USING A PROCESS MODEL AT STATISTICS SWEDEN

IMPLEMENTATION, EXPERIENCES AND LESSONS LEARNED

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The Swedish Process Model was developed in 2007. Like the Generic Statistical Business Process Model (GSBPM, released widely in 2009) it was based on work done by Statistics New Zealand. There are some differences between the models since they were developed in parallel, but they are very closely aligned. Standards, guidelines, templates and checklists as well as IT tools are described and disseminated through the Process Support System, the first version of which was released in 2008.
The whole formed the basis for a standardised and process oriented approach to statistical production. That approach has been used by Statistics Sweden since 2008, affecting widely its organisation. Since 2014, the Office has been also certified according to the international standard ISO 20252. All the criteria from this standard have been included in the Process Support System.
The Process Model and the Process Support System has reached a broad use in the organisation. That does not mean there haven't been challenges along the way, like acceptance, finding the relevant information and keeping everything up to date. While the systems have now been used for over ten years, there are still possibilities for further development. These include creating a more tailored view for each statistical product, as well as spreading the use of the Process Model and the Process Support System to other authorities responsible for official statistics in Sweden.

L'institut national statistique suédois (SCB) a développé son modèle de processus statistique en 2007. Comme le GSBPM, modèle générique de description des processus de production statistique diffusé à grande échelle en 2009, il se fonde sur les travaux de Statistics New Zealand. Les deux modèles ont été développés en parallèle : malgré certaines différences, ils sont très proches l'un de l'autre. Des normes, des lignes directrices, des modèles et des listes de contrôle, ainsi que des outils informatiques ont été décrits et diffusés au sein de l'institut suédois, par le biais d'une infrastructure servant de support à la démarche. On a ainsi posé les bases d'une approche de la production statistique standardisée et « orientée processus ».
À l'œuvre depuis 2008, la démarche a radicalement changé l'organisation du SCB. En outre, depuis 2014, l'institut est certifié selon la norme internationale ISO 20252, dont tous les critères ont été incorporés à l'infrastructure associée au modèle. L'ensemble est maintenant largement implanté au sein du SCB, non sans avoir dû surmonter quelques difficultés : l'acceptation par les parties prenantes, l'identification des informations pertinentes et le maintien à jour des éléments constitutifs. Utilisé depuis plus de dix ans, le dispositif pourra se développer, par exemple en créant une version adaptée à chaque produit statistique, ou en étendant son usage à d'autres autorités responsables de la statistique publique en Suède.

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This paper describes both the implementation of the Swedish Process Model, and the Process Support System for process oriented statistical production that is based on and connected to the process model. We first describe the model, its similarities and small differences to the Generic Statistical Business Process Model (GSBPM). Then follows a short description of the Swedish system for official statistics, which has developed and implements the model. Looking backward to the context of the creation and implementation of both the model and the Process Support System, we identify the factors of success that meant it became widely used within the organisation. Then we cover in turn the changes that have occurred since the systems were created, compliance with the systems and some of the main challenges we have faced over time. Finally, the main ideas for future development are outlined.

THE GSBPM...

The Generic Statistical Business Process Model (GSBPM) describes the set of stages needed to produce official statistics. It was first developed in 2008 by the Joint UNECE/Eurostat/OECD group on Statistical Metadata (METIS). It was based on the Process Model designed by Statistics New Zealand. The first version that was used widely (version 4.0) was published in 2009 and has been broadly adopted by the global official statistics community.

> *"The GSBPM is a reference model, which means that it can be (and is intended to be) used by different organisations in different ways as they see fit."*

The GSBPM structures the statistical production process divided into phases and sub-processes, each with a description of what is included in the (sub-)process and the work carried out within it ***(Figure 1)***. The GSBPM is a reference model, which means that it can be (and is intended to be) used by different organisations in different ways as they see fit.

The GSBPM is related to other models that have been developed to describe the work of statistical organisations, both the Generic Activity Model for Statistical Organisations (GAMSO) that describes what statistical organisations do on a high level, and the Generic Statistical Information Model (GSIM) which is a reference framework for statistical information. Both GAMSO and GSIM have been developed after GSBPM, and build on the foundation laid by GSBPM.

The full GSBPM model can be found at (UNECE, 2019). A good description of the first version of GSBPM and how it was developed can be found in (Vale, 2009).

...THE SWEDISH PROCESS MODEL...

The Swedish Process Model was developed in 2007 (independent from and in parallel with the development of the GSBPM) and it was also based on the work carried out by Statistics New Zealand (Pearson and Savage, 2007). It was created as a part of a large modernisation and standardisation project in Statistics Sweden called *Lotta* that was carried out between 2006 and early 2008 that we detail further.

The process model was an important part of this approach as it set the chart for which processes and sub-processes to gather and develop standards for. The first version of the Swedish Process Model was established in October 2007, and since then there has only been minor revisions to it. ***Figure 2*** is the current version of the model.

... AND THE DIFFERENCES BETWEEN THEM

Looking at both models, you can see that there are some differences. The main differences between the Swedish Process Model and the GSBPM are as follows:

- The GSBPM has eight phases plus Overarching processes, whereas the Swedