarzabkowski, Laamanen, 2020).

STRATEGY: An overarching plan that describes the tactics with which an organization intends to realize its business idea and vision and that is then converted into adapted strategic goals and aims that reflect what the organization has to do.

STRATEGY CONCEPTUALISATION: Activities involved in generating and continuously re-evaluating the strategic direction of an organization (Weiser, Jarzabkowski, Laamanen, 2020).

SUCCESS FACTORS: Factors that, according to research and practice, give rise to better results and success in an organization, regardless of sector or size.

SUSTAINABILITY: The most common definition of sustainability is: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). Most definitions of the concept of sustainability are built on the three dimensions: social, environmental and economic sustainability.

VISION: Description of what the organization is trying to achieve in the long term. It is intended to provide clear guidance in the choice of present and future alternative courses of action and, in combination with the business idea, forms the basis of strategies and policy.

WORKING METHODS: Results are achieved through an organization's working methods. Working methods can be seen as a series/sequence of activities and can sometimes consist of a process, but not always. Working methods are designed to generate the best possible results and to support desirable values upon which the organization wishes to rest. If desirable results are not achieved, change and improvements can help them to be.

Contents

1. INTRODUCTION 7

2. THE FIFTH QUALITY WAVE – QUALITY 5.0 7

3. SIQ MANAGEMENT MODEL – AN EXCELLENCE MODEL 9
3.1 Experiences of business excellence models 10

4. WHAT LEADS TO SUCCESS WITH PROSPECTS OF A SUSTAINABLE FUTURE? 11

5. HOW HAS THE SIQ MANAGEMENT MODEL BEEN DESIGNED? 13

6. THE MODEL'S THREE CORNERSTONES 13
6.1 Culture 14
6.2 Structure 15
6.3 Systematic approach 15

7. AN IMPORTANT INITIAL DOCUMENT – THE ORGANIZATION'S CURRENT SITUATION AND STRATEGIC WORK 17

8. MAIN CRITERIA AND SUB-CRITERIA 18
8.1 Working method in focus 18
8.2 The common thread 18
8.3 Sustainable developmen 19
8.4 Sustainability pervades the SIQ Management Mode 19
8.5 Frameworks for sustainable development 20

9. GENERAL DESCRIPTION OF THE FIVE MAIN CRITERIA 23
9.1 Customers and stakeholders 23
9.2 Management 24
9.3 Employees 25
9.4 Organizational processes 25
9.5 Results 26

10. GENERAL ADVICE ON THE APPLICATION OF THE SIQ MANAGEMENT MODEL 29

11. EVALUATION ACCORDING TO THE SIQ MANAGEMENT MODEL 30
11.1 Description of the organization 30
11.2 Self-evaluation 30
11.3 External evaluation 31

12. ASSESS IN A NATIONAL AWARD 31

13. THE SIQ MANAGEMENT MODEL AND DIGITALIZATION 32

14. SIQ MANAGEMENT MODEL AND INNOVATION 33

15. OTHER TOOLS 34
15.1 SIQ Success Insight 34
15.2 SIQ Contrast 35
15.3 SIQ Management Index 36
15.4 SIQ Quality Culture Index 37

16. FAQS ON THE SIQ MANAGEMENT MODEL 38

17. THE MODEL'S AUDIT PLAN 39

18. REFERENCES 40

1. Introduction

This manual provides advice and instructions on how the SIQ Management Model should be used to achieve good results and success in an organization. By way of introduction, the manual provides a description of the quality field and its development in a context in the form of a review of where the field is today combined with prospects for the future with the need of quality development in order to meet the challenges of social development. The recommendations given in this manual are based on research and the practical application of excellence models in general and the SIQ Management Model in particular.

The SIQ Model has existed since 1991 and provided support to Swedish organizations and companies in their development (SIQ, 2017). Thanks to funding from the Swedish Agency for Innovation Systems and the Swedish Agency for Economic and Regional Growth in 2015–2017, SIQ conducted a major interactive research project with researchers and practitioners working together to develop the model. The model provides research-based guidance for organizations on leadership in a rapidly changing world. Our hope is that the manual will make it easier to work with the SIQ Management Model and provide support to your organizational development. Organizations that then decide to apply for the Swedish Quality Award - Sustainable Success or the Better School Quality Award use the model as a basis.

The SIQ Management Model and this manual are available digitally and free of charge via the SIQ website (www.siq.se.

2. The Fifth Quality Wave – Quality 5.0

Around 1960, SAAB based in Trollhättan and Japanese Toyota were approximately the same size – both manufactured about 30,000 cars a year. Over the subsequent decades, the gap grew and in 2012, after years of setbacks, the journey came to an end for SAAB while Toyota reached number one in the world, producing 10 million cars. This is one of many manifestations of the "Japanese Miracle", which has dominated quality thinking in the western world over the last few decades. But times change. An entirely new way of leading and governing organizations is now required. We are talking about the Fifth Quality Wave – Quality 5.0 (Deleryd and Fundin, 2015), see Figure 1.

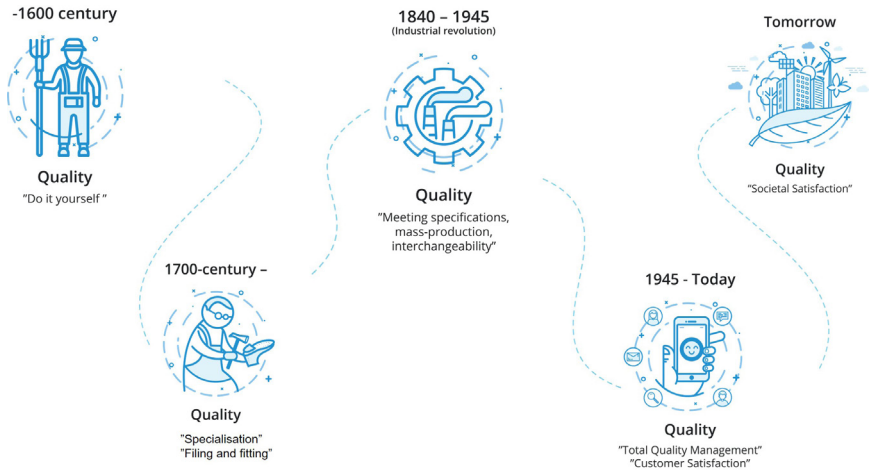


FIGURE 1. After four generations of quality, we are now talking about the Fifth Quality Wave and "societal satisfaction" (Deleryd and Fundin, 2020).

To be able to look forward, we have to understand history. In the course of a couple of decades, the western world went from self-sufficiency via bartering to industrial revolution – three quality waves that radically changed both people and organizations. After the Second World War, a fourth wave was started in the east, driven by a national desire for revenge after a lost war. In the mid-1980s, the world marvelled at how a nation like Japan could become a first-rate global player. Japan's quality tools and continuous improvement in combination with stubborn perseverance and a new global management philosophy – Total Quality Management – in which the customer, and not the product, was in focus and the organization constantly developed, were the success factors. Today, Japan is the world's third-largest economy and a G7 country. No-one raises an eyebrow at the Japanese Miracle anymore and the Fourth Quality Wave is starting to ebb away.

But a fifth wave is already on its way. The Fifth Quality Wave, which we have chosen to call "Quality 5.0", consists of several parts. We see a new global challenger from another country in the east – China – coming to the fore, while on home soil we see modified consumer requirements in combination with ever-faster technological development, which is changing behaviour patterns. As a result of its first quality plan 1996-2010, it is now clear that China improved the quality of its goods and services to levels on a par with the west. Now, as China enters the home straight of its second quality plan, 2011-2020, it is globally competitive and also occupies strategic ownership positions, in both Europe and elsewhere. Several voices in the debate are saying the same thing and China is not the only challenger. The Indian economy is also growing rapidly in competition with China.

The Fifth Quality Wave is also about global technological development. The digitalisation of services is erasing borders and driving new consumer behaviours that increase the demands on services and relations. At the same time as customer demands are increasing, we are unfortunately seeing the deterioration of employee commitment and satisfaction. Gallup's "2017 State of the Global Workplace" shows that only 14 per cent of all employees in Sweden are actively committed to their work – employees who should be spurred to be innovative and agile and to seek change.

Quality 5.0 challenges on several fronts the prevailing theories and patterns of thought on how to run organizations successfully. Current management models do not lead to sufficiently agile organization and committed employees. Today, most people on the labour market have very solid skills and follow trends and development in their industry, their country and the world at large. The inefficiency arising from uncommitted employees is almost impossible to quantify. The SIQ Management Model is based on the idea of Quality 5.0 and a fast-moving world. Developing a management model is a never-ending task to keep up with the times. This is why we are looking forward to your feedback with regard to your use of the model and how we can continuously improve it. Articles and blog-posts are regularly published on the Quality 5.0 Forum: https://forum.siq.se. SIQ's forum for dialogue on sustainable success welcomes all contributors.

3. The SIQ Management Model – An excellence model

The SIQ Management Model is an "excellence model". Put in very simple terms, the aim of excellence models is to help organizations to do the "right things" in the "right way" and hence achieve success. The "right things" refer to products; goods and services that the organization's stakeholders, customers and users demand and attach value to. The "right way" refers to the organization having and continuously developing appropriate working methods and processes to deliver the "right things". To achieve success, there must always be a balance between what the organization delivers and offers and the way in which this is done. There must be a balance between an organization's internal and external efficiency. Every organization exists in a changing world. The "right things" and the "right way" today are not necessarily the same tomorrow. This is why the SIQ Management Model constantly stresses the importance of improving the adaptability of the organization so that it is always relevant and can thereby achieve success, see Figure 2.

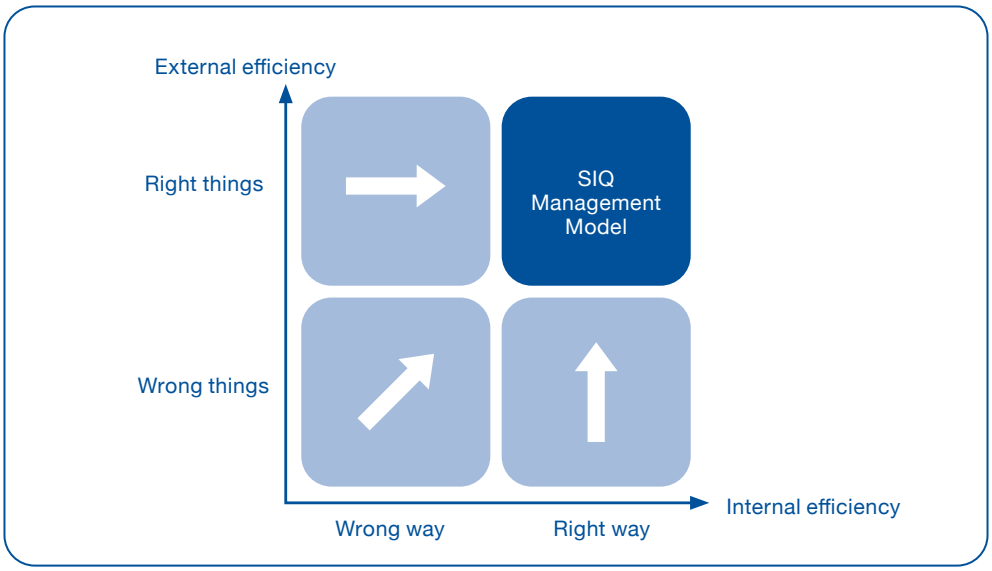


FIGURE 2. The balance between the organization's internal and external efficiency.

The following can be said to be the overall properties of excellence models:

- **GENERAL** – can be used by all types of organization and company, large or small, in different sectors.
- **LEADERSHIP PHILOSOPHY** – based on a philosophy on how managers lead and steer an organization towards improved results.
- **HOLISTIC APPROACH** – covers all parts of an organization and pinpoints the areas that impact an organization's results.
- **NON-REGULATORY** – the models do not impose demands but ask questions about an organization's working methods and results, which constitute the two foundations of excellence models.
- **THREE CORNERSTONES** – a systematic approach reinforces a culture consisting of success factors that are realized by improving working methods based on criteria in the structure. Combined together, the culture, structure and a systematic approach constitute the three cornerstones of excellence models.
- **EVALUATION MATRIX** – which creates a dynamic by evaluating and improving the organization's working methods in order to achieve better results.

In addition to the above-mentioned general properties of excellence models, the following are more specific characteristics of the SIQ Management Model in particular:

- **RESEARCH-BASED** – The SIQ Model has been developed as part of an interactive research project in 2015–2017 together with 130 researchers and practitioners; specialists in quality development, business excellence, service design, sustainability and innovation.
- **SWEDISH EXCELLENCE MODEL** – the model has been designed based on the characteristics of Swedish culture and leadership ethos: decentralization, employee participation and co-determination, an employee mandate for decision-making, equality, diversity, a sense of security and safety, short decision-making processes, transparency, trust, sustainability and innovation. At the same time, it can be observed that these properties have been shown to be universal qualities needed in order to achieve success.
- **PRACTICAL RELEVANCE, PRACTICAL VALIDITY** – the model deals with present and future challenges faced by organizations and companies.
- **STIMULATES IMPROVED RESULTS** – the model is designed on the basis of qualities shown by leading organizations and covers the areas that have the greatest impact on results.

3.1 Experiences of business excellence models

A business excellence model can be the foundation for sustainable development in many ways. Many use it when planning strategy and activities in order to gain a holistic perspective of their organization.

The experiences of excellence models can be summarised in the following points:

- They give management and employees a holistic picture of the organization and its activities.
- They give insight into the link between working methods and results.
- They create a common language and strong commitment in the organization when managers and employees work together to develop working methods and achieve better results.
- They stimulate systematic improvement efforts.
- They integrate relevant areas such as sustainability, innovation and quality development.
- They provide support to corporate sustainability reporting, a European Directive incorporated into Swedish law in 20171.
- They support and facilitate systematic benchmarking.
- Working systematically with the model leads to improved results. Research points to a clear correlation between systematic improvement efforts in accordance with excellence models and improved results, for example in the form of increased value to customers, employees and owners (Eriksson and Hansson, 2003; Bäckström, 2009).

The development of the SIQ Management Model has also been inspired by the "Springboard" tool, developed at the Department of Quality Technology and Statistics at Luleå University of Technology (LTU). The Springboard is also based on values and cornerstones in Total Quality Management, but is less extensive than the SIQ Management Model with lower scoring weight adapted for smaller organizations (Hellsten & Klefsjö, 2020).

1 For companies with >250 employees, a balance sheet total of > MSEK 175 or net sales of > MSEK 350

4. What leads to success with prospects of a sustainable future?

Success can be defined in many different ways. What characterises successful quality development leads us on to a discussion on what characterises and develops a sustainable society in all three dimensions, i.e. economic, environmental and social sustainability together with organizations' employees, their customers and stakeholders.

There is a large amount of research showing the link between satisfied employees and more satisfied customers and stakeholders. Based on earlier research, Hallencreutz, Deleryd and Fundin (2020) develop this reasoning to highlight the links between more satisfied employees, customers and stakeholders and how this can also lead to economic, environmental and social sustainability – taken together, a link that shows the way to sustainable success. Consequently, success is defined here as a result of leading and steering towards a sustainable future, see Figure 3. The five parts of the reasoning in Figure 3 are included in the SIQ Management Model as result variables (external efficiency), i.e. as a result of leading and steering with the support of consciously chosen working methods (internal efficiency). There are thus several studies showing that satisfied and committed employees lead to satisfied customers. There is also research indicating that satisfied customers lead to better financial results. Being economically sustainable allows an organization to continue to invest in environmentally and socially sustainable solutions and offerings that lead to more satisfied and more committed employees. There is also a link between improved environmental sustainability and better social sustainability.



FIGURE 3. Links that lead to sustainable success (Hallencreutz, Deleryd and Fundin, 2020).

It is always a challenge to take decisions that provide long-term sustainable success for the organization. In their research, Deleryd and Fundin (2020) have taken support from several research disciplines and built on research by, for example, Broman and Robèrt (2017). The research, based on a tunnel metaphor, proposes a conceptual model for sustainable quality development, see Figure 4. The model proposes how to continuously balance the three sustain-

ability dimensions (economic, environmental and social sustainability) and thereby reduce the risk of an organization being in situations where one of the sustainability dimensions dominates the other two or is not fulfilled.

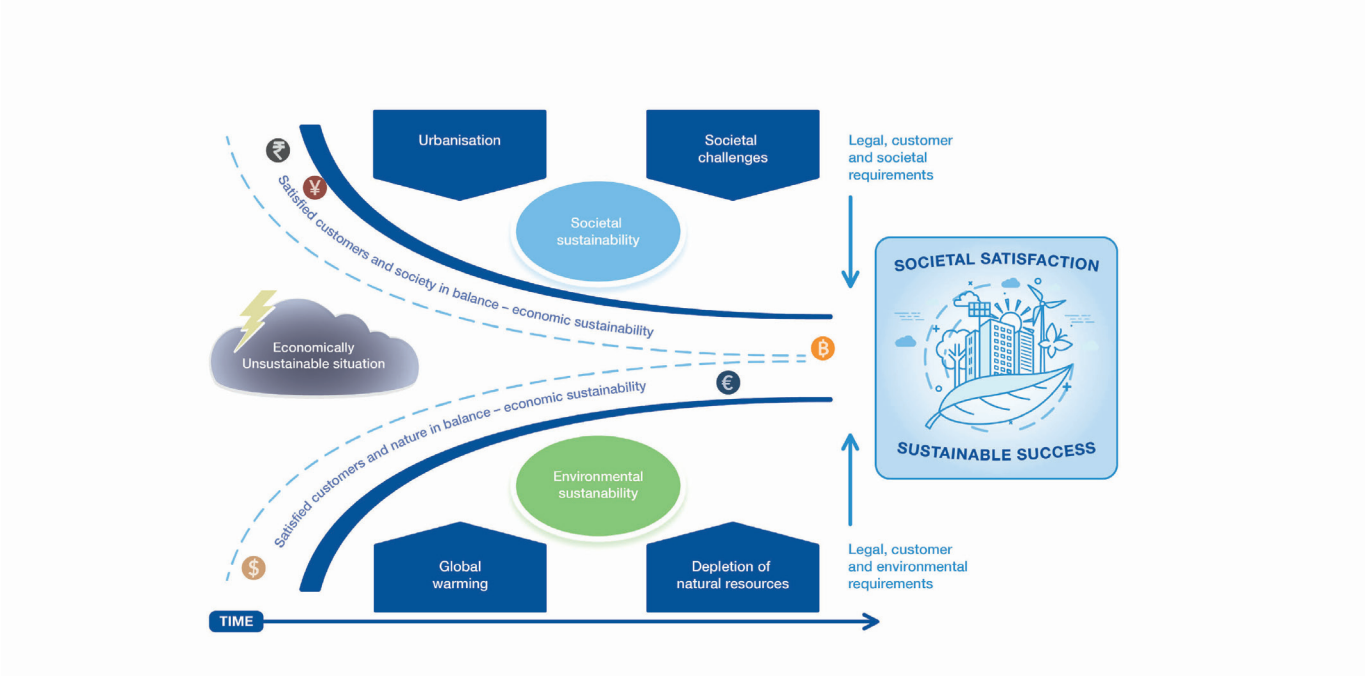


FIGURE 4. A model that balances economic, environmental and social sustainability to achieve societal satisfaction and sustainable success – a new way of taking decisions on and measuring quality (Deleryd and Fundin, 2020).

All organizations, private or public, large or small, find themselves in what is known as the "sustainability race" towards societal satisfaction and sustainable success. The strategies of organizations to achieve sustainable success differ substantially, however. See Figure 5 for an example of how the situation could be in a given organization at a given time (Deleryd and Fundin, 2020).

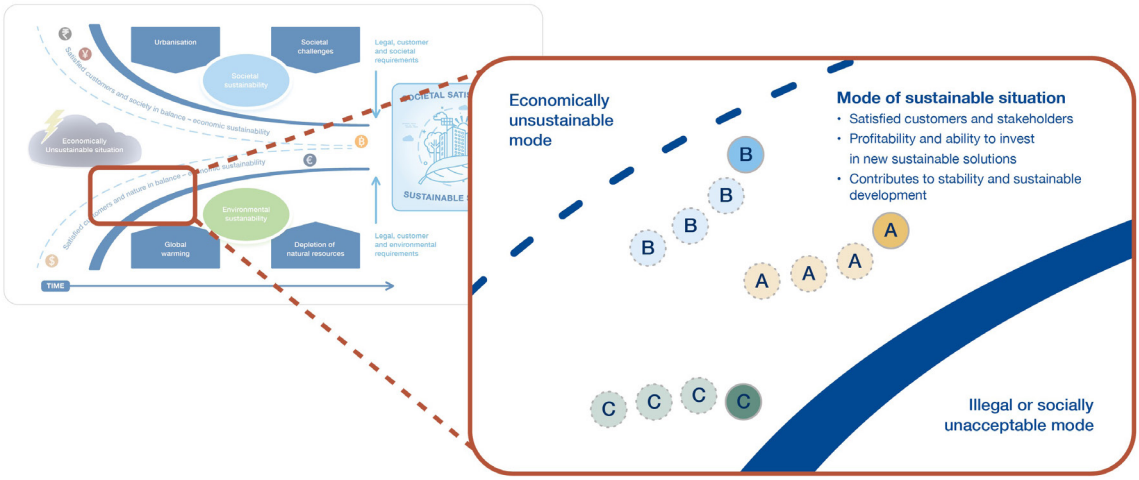


FIGURE 5. Example of how different organizations are working towards different sustainability objectives (Deleryd and Fundin, 2020).

Figure 5 visualises competitors A, B and C in a market. As organization C is experiencing difficulties delivering an offering that is legally, socially and environmentally acceptable, there is a great risk that organization C will soon find itself in an illegal and socially unacceptable situation, which will cause problems to its operations. Organization B has a solution that is advanced, both environmentally and socially, but is also very costly and poses a risk of financial challenges. On the other hand, the offering from organization A is seen as well-balanced, both environmentally and socially, and as economically sustainable. Hence, organization A is poised to become (or already is) the market leader by offering sustainable solutions to customers, users and stakeholders who, over time, develop and increase their expectations of sustainable solutions (Deleryd and Fundin, 2020).

5. How has the SIQ Management Model been designed?

Excellence models and specifically the SIQ Management Model are based on the idea that it is via the application of different working methods that results are achieved. The model is built on the principle that given working methods provide certain given results and if other results are required, working methods need to be further developed.

WORKING METHODS/ENABLERS

- How we work
- Affects results

RESULTS

- Facts and figures
- Indicates the performance of the organization in the present, past and projected future

6. The model's three cornerstones

The model is built on three cornerstones, see Figure 6:

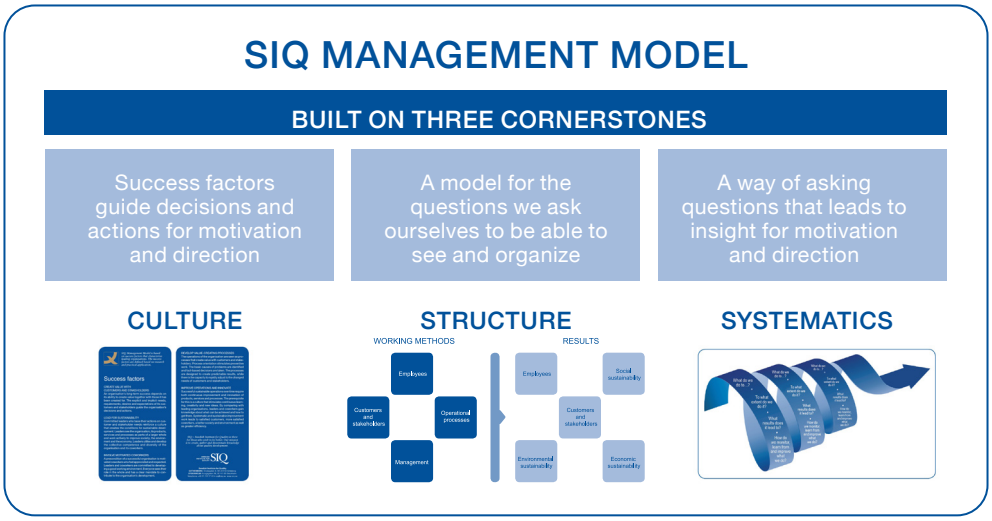


FIGURE 6. The SIQ Management Model consisting of three cornerstones: culture, structure and systematics.

CULTURE
- 5 success factors

STRUCTURE
- Main criteria: 4 that concern working methods + 1 that concerns results = 5
- Sub-criteria: 13 working methods + 5 results = 18

SYSTEMATICS
- Based on the Deming Wheel (Deming, 1986)
- Working method, Application, Results, Evaluation and improvement

6.1 Culture

Culture consists of five success factors that are characteristic for leading organizations, see Figure 7. These factors have been defined based on research and practice:

- Create value with customers and stakeholders
- Lead for sustainability
- Involve motivated employees
- Develop value-creating processes
- Improve the organization and create innovations



FIGURE 7. Culture in the SIQ Management Model

6.2 Structure

The SIQ Management Model consists of the areas that have the greatest impact on an organization's results. The areas focus on customers and stakeholders, management, employees and processes. By developing its working methods in these areas, an organization strengthens its culture and its results. see Figure 8.

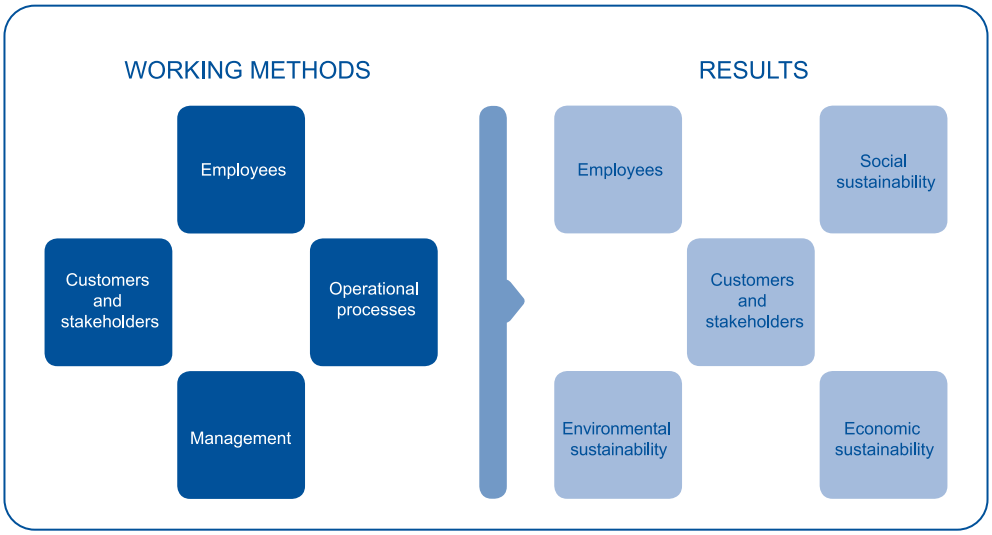


FIGURE 8. Structure in the SIQ Management Model.

6.3 Systematics

Systematics is a way of asking questions that provide insight into how one's own organization works. It is only when we become aware of how we do something that we can improve what we do, see Figure 9.

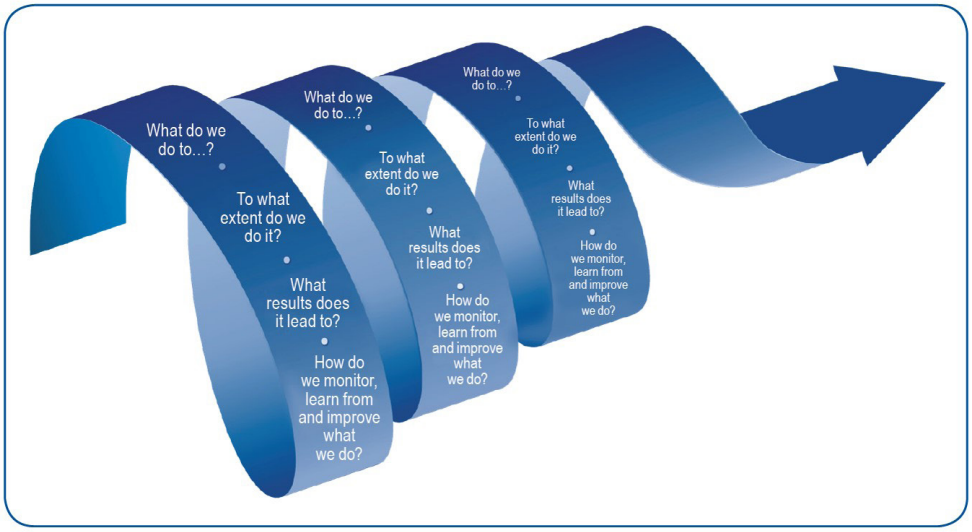


FIGURE 9. Systematics in the SIQ Management Model.

WHAT DO WE DO TO..?

Do we have a consciously chosen, well-considered, methodical and organized working method in order to implement our working tasks? Is this also pervaded by the success factors? Does the chosen working method support the organization's plans? Does it interact positively with other chosen working methods? Does the working method prevent errors, problems and risks through foresight and planning?

TO WHAT EXTENT ARE THE CHOSEN WORKING METHODS APPLIED?

When we develop systematic and integrated working methods, they shall also be applied in relevant contexts, in the entire organization, in all processes, for all products; goods and services on relevant occasions.

WHAT RESULTS DOES IT LEAD TO?

Results are the ultimate proof that the chosen and applied working methods lead to the intended outcome. To be able to monitor the organization and its development, the results must be compared with the organization's own target values and with the corresponding values of leading organizations and competitors.

HOW DO WE MONITOR, LEARN FROM AND IMPROVE WHAT WE DO?

One of the model's success factors is Improve the organization and create innovations. How do we evaluate chosen working methods and their application? Are we implementing improvements systematically based on performed evaluations and lessons learned?

The illustration below is based on the well-known improvement wheel or Deming's PDSA-wheel (Plan, Do, Study, Act) and illustrates the above (Deming, 1986). Continuous improvement can be achieved if we keep asking ourselves these questions on a regular basis.

7. An important initial document – The organization's current situation and strategic work

Working on quality development with the support of the SIQ Management Model should be seen as a long-term project based on perseverance and the participation of all. The work should be thoroughly planned and the starting-point is for as many people as possible in the organization to be made aware of the success factors and of the model's concepts and methodology. It is important to plan and gain support for the work on all levels of the organization. As the model's methodology is strongly improvement-oriented, it is advantageous to teach as many people as possible at an early stage how to use systematic improvement tools.

The first step: *The organization's current situation and strategic work* should be analysed and a document created. The aim is to describe the organization's basic conditions and to create a common picture of the organization. This should be done by the management in cooperation with the employees in order to promote participation and create consensus. The information required in *The organization's current situation and strategic work* also forms a basis for the work on the various sub-criteria.

The SIQ Management Model can be used for the entire organization or just parts of it. *The organization's current situation and strategic work* defines the organization itself and establishes important basic concepts and conditions that will be needed when working through the structure (the various sub-criteria). *The organization's current situation and strategic*

work also provides a framework for evaluation in accordance with the SIQ Management Model. It also provides a basis for focusing the subsequent improvement work on the right things. It also constitutes necessary information material in case the organization wants to have an external evaluation performed, for example within the framework of an award/certification process.

The organization's current situation and strategic work should be brief, a maximum of 6 pages is recommended. Part of or all the information to be included in *The organization's current situation and strategic work* has often already been prepared in, for example, the organization's business plans and management systems. Some parts are just pure formalities. If you lack material for any section of *The organization's current situation and strategic work*, you should produce it first before you continue working on the sub-criteria in the model.

The organization's current situation and strategic work consists of two parts. Under each point, you describe what is relevant and most important for your organization, for example the organization's vision with strategic plans and goals, the organization's most important customers and stakeholders, processes and suppliers. Due to the nature of the organization, some points may be less relevant and chosen concepts may not tally with the concepts used within the organization and area of activity. In most cases, however, the intention/purpose of each point can nevertheless be considered after a translation to concepts and areas that better correspond to the organization's specific conditions. The comprehensive description of objectives in *The organization's current situation and strategic work* should have a connection to the objectives and measures asked for in several sub-criteria.

SIQ has developed a support function to help describe *The organization's current situation and strategic work*. The aim of the support is for the organization to analyse important business factors and how these factors affect each other in a holistic picture.

Please contact SIQ (siq@siq.se) if you see a need for support with analysing important business factors.

8. Main criteria and sub-criteria

The structure of the SIQ Management Model is based on a general model for how an organization works. The model is applicable to all organizations regardless of size, sector or organizational form. The model covers the areas that, according to research, have the greatest impact on results (Raharjo & Eriksson (2016). It puts customers and stakeholders, management, employees and processes in focus and its main emphasis is on the sustainable results this leads to. The organization's activities consist of a system of people, machines, material, methods, etc., the aim of which is to create value in the form of goods and services for someone – customers and stakeholders. Results are achieved by means of a number of processes that build up the activities. This cannot work without the active commitment and participation of employees. Main criteria and sub-criteria are formed based on this model. See the Management model.

The SIQ Management Model consists of five main criteria that reflect how an organization works:

1. Customers and stakeholders
2. Management
3. Employees
4. Operational processes
5. Results

What makes an excellence model like the SIQ Management Model so successful as a management model is partly that it focuses on areas that are important in order to create sustainable, long-term success and partly because it has all the systematics built into it; the model also includes components such as monitoring, learning and improvement. The model asks for both working methods that exist today in order to achieve success and working methods in order to improve existing working methods.

8.1 Working method in focus

A constant feature of the SIQ Management Model is that it asks which working methods the organization has chosen in the area; *not that, when, who* or *where*. The reason for this is that the capacity to be successful is linked to the existence in the organization of a consensus on and knowledge about how our results are connected to our chosen working methods. If we work in the same way, we will also obtain the same results. If we wish to improve our results, we also have to change the way we work and it is therefore important that we can describe the way in which we work.

8.2 The common thread

All the criteria are connected to each other in one way or another and it is of value to the organization that the integration between them is visible in order to create synergy effects and to achieve the intended value. There is also a clear link between important basic concepts and the prerequisites described in *The organization's current situation and strategic work* methods asked for in the criteria. The "common thread" of this integration clarifies that the working methods chosen strengthen that which the organization has specified as important. This may a question of strategies, objectives, strengths and areas of improvement.

8.3 Sustainable development

Today, sustainable development is a universally accepted concept. The most used and referenced definition of sustainability was presented in 1987 in what is commonly referred to as the Brundtland Report. *"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs"* (World Commission on Environment and Development, 1987). The concept is often divided into the three dimensions: social, environmental and economic sustainability in order to systematically analyze different sustainability aspects of a problem. To be sustainable, the given solution must be sustainable in all three dimensions (Dahlin, 2014).

Each organization exists for its customers and stakeholders and delivers some kind of value. At the same time as organizations deliver this value to stakeholders and customers, environmental and social effects emerge that are not always desirable. The challenge of achieve sustainable development lies in each organization understanding who it exists for and what value it delivers. At the same time, it must also understand the environmental and social challenges posed by its own activities, products; goods or services, in a lifecycle perspective.

The development of a sustainability strategy therefore always starts with a stakeholder analysis – who does the organization exist for? The stakeholder analysis must have a broad approach, studying not only customers, patients, users, etc., but also other stakeholders and future generations. What is referred to as a materiality analysis is then often performed in which the organization identifies what is important for its stakeholders and what is important for the organization itself from a sustainability perspective. Based on the materiality analysis, the

organization's strategy and action plan for sustainable development can then be established. It is worth noting that all types of sectors and organizations often have their own specific environmental and social challenges. A common finding of many studies is that organizations that best understand their customers – who they exist for – and meet this need in the best way are also the suppliers that build stable finances. With such stable finances in place, an organization's offerings can then be developed and become even more sustainable over time, i.e. minimize/eliminate the environmentally and socially negative aspects of the organization's activities.

8.4 Sustainability pervades the SIQ Management Model

The three sustainability dimensions pervade the entire SIQ Management Model as a common thread: social, environmental and economic sustainability. Many of an organization's chosen working methods concern one or more of these dimensions, while some of the working methods have a bearing on all the sustainability dimensions.

Working methods can be aimed internally at employees, externally at customers and other stakeholders, but also concern overall commitment in both the long and the short term, locally, regionally and globally.

SOCIAL SUSTAINABILITY

The social sustainability dimension largely concerns well-being, justice, power, rights and the needs of the individual. Some of these can be quantified, others are more qualitative. What this means in practice, however, varies depending on the context. Each organization must therefore understand what the social challenges or benefits of its activities are. Examples of social sustainability can be studied in the global goals in Agenda 2030, see Figure 10 (UN, 2017a). Social sustainability therefore means that the organization also formulates goals and goes beyond what is currently considered to be normal practice; while there is also some form of logical connection to the organization's fundamental task.

ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability refers to everything that has to do with the earth's ecosystems. This includes the stability of the climate, air, soil and water quality, land use and soil erosion, biodiversity (of both species and habitats) and ecosystem services (such as pollination and photosynthesis). What this means in practice, however, varies depending on the context. Each organization must therefore understand what the environmental challenges or benefits of its activities are. Examples of environmental sustainability can be studied in the global goals in Agenda 2030, see Figure 10 (UN, 2017a).

ECONOMIC SUSTAINABILITY

There are several dimensions of economic sustainability. In the definition we use economic sustainability is seen as economic development that does have negative consequences for environmental or social sustainability. In other words, an increase in economic capital must not occur at the expense of a reduction in ecological or social capital. Regarding the above reasoning, a universally accepted truth is that organizations that best understand their customers – who they exist for – and meet this need in the best way are also the suppliers that build stable finances. With stable finances in place, an organization's offerings can then be developed and become more sustainable over time, i.e. minimize/eliminate the environmentally and socially negative aspects of the organization's activities.

8.5 Frameworks for sustainable development

In September 2015, 193 world leaders agreed on 17 global goals for sustainable development. If these goals were to be realized, it would mean the end of extreme poverty, inequality and climate change in 2030, see Figure 10 (UN, 2017a). Agenda 2030 is the framework and the overall strategy document adopted to achieve the goals (UN, 2017b).

Examples of other frameworks include:

- OECD Green growth measurement framework
- Global reporting Initiative (GRI)



FIGURE 10. Agenda 2030 goals, see also the Swedish Government's Agenda 2030 website[4].

- ISO 14001 Environmental management systems
- OHSAS 18001 work environment management systems

PLANETARY BOUNDARIES

The Stockholm Resilience Center 5 has identified and quantified planetary boundaries that must not be exceeded as this would lead to disastrous consequences for humanity and the earth (Rockström et al, 2009), see Figure 11 (J. Lokrantz/Azote based on Steffen et al. 2015). Planetary boundaries define a safe "space" for humanity which can help prevent human activities that cause unacceptable environmental changes. Planetary boundaries are as follows: (1) climate change, (2) loss of biodiversity, (3) modified land use, (4) modified bio-geochemical flows of nitrogen and phosphorus, (5) depletion of the ozone layer in the stratosphere, (6) ocean acidification, (7) freshwater use, (8) aerosols in the atmosphere and (9) new chemical substances.

Four of the nine planetary boundaries have now been crossed as a result of human activity (Steffen et al., 2015). These four are: climate change, loss of biodiversity, modified and use and modified bio-geochemical flows of nitrogen and phosphorus. Since their publication in 2009, these planetary boundaries have been scaled down to the more detailed levels of countries, organizations and individuals, in order to show what is required for them to remain within the "safe space". The above framework can be beneficially used as the basis for an organization's strategy for a sustainable environment. Randers et al. (2018) published a report in cooperation with the Stockholm Resilience Center, Stockholm University, the Norwegian Business School and Global Challenge Forum, that describes how different choices when developing a strategy can be crucial for achieving the objective of not exceeding the planetary boundaries.

4 https://www.regeringen.se/regeringens-politik/globala-malen-och-agenda-2030/agenda-2030-for-hallbar-utveckling/

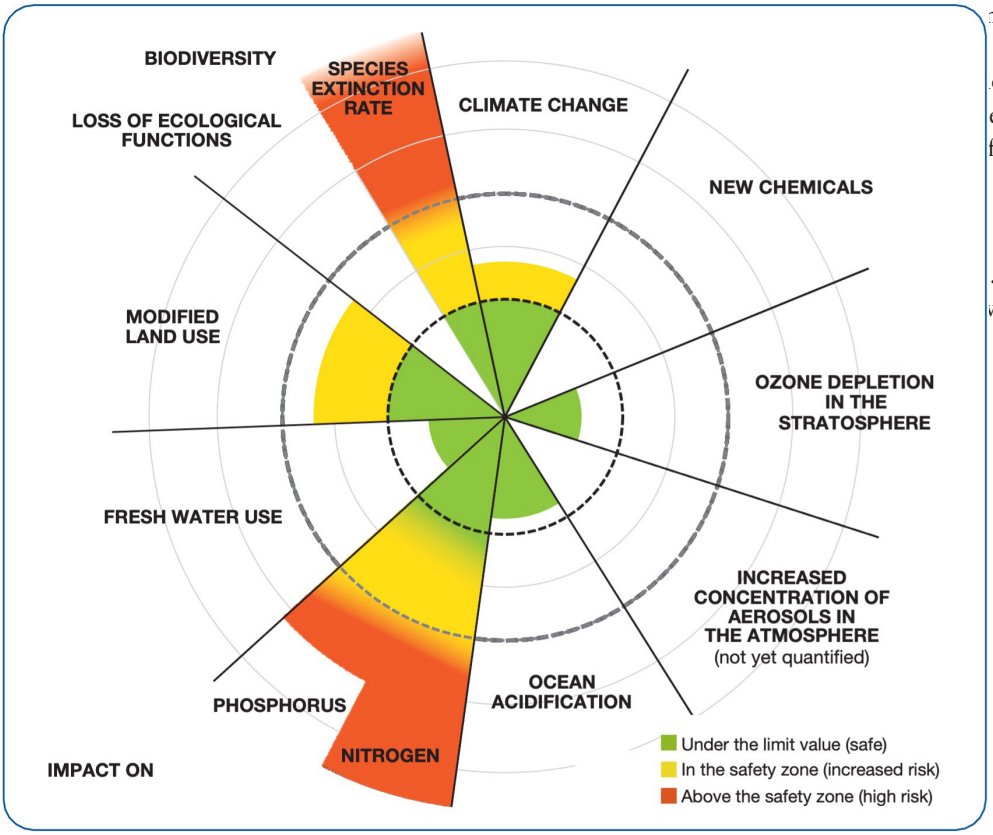


FIGURE 11. Planetary boundaries. Credit: J. Lokrantz/Azote based on Steffen et al. 2015. (Stockholm Resilience Center).

MATERIALITY ANALYSIS

Sustainability efforts should start with an analysis of the organization's customers and stakeholders, see heading 7, "An important initial document – The organization's current situation and strategic work".

After performing a stakeholder analysis, the organization should carry out a materiality analysis that lays the foundation for its sustainability efforts, see example in Figure 12. A materiality analysis is aimed at a systematic study of the most important sustainability aspects for an organization so that resources can be employed where they create the greatest benefit. The analysis studies not only the impact of the organization on various stakeholders along the value chain, but also the impact or potential impact of these stakeholders on the organization. It also aims to understand the need of various stakeholders for information, which is the basis for compiling the relevant key indicators required for sustainability reporting. The results of the materiality analysis lay the foundation for future sustainability efforts and result in an action plan.

EXAMPLE OF SUSTAINABILITY EFFORTS

An organization can convey positive social aspects. There are organizations such as schools and hospitals the entire aim of which is to contribute positively to society. But the activities of all organizations also face social challenges, i.e. socially negative aspects that must be managed and minimized, and eventually eliminated. On a higher level, an organization can also work on social sustainability by creating opportunities for more people to enter the labour market, as well as by promoting equality, sustainable working conditions and human rights.

An example of social sustainability efforts is a food company that invests in the health and

based on electrification. But even this new technology involves environmental challenges, for example in the form of battery technology. In the same way, every sector/organization must understand its environmental challenges and have action plans to minimize the environmentally negative consequences.

The economic sustainability dimension can include working tasks that promote the organization's long-term survival and growth, and the basis for this, according to the above reasoning, is understanding who one's stakeholders are and delivering solutions based on these needs in the best possible way.

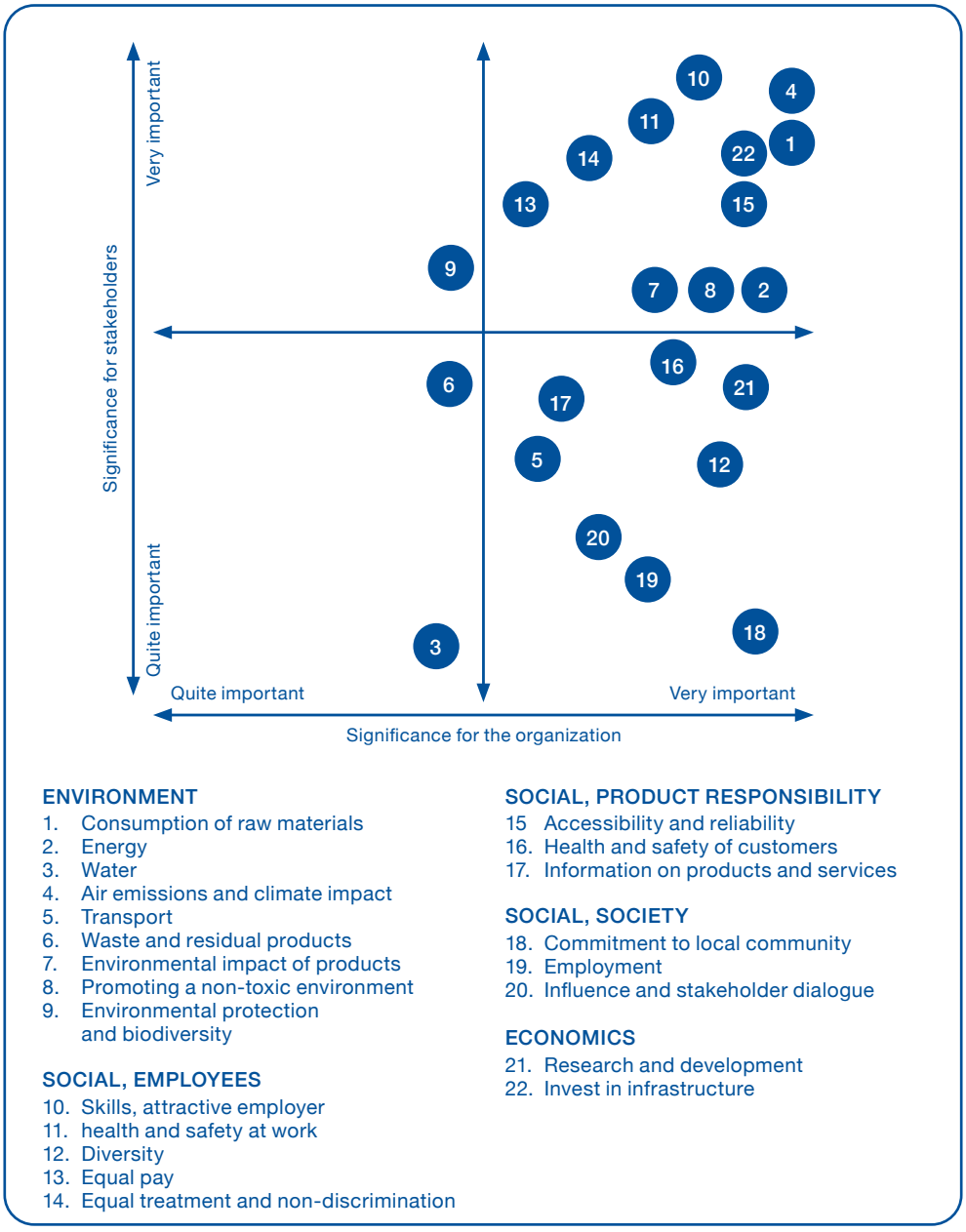


FIGURE 12. Example of a materiality analysis.

9. General description of the five main criteria

The main criteria Customers and stakeholders, Management, Employees and Processes consist of sub-criteria with points that ask for information about the working methods chosen by the organization and to what extent these are applied.

To conclude, information is requested about the way in which the organization evaluates and improves its chosen working methods within each sub-criteria. Here, it is important to observe that what is being requested is how the chosen working methods are *evaluated and improved*, not what the results of the chosen working methods are.

The main criterion Results asks what the indicators and goals of the most important results are and in which way these are relevant to the organization and to what is being requested by the sub-criterion. The main criterion Results describes the way in which the results can be linked to the working methods and their application, levels and trends. Both process indicators and result indicators are requested within the areas specified in the sub-criteria.

9.1 Customers and stakeholders

The main criterion Customers and stakeholders consists of sub-criteria with points that ask for information about the working methods chosen by the organization and to what extent these are applied. Information on *HOW the organization does what it does, which working methods have been chosen in the area* is requested; not that, when, who or where.

To conclude, information is requested about the way in which the organization evaluates and improves its chosen working methods within each sub-criteria. Here, it is important to observe that what is requested is *how the chosen working methods are evaluated and improved,* not what the results of the chosen working methods are.

Customers and stakeholders refer to parties with whom the organization shall create value: customers, suppliers, partners, owners/governing bodies, society, etc. *The organization's current situation and strategic work* describe the organization's customers and stakeholders specifically. Working methods described within this main criterion are to be linked to this description.

This main criterion focuses on how the organization understands the needs and expectations of its customers and stakeholders, how value is created and how the organization creates trust among its customers and stakeholders through its pledges to them.

Pledges refer to what the organization promises its customers and stakeholders. Pledges can refer to the organization's products; goods and services, processing times, accessibility, etc.

In the main criterion Customers and stakeholders, there is a sub-criterion that asks for information about working methods used to measure customer and stakeholder satisfaction. The results from these measurements can be found in sub-criterion 5.1, in which results linked to customers and stakeholders are reported and described.

9.2 Management

The main criterion Management consists of sub-criteria with points that ask for information about the working methods chosen by the organization and the extent to which these are applied. Information on *HOW the organization does what it does, which working methods have been chosen in the area* is requested; not that, when, who or where.

To conclude, information is requested about the way in which the organization evaluates and improves its chosen working methods within each sub-criteria. Here, it is important to observe that what is requested is *how the chosen working methods are evaluated and improved*, not what the results of the chosen working methods are.

It is the organization that defines what top management is. There are several different management structures and some operations have a more agile organization.

Top management refers to the highest executive in the organization and their management group or equivalent. Management and monitoring refer to working methods that concern all customers and stakeholders in the organization.

The main criterion deals with working methods used to plan and lead the organization based on the needs, requirements, wishes and expectations of customers and stakeholders. There is a clear link to the criteria on Customers and stakeholders (1.) and Results (5.).

The criterion also deals with how the organization uses information to plan its activities. Information that may be needed can include facts about customers and stakeholders, employees, research and development, finances, leading organizations and competitors, etc. External factors may refer to research, technical development, social, environmental and economic conditions.

The main criterion deals with how managers on all levels practise committed leadership that creates the conditions for all employees to take part in the development of the organization and how the organization leads and develops its business processes in general.

The day-to-day work on leading and improving processes is dealt with in criterion 4. The overall process structure shall be linked to the organization's business idea and the customers and stakeholders described in *The organization's current situation and strategic work* and the working methods asked for in criterion 1. Customers and stakeholders.

Managers are also regarded as employees.

9.3 Employees

The main criterion Employees consists of sub-criteria with points that ask for information about the working methods chosen by the organization and the extent to which these are applied. Information on *HOW the organization does what it does, which working methods have been chosen in the area* is requested; not that, when, who or where.

To conclude, information is requested about the way in which the organization evaluates and improves its chosen working methods within each sub-criteria. Here, it is important to observe that what is requested is *how the chosen working methods are evaluated and improve*d, not what the results of the chosen working methods are.

The main criterion deals with working methods for drafting development plans for each employee and how skills development is carried out based on strategies, objectives and action plans for the organization's overall competence.

The main criterion Employees contains a sub-criterion that deals with the area of creativity and innovation. Innovation refers to both incremental (continuous improvement) and radical innovations.

In addition, the main criterion deals with issues concerning working methods to promote a good work environment and employee satisfaction. The results of your working methods concerning employees are described under 5.2.

Employees also include managers.

9.4 Operational processes

The main criterion Operational processes consists of sub-criteria with points that ask for information about the working methods chosen by the organization and the extent to which these are applied. Information on *HOW the organization does what it does, which working methods have been chosen in the area* is requested; not that, when, who or where.

To conclude, information is requested about the way in which the organization evaluates and improves its chosen working methods within each sub-criteria. Here, it is important to observe that what is requested is *how the chosen working methods are evaluated and improved*, not what the results of the chosen working methods are.

The main criterion Operational processes asks for information about the working methods applied by the organization to develop stable processes that also have the capacity to adapt to new conditions. Information on how the organization and its processes are improved is also requested. The criterion refers to the day-to-day management of the processes. Information about how the management exercises overall leadership of organizational processes is requested under criterion 2.4 in the SIQ Management Model.

To succeed, the challenge is to work continuously on all three challenges simultaneously. There are examples of organizations that have been successful with challenge 1 and 2 but that have gone bankrupt as a result of a lack of adaptability and because the speed of transition needed to deal with challenge 3 has been too slow (and does not satisfy future stakeholder needs). See, for instance Fundin et al. (2017).

The SIQ Management Model aims to improve the capacity of organizations to work on all three challenges, in which both the speed of transition and adaptability are developed based on stakeholder needs. The model therefore challenges and develops the capacity to work on all three challenges. Research calls this *emergent* quality management (Fundin et al., 2019), which can be described as an organization constantly making use of the new knowledge that emerges in the dilemmas that present themselves in quality development work. The social dynamic in an organization is central to this concept. In emergent quality development, organizations make use of the knowledge and creativity that exists in the social dynamic on the individual and group level in an organization.

9.5 Results

The main criterion Results asks what the most important result indicators and goals are and in what way these are relevant to the organization and to what is requested by each sub-criterion. The main criterion Results describes the way in which the results can be linked to the working methods and their application, levels and trends. Both process indicators and result indicators are requested within the areas specified in the sub-criteria.

It is beneficial to report these sub-criteria with the help of tables and figures.

Sub-criteria within 5. Results concern results for:

- Customers and stakeholders (5.1)
- Employees (5.2)
- Social sustainability (5.3)
- Environmental sustainability (5.4)
- Economic sustainability (5.5).

The activities of an organization involve many different parties and stakeholders, everyone from internal employees, management, suppliers, customers, owners and other stakeholders who, in different ways, have an impact on or are affected by the organization's activities.

An organization achieves many different types of results for its various stakeholders, which can beneficially be reported based on the five result areas, see Figure 13.

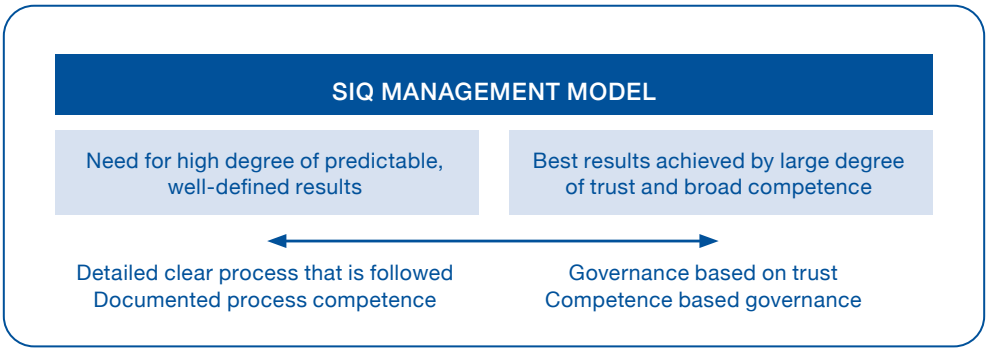


FIGURE 13. The choice of how a process shall be governed and monitored is determined by its complexity and need for exactly predictable and repeatable results.

Among many definitions of quality, the SIQ Management Model is based on the use of the following definition founded on a customer perspective: The quality of a product is "... its ability to satisfy, or preferably exceed, the needs and expectations of the customer" (Bergman & Klefsjö, 2020). Products refer to both goods and services or other solutions that can satisfy stakeholders. This definition also highlights a "quality dilemma" for organizations; namely *to do things right* (internal efficiency) and *also do the right things* (external efficiency) (Fundin et al., 2017). This quality dilemma affects both operational and strategic quality development in organizations. An example of a dilemma is that at the same time as the needs of existing stakeholders have to be fulfilled, organizations must also develop solutions to satisfy the needs of future stakeholders. Another example of a dilemma is that an organization's global principles must meet the needs of a local market. Dealing with these dilemmas is a challenge in practice, while there is simultaneously a source of and potential for entirely new innovations and solutions in the resulting friction.

How do we derive the most benefit from a strategy for quality development that utilizes the full potential of this clash of interests between internal and external efficiency which seems to be so difficult to combine in practice?

To simplify the complexity, we can instead choose to describe how organizations can successfully and competitively have processes that enable quality development based on three challenges:

1. Work efficiently within a standard (internal efficiency)
2. Develop efficiency through small stepwise improvements (internal efficiency)
3. Develop external efficiency through innovations and major radical improvements

To succeed, the challenge is to work continuously on all three challenges simultaneously. There are examples of organizations that have been successful with challenge 1 and 2 but that have gone bankrupt as a result of a lack of adaptability and because the speed of transition needed to deal with challenge 3 has been too slow (and does not satisfy future stakeholder needs). See, for instance Fundin et al. (2017).

The SIQ Management Model aims to improve the capacity of organizations to work on all three challenges, in which both the speed of transition and adaptability are developed based

on stakeholder needs. The model therefore challenges and develops the capacity to work on all three challenges. Research calls this emergent quality management (Fundin et al., 2019), which can be described as an organization constantly making use of the new knowledge that emerges in the dilemmas that present themselves in quality development work. The social dynamic in an organization is central to this concept. In emergent quality development, organizations make use of the knowledge and creativity that exists in the social dynamic on the individual and group level in an organization.

9.5 Results

The main criterion Results asks what the most important result indicators and goals are and in what way these are relevant to the organization and to what is requested by each sub-criterion. The main criterion Results describes the way in which the results can be linked to the working methods and their application, levels and trends. Both process indicators and result indicators are requested within the areas specified in the sub-criteria.

It is beneficial to report these sub-criteria with the help of tables and figures. Sub-criteria within 5. Results concern results for:

- Customers and stakeholders (5.1)
- Employees (5.2)
- Social sustainability (5.3)
- Environmental sustainability (5.4)
- Economic sustainability (5.5).

The activities of an organization involve many different parties and stakeholders, everyone from internal employees, management, suppliers, customers, owners and other stakeholders who, in different ways, have an impact on or are affected by the organization's activities.

An organization achieves many different types of results for its various stakeholders, which can beneficially be reported based on the five result areas, see Figure 14.

Concerning the area "employees", results can beneficially be reported in terms of, e.g., employee satisfaction, competence indicators, equality indicators, work environment indicators, etc.

Concerning the area "customers and stakeholders", results can beneficially be reported in terms of, e.g., customer satisfaction, competitors' customer satisfaction, market share, fulfilment of owner demands, supplier indicators, etc.

Concerning the area "environmental sustainability", indicators and results to do with both the organization's internal and external environment can beneficially be reported. Internal indicators can, for example, be chemicals use, energy and water consumption, recycling rates, etc. External environmental indicators can, for example, be emissions, both noise and air, from both products; goods and services, and facilities. Sometimes, environmental indicators can be reported that don't actually have anything to do with the organization's core activities, known as "green-wash" indicators, which we want to avoid and hence do not put a premium on in an assessment of an organization. It is also important to assess the balance between results and actual impact, i.e. that the goal is proportional to the environmental impact of the organization's activities otherwise.

"Economic sustainability" can relate to internal efficiency indicators as well as measures of turnover, profit, etc.

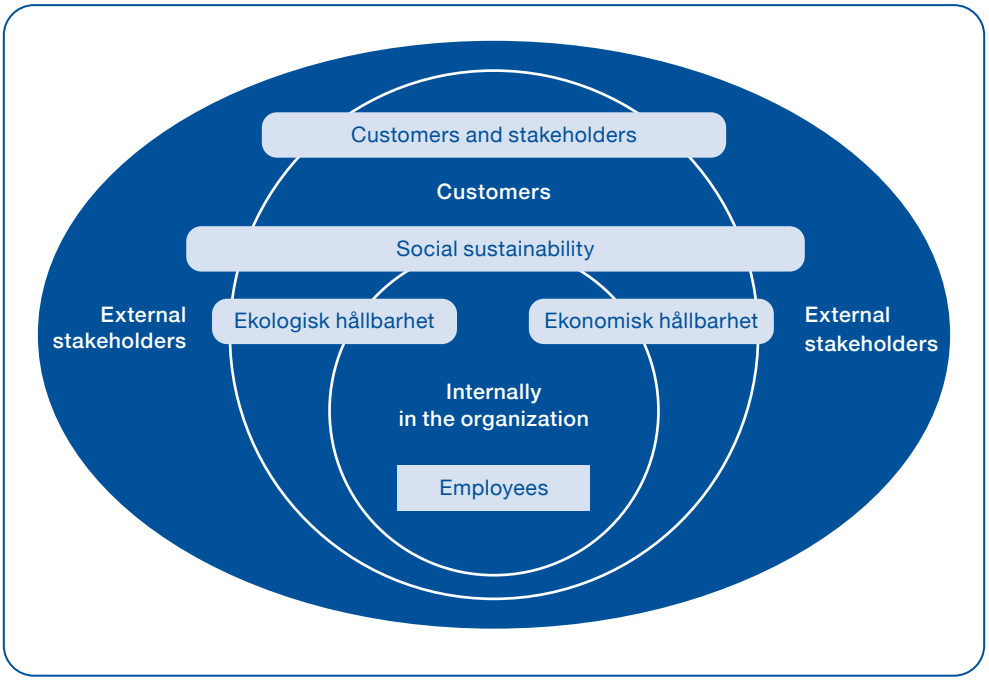


FIGURE 14. The organization's results are reported within the five result areas in the SIQ Management Model. These results affect different stakeholders, from employees and suppliers to owners, executive boards, governing bodies, direct and indirect customers and other external stakeholders. The figure provides a schematic description of how the organization's results are reported in relation to the various stakeholder groups and should be seen as a guide.

As previously described, social sustainability involves the organization also formulating goals and working beyond what is currently considered to be normal practice; at the same time as there is some form of logical link to the organization's core task. Indicators are often linked to the organization's Corporate Social Responsibility (CSR) efforts. It can, for example, be highlighted that an indicator of employee satisfaction has a social dimension, but it is preferably reported in relation to employee indicators as above. Sometimes, social indicators can be reported that have no kind of connection to the organization's business idea, known as "social-wash" indicators, which we want to avoid and hence do not put a premium on in an assessment of an organization.

10. General advice on the application of the SIQ Management Model

In 2017, a prototype test was performed in connection with the development of the SIQ Model. Based on the results of this test in five different organizations/sectors and the application of the model between 2018-2021, recommendations on the use of the SIQ Management Model and the development of a description of activities are summarized here.

To consider:

- Present a clear connection between what is described as *The organization's current situation and strategic work*, the organization's working methods and reported results.
- Describe working methods and report results for all customers and stakeholders described in *The organization's current situation and strategic work*.
- Compare working methods and results with leading organizations and competitors.
- In which industries, particularly in the private sector, is it not possible to gain access to

data from one's competitors? Please note that the comparison need not be in the same industry, instead it can be organizations that are in the vanguard of strategically important areas for the organization concerned. Ensure here as well, where relevant, to retrieve international comparisons with leading global organizations.

- Information about evaluation and improvement of working methods is requested in all sub-criteria relating to working methods. Please note that what is requested is *how the chosen* working *methods are evaluated and improved*, not what the results of the chosen working methods are. Evaluation and improvement is one of three dimensions in the *Assessment matrix*, when working methods are assessed, and therefore has a substantial impact on the assessment made by examiners in an external evaluation.
- Describe working methods based on what is requested by the sub-criterion and its points, preferably under the relevant points. This makes the examiners' evaluation easier. Please summarize the application of working methods in table form with frequency and where the working methods are applied (breadth/depth). This helps both the organization internally and examiners in an external evaluation.
- Report results in tables and figures with clear descriptions of:
  - Own indicators and goals
  - Comparisons with leading organizations and competitors
  - Development of results over time (trends with at least three measuring points)
  - Comments on the results to demonstrate awareness of result development

11. Assessment according to the SIQ Management Model

11.1 Description of activities

With the help of the model's structure, an analysis is performed of the organization's activities resulting in a description of activities. This analysis looks at the organization's own answers to the question set by the criteria: *"What do we do in order to..?"* to identify working methods. The question *"To what extent do we do this?* is set to is set to determine application in time and space in the organization. The question *"How do we monitor, learn from and improve what we do?"* is set to determine working methods for evaluation and improvement. The result criteria request the relevance and scope of the indicators and the traceability, levels and trends for each of the results. It is beneficial if as many players as possible participate in the work. This promotes skills development and increases commitment. An analysis coordinator and criteria manager for the different main criteria are often appointed. They, in turn, form cross-functional working groups for fact gathering and documentation of activities, which results in a description of activities. The description of activities consists of accounts of participants' activities in accordance with the criteria in the SIQ Management Model. The account follows the points in the main criteria and sub-criteria.

11.2 Self-assessment

The developed description of activities can be evaluated by an internal evaluation team within the organization consisting of people trained in the methodology that forms of the basis of the SIQ Management Model (see heading 10). The assessment team should have as broad competence as possible and it is a good idea to bring people from other organizations into the team. Assessment entails evaluating whether there are consciously chosen and applied working methods for the areas requested in each sub-criterion. Based on the organization's way of

working, the strengths and improvement areas are formulated for each sub-criterion that constitutes the basis for an assessment of the level. A strength might be, for example, the fact that the chosen working methods are characterized by the success factors in the SIQ Management Model and that there are clear links between strategies, goals, working methods and results. A strength of a result might be that it is relevant, has good levels and trends and that there are clear links to strategies and goals.

The assessment matrix is used to determine the level of the organization as a percentage for each of the sub-criteria. See evaluation matrices in the SIQ Management model for assessment of working methods and assessment of results, respectively.

When assessing working methods, the extent to which they show systematics and how well they are integrated are evaluated. Its application is also evaluated (where and when) and how working methods are evaluated and improved.

The assessment of results takes into account relevance and scope as well as its performance, ie derivability, levels and trends.

The evaluation results in a feedback report which indicates the organization's strengths and improvement potential. The purpose of the feedback report is to use it as a basis for structuring and planning improvement work.

Simpler and less resource-demanding methods and forms for evaluation can be chosen depending on level of ambition and the resources available for analysis and evaluation work, see Chapter 15 about SIQ tools.

11.3 External assessment

One way of obtaining a qualified and objective assessment is to let an external assessment team review the organization. This can be done via an external *SIQ Certification* assessment, or by participating in a national award. An external assessment performed by SIQ examiners, specially selected and trained to create a dynamic team of experienced members from different backgrounds and with different skills, see Chapter 10 about evaluation as part of a national award. The external SIQ Certification evaluation or one of the awards may result in the organization being nominated for the *Swedish Quality Award -Sustainable Success* or the *Better School Quality Award*.

The external assessment includes an evaluation of working methods and results in a comprehensive three-step process of:

1. Individual assessment
2. Consensus assessment
3. Site visit

Participation in one of the awards starts with an application to SIQ. Then complete assessment documentation is submitted. Examiners assess the evaluation documentation, which is followed by a site visit in order to verify the description of activities. The evaluation results in a feedback report that describes the organization's strengths and improvement potential with percentage assessments per sub-criterion (according to assessment matrices in Chapter 9.2). See Figure 15 for an overall description of the steps in the national award processes.



FIGURE 15. Overall description of the steps in the national award processes.

12 Assess in a national award

Becoming an examiner is one way of developing both oneself and one's organization by learning from others. In the role of examiner, you have the opportunity to obtain advanced management training. It gives you access to a broad network and allows you to get to know leading organizations. It is a strategic management programme perfect if you have been a manager/leader or have leadership ambitions.

Being an examiner also involves deeper learning about the SIQ Management Model.

More information about the SIQ examiner's training can be found on the SIQ website (siq.se).

13. The SIQ Management Model and digitalization

The most talked-about mega-trend and challenge in today's society is digitalization and the opportunities it provides for artificial intelligence (AI). Many associate digitalization with resource efficiency and believe that we will be able to replace people with apps and electronic services of different kinds in order to rationalize organizational processes. This is the aim of many organizations and companies as regards digitalization. But there is a substantial risk here that these organizations are forgetting who they are digitalizing for – their customers and stakeholders. Digital technology also provides the opportunity for entirely new functions and offerings to customers, see Figure 16.

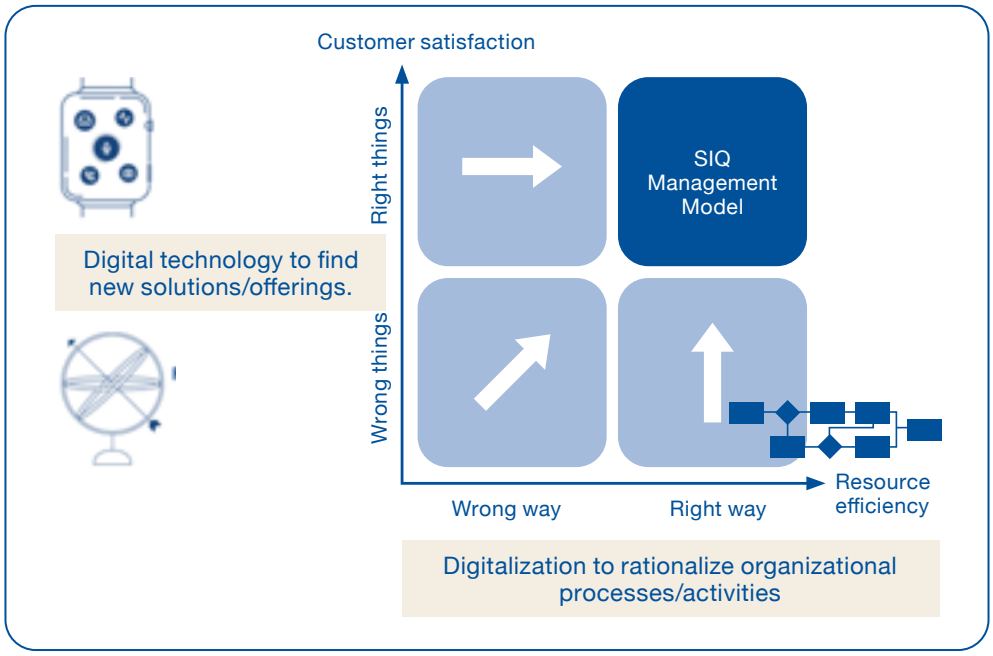


FIGURE 16. Digital technology can help to increase an organization's resource efficiency and to rationalize its processes and activities. It also provide opportunities to develop entirely new solutions and offerings that radically change industries and our view of what is possible to offer.

There is research indicating a strong mutual relationship between digitalization and quality management (Rönnbäck & Eriksson, 2012). Most organizations have working methods to help manage both digitalization and quality management. The problem is that these working methods for digitalization and quality management are often separated from each other. They are often managed in two different functions in an organization and there is seldom any communication between them or establishment of common goals. Even in the academic world, digitalization and quality management are two separate disciplines. The exchange of ideas to learn from each other's disciplines is fragmented and limited.

If we consider the aim of both digitalization and quality management, it is mostly a question of contributing to better products, services and processes for the organization's customers and stakeholders and of improving internal efficiency. Previous research has shown that poor digitalization is an obstacle to good profitability. We also know that digitalization aimed at and achieving both internal and external efficiency leads to higher profitability (Carlson & McNurlin, 1992). Research indicates the same relationship between quality management and profitability – success with quality management leads to higher profitability (Hendricks & Singhal, 1995, 1996, 1997, 2001a, b; Flynn et al., 1995; Eriksson & Hansson, 2003).

In order to digitalize an organization and its products; goods, services and processes, it is an advantage to understand the mutual relationship between digitalization and quality management. Quality management consists of values, working methods and tools. The most common values within quality management are: commitment from management, customer orientation, everyone's participation, process orientation, continuous improvement and fact-based decisions (Bergman & Klefsjö, 2020). With these values, we can develop the organizational culture in order to achieve both internal and external efficiency. This current research study shows that digitalization is dependent on exactly the same values. In addition to this, methods and tools within quality management enable digitalization.

Digitalization currently represents a major challenge for organizations and companies. There are many question-marks regarding how to digitalize an organization. What recommendations can then be given based on this research?

THE DIGITALIZATION OF PRODUCTS, SERVICES AND PROCESSES REQUIRES ALL ORGANIZATIONS TO DEVELOP:

- a culture built on the above-mentioned values
- a structure that clarifies the organization, its activities and processes
- systematics for improvements

WHAT DOES THIS MEAN IN MORE CONCRETE TERMS? SUCCESSFUL DIGITALIZATION REQUIRES ORGANIZATION TO:

- understand the needs, requirements and expectations of its customers and stakeholders
- see its activities as cross-functional flows
- clarify roles, responsibilities and working methods
- measure and understand how digital products, goods, services and processes should be improved based on facts
- involve everyone in the efforts to improve the organization's digital products, services and processes

The management's task is to understand, prioritize and create the right conditions to work proactively with quality development, in which values, working methods and tools within quality development enable digitalization.

14. The SIQ Management Model and innovation

The concept of innovation has received an enormous amount of attention in recent years. Here, innovation refers to product, process, marketing and organizational innovations . The concept of innovation is often associated with a new offering to a customer, a product or service, but innovation can also consist of a dramatically different working method that, for various reasons, is more efficient than the previous one.

The results of the organization's processes are reported within each sub-criterion in Chapter 5 in the SIQ Management Model, which deals with results.

An organization is only competitive if it can develop an ability to lead development by offering customers the most beneficial offerings while delivering them in a resource-efficient way, see Figure 17. Continuous development and innovation work are very similar and can actually be seen as the same thing. Work on continuous improvement can be seen as gradually and incrementally improving working methods and offerings and sometimes needing to take larger steps, innovations, in the form of more radically modified and improved working methods and offerings.

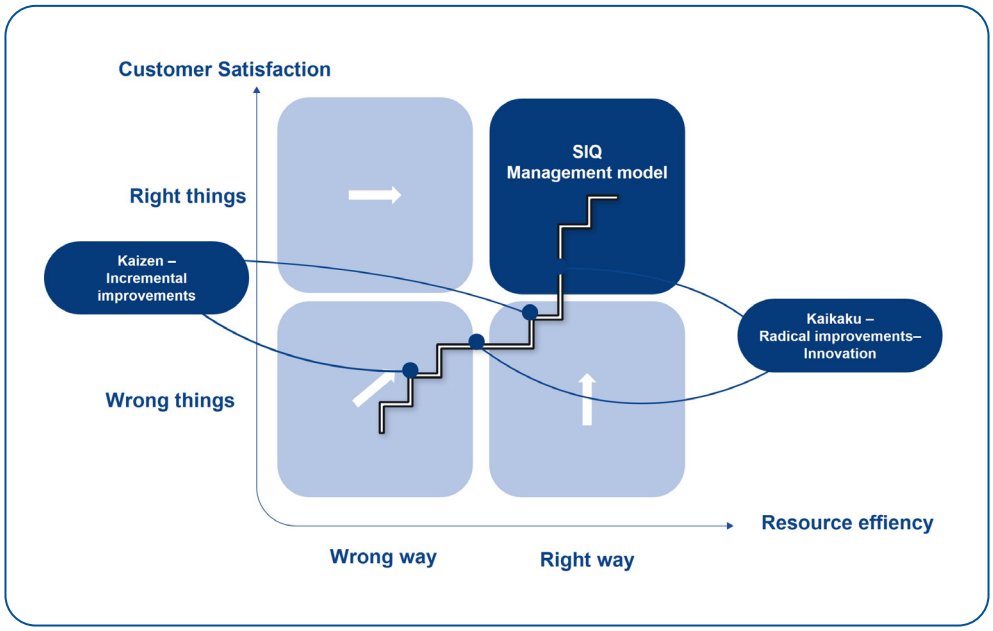


FIGURE 17. To constantly retain its relevance, an organization must constantly improve and adapt its working methods (x axis) and offerings (y axis). Sometimes this occurs via smaller incremental improvements and sometimes via more substantial improvements, innovations.
In Japanese, continuous improvement is often referred to as "Kaizen" while more dramatic changes/improvements are called "Kaikaku".

15. SIQ tools

More information on the tools below can be found on the SIQ website, www.siq.se.

15.1 SIQ Success Insight

AIM

SIQ Success Insight is based on the success factors in the SIQ Management Model and is a tool for reflection and dialogue on quality management from a holistic perspective. The aim is to reflect on where the organization is today in relation to the model's success factors. Perhaps an organization could also be more successful by ensuring that more of its working methods and its culture are characterized by these success factors. SIQ Success Insight is also available as a digital product available online on SIQ's website, https://www.siq.se/vara-tjanster/siq-framgangsinsikt/. The digital version also includes a guide with suggestions for steps in an improvement work based on the group's assessment of the current situation.

TARGET GROUP

Carried out individually and then in groups at the management group or team level. The tool works at all levels of an organization

WHEN

Carried out when a group wishes to gain a consensus picture of:

- What do we think we are good at?
- What do we think we are bad at?
- Where do our opinions differ and why?

- What do we want to be defined by and why?
- What is important for us to improve?



FIGURE 18. The digital SIQ Success Insight in three steps: 1) Evaluation, 2) Study and analyze and 3) Guide to improvement.

15.2 SIQ Contrast

PURPOSE

SIQ Contrast provides support for leading and steering towards sustainable success. It is a quantitative measurement tool based on the structure in the SIQ Management Model. Business operations are evaluated on the basis of how they are run and the results they produce. By asking 45 questions in a digital survey, the analysis provides a common understanding of how one's own organisation works, reaches goals and achieves results, which are key areas of responsibility for a management team. Based on the analysis presented in the report, there is an opportunity for SIQ consultation with key individuals on what could be the next step in the development of the business. See example in Figure 19.

TARGET GROUP

The target group is both managers and coworkers in an organisation.

WHEN

The assessment of the current state of the business made by coworkers is important for leading and steering towards sustainable success by obtaining answers and insight into:

- the balance between internal and external efficiency of the business
- areas of agreement and disagreement within the group
- priority focus areas

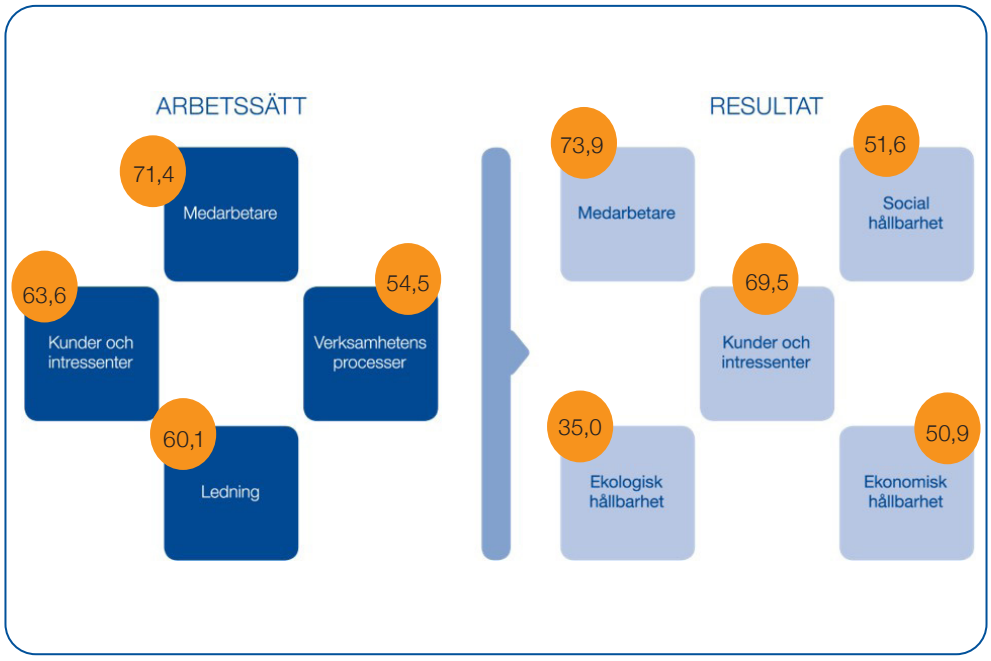


FIGURE 19. SIQ Contrast provides insight into the balance between internal efficiency (working methods) and external efficiency (results) to lead and steer towards sustainable success.

15.3 SIQ Management Index

AIM

The SIQ Management Index is a quantitative measurement tool based on excellence models. It provides a common understanding on how one's own organization works, achieves goals and results, what are important areas of responsibility for a management group. See Figure 19 for an example.

TARGET GROUP

The target group is management groups.

WHEN

Measurements made by management groups are important in order to obtain answers and insight into:

- areas where there is consensus or lack of consensus in the group
- what creates any gaps to other leaders in the organization
- priority focus areas
- how efficient the organization is in relation to the working model chosen by the management
- how flexible and adaptable the management is in relation to external factors

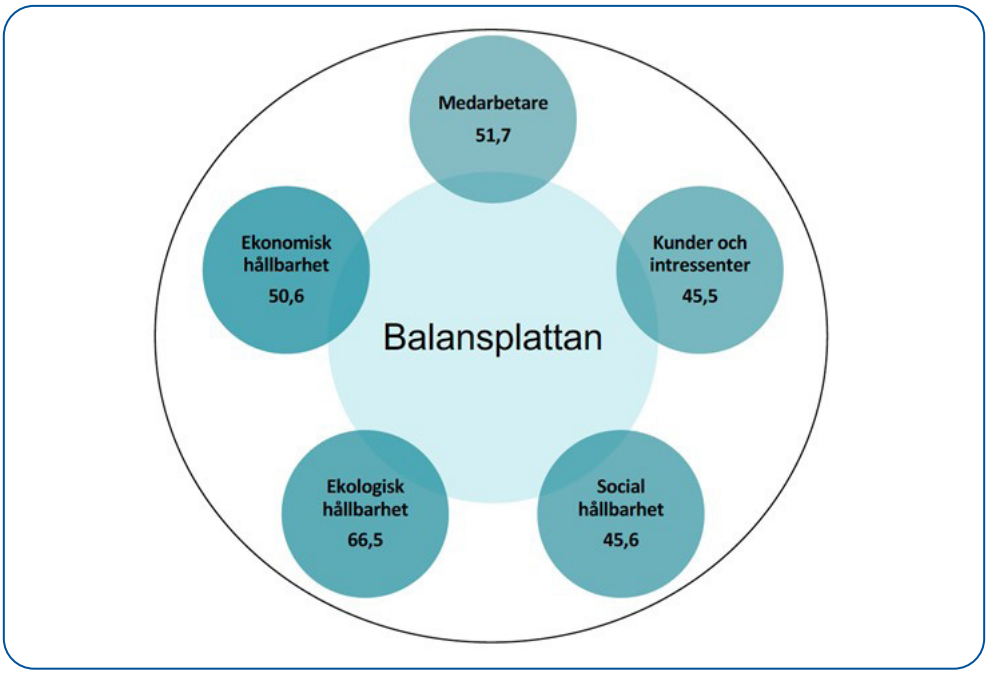


FIGURE 20. Over time, an organisation needs to balance its results based on several stakeholders. The balance sheet (balansplattan) shows your organisation rating within five areas. The grades are presented on a scale of 0-100.

15.4 SIQ Quality Culture Index

AIM

The SIQ Quality Culture Index has been developed to give organizations an understanding of the behaviours that, in our assessment, dominate at the workplace. At the same time, the Quality Culture Index provides an idea of which behaviours we think are most desirable, see Figure 21 on the following page for an example.

TARGET GROUP

The target group is both leaders and employees in an organization. To facilitate the processing of results from quality culture measurements, it is recommended that measurements are made at divisional/specific workplace level and not just at the organization-wide level.

WHEN

Measurements are important in order to gain an understanding of the quality culture in one's own organization at the behaviour level; what are the behaviours that can be influenced by the organization's leaders.

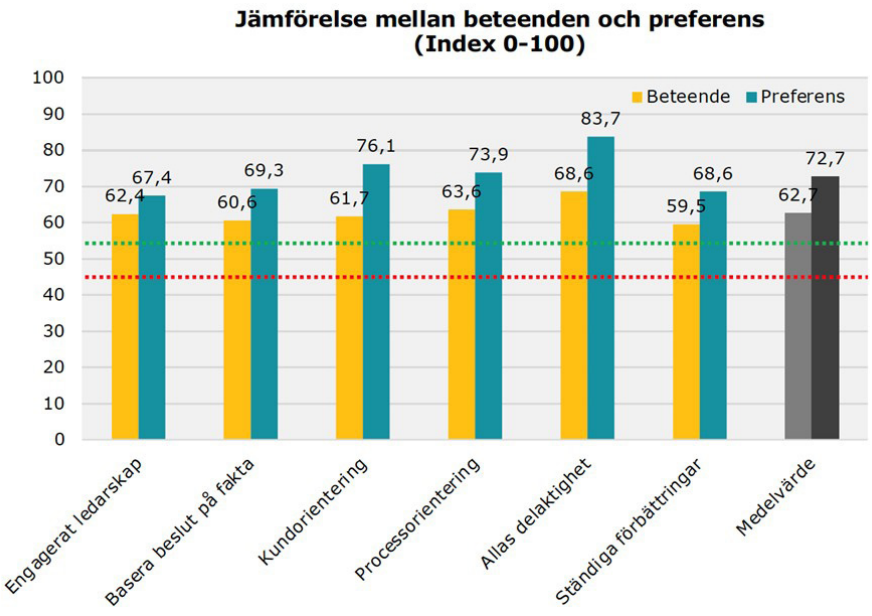


FIGURE 21. SIQ Quality Culture Index provides an overview of the current state of quality culture in an organization. The analysis shows the difference between estimated behavior and preference, ie the desired level. The grades are presented on a scale of 0-100.

16. FAQs on the SIQ Management Model

IS THE NEW MODEL APPROPRIATE FOR SMALL, RAPIDLY GROWING COMPANIES?

ANSWER: All organizations, including small, rapidly growing companies, need to develop working methods for customers, stakeholders, management, employees and processes. These are generic areas for all types of organization. SIQ has had several recipients of the Swedish Quality Award -Sustainable Success that are classified as SMEs (small and medium-sized enterprises).

HOW DOES THE MODEL CREATE THE RIGHT CONDITIONS FOR DEVELOPING A MODERN COMPANY?

ANSWER: The SIQ Management Model has been developed in an interactive research project and meets the challenges faced by organizations and companies (see heading 13). In this way, the model is practically relevant and creates the conditions for developing a modern company. In addition, the model contains questions on how the organization keeps itself updated on relevant external factors that affect the specific organization.

HOW DOES THE MODEL DEAL WITH DIGITALIZATION?

ANSWER: The model contains questions on how the organization keeps itself updated on relevant external factors that affect it specifically. Such a factor can be digitalization. This manual points out the mutual relationship between quality management and digitalization,

which can provide advice on how an organization should work with these areas in an integrated way (see heading 11).

WHY A SWEDISH MODEL WITH AN ENGLISH NAME?

ANSWER: "Management" is a concept that is listed in the Swedish Academy dictionary. As the SIQ Model is built on a leadership philosophy about how to lead and govern an organization to achieve better results, we wanted the name of the model to reflect this. The model is mostly for the organization's operational management. During development of the prototype, the question of whether the name is suitable for the public sector has emerged. SIQ has a product called the SIQ Management Index, which has been used primarily by public sector organizations. No-one has commented directly on the name of the product. Instead, the importance of focusing on the significance of the management for development has been emphasised.

17. The Model's audit plan

In connection with the examiner training and when participating in the *Swedish Quality Award - Sustainable Success* and *Better School Quality Award*, the SIQ Management Model and this associated manual are evaluated once a year. This evaluation is analyzed by SIQ and improvements are subsequently made to the model.

The SIQ Management Model and this manual will be updated annually based on relevant comments. Periodically, a larger research-based review of the model is initiated in cooperation with researchers and practitioners.

If you have any comments and suggestions for improvements with regard to the model, please e-mail them to siq@siq.se.

18. References

Backström, T., Fundin, A., & Johansson, P. E. (Eds.). (2017). Innovative quality improvements in operations: introducing emergent quality management (Vol. 255). Springer International.

Bergman, B., Klefsjö, B. (2020). Quality - From Customer Needs to Customer Satisfaction, Studentlitteratur, ISBN 9789144078250

Broman, G. , and Robèrt, K.-H. (2017). A framework for strategic sustainable development. Journal of Cleaner Production , 140 (1), 17–31. https://doi.org/10.1016/j.jclepro.2015.10.121

Bäckström, I. (2009). On the Relationship between Sustainable Health and Quality Management – Leadership and organizational behaviours from Swedish organizations, Doctoral thesis No. 71, Mid Sweden University, Östersund.

Carlson, W. and McNurlin, B. (1992), "Basic principles for measuring IT value", I/S Analyzer, Vol. 30 No. 10, pp. 1-16. Dahlin, J.-E. (2014), Hållbar utveckling [Sustainable development], Studentlitteratur.

Deleryd, M. and Fundin, A. (2020) Towards societal satisfaction in a fifth generation of quality – the sustainability model, Total Quality Management & Business Excellence, https://doi.org/10.1080/14783363.2020.1864214

Deming, E.W. (1986). Out of the Crisis. Cambridge, MA, MIT/Center for Advanced Engineering Studies.

Eriksson, H. and Hansson, J. (2003). "The Impact of TQM on Financial Performance", Measuring Business Excellence, Vol. 7 No. 1, pp. 36-50.

Fundin, A., Backström, T., Johansson, Peter E. (2019) "Exploring the emergent quality management paradigm", Total Quality Management and Business Excellence, March 17, https://doi.org/10.1080/14783363.2019.1591946

Fundin, A., Bergman, B., Elg, M. (2017) "The quality dilemma – combining development and stability", in Backström, T., Fundin, A., Johansson P.E. (eds), Innovative quality improvements in operations – introducing emergent quality management, Springer International Publisher, USA.

Flynn, B.B., Schroeder, R.G. and Sakakibara, S. (1995). "The Impact of Quality Management Practices on Performance and Competitive Advantage", Decision Sciences, Vol. 26 No. 5, pp. 659-691.

Hallencreutz, J., Deleryd, M., Fundin, A. (2020) Decoding sustainable success, Total Quality Management & Business Excellence. https://doi.org/10.1080/14783363.2020.1863779

UN (2017a). The global goals for sustainable development. Retrieved on 19 Dec 2017 from http://www.globalamalen.se.

UN (2017b). Transforming the world: the 2030 agenda for sustainable development. Retrieved on 19 Dec 2017 from https://sustainabledevelopment.un.org.

Hellsten U. and Klefsjö, B. (2001), "Självutvärdering – några verktyg och råd för arbetet" [Self-evaluation – A few tools and some advice], Kvalitetsmagasinet, 2 April.

Hendricks, K.B. and Singhal, V.R (1995). "The Impact of Capacity Expansion in the Market Value of the Firm", Journal of Operations Management, Vol. 12 No. 3, pp. 259–272.

Hendricks, K.B. and Singhal, V.R (1996). "Quality Awards and the Market Value of the Firm: An Empirical Investigation", Management Science, Vol. 42 No. 3, pp. 415–436.

Hendricks, K.B. and Singhal, V.R. (1997). "Does Implementing an Effective TQM Program Actually Im- prove Operating Performance? Empirical Evidence from Firms that have won Quality Awards", Management Science, Vol. 43 No 9, pp. 1258–1274.

Hendricks, K.B. and Singhal, V.R. (2001a). "The Long-run Stock Price Performance of Firms with Effective TQM Programs", Management Science, Vol. 47 No. 3, pp. 359–368.

Hendricks, K.B. and Singhal, V.R. (2001b). "Firm Characteristics, Total Quality Management, and Financial Performance", Journal of Operations Management, Vol. 19 No. 3, p. 269-285.

OECD/European Communities. (2005). "Oslo Manual: Guidelines for collecting and interpreting innovation data", OECD/European Communities.

Raharjo, H. and Eriksson, H. (2016). "Exploring differences between private and public organizations in business excellence model", International Journal of Operations and Production Management, Vol. 37 No. 12, pp. 1795-1816.

Randers, J., Rockström, J., Stoknes, P.E., Golüke, U., Collste, D., Cornell, S. (2018) Transformation is feasible

– how to achieve sustainable development goals within planetary boundaries, a report to the club of Rome from Stockholm Resilience Center and BI Norwegian Business School, 17 October.

Rockström, J., W. Steffen, K. Noone, Å. Persson, F. S. Chapin, III, E. Lambin, T. M. Lenton, M. Scheffer,

C. Folke, H. Schellnhuber, B. Nykvist, C. A. De Wit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sörlin, P.

K. Snyder, R. Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R. W. Corell, V. J. Fabry, J. Hansen, B. Walker,

D. Liverman, K. Richardson, P. Crutzen, and Foley J. (2009). "Planetary boundaries: exploring the safe operating space for humanity. Ecology and Society, Vol. 14, No. 2. http://www.ecologyandsociety. org/vol14/iss2/art32/.

Rönnbäck, Å. & Eriksson, H. (2012). ”A case study on quality management and digital innovation”, International Journal of Quality and Service Sciences, Vol. 4 No. 4, pp. 408–422.

SIQ (2017). SIQ Model for Customer-Oriented Business Development. SIQ – Swedish Institute for Quality, Göteborg, Sweden.

Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Biggs, R., Carpenter, S. R., de Vries, Wim, de Wit, C. A., Folke, C., Gerten, D., Heinke, J., Mace G. M., Persson, L. M., Ramanathan, V., Reyers, B., Sörlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. Science, Vol. 347, No. 6223.

Weiser, A. K., Jarzabkowski, P., and Laamanen, T. (2020). Completing the adaptive turn: An integrative view of strategy implementation. Academy of Management Annals, 14(2), 969-1031.

World Commission on Environment and Development. (1987). Our Common Future. Oxford. Oxford University Press. p. 27.

SIQ - Swedish Institute for Quality, whose statutes have been established by the Swedish Government, is tasked with being the unifying, inspiring and resource-creating body for national development within the area of quality and playing a supportive role in international cooperation. SIQ stimulates and contributes to positive quality development in all parts of the Swedish society by creating, gathering and disseminating knowledge to promote long-term and sustainable development work. SIQ is supported by the Swedish Agency for Economic and Regional Growth and our member organizations are from both private business and the public sector.

FOLLOW US ON LINKEDIN AND FACEBOOK.

Visit us at siq.se

SWEDISH INSTITUTE FOR QUALITY SIQ

Swedish Institutet for Quality
Drakegatan 6, 412 50 Göteborg
Torsgatan 2, 111 23 Stockholm
Telefon +46(0)31 723 17 00
siq@siq.se · www.siq.se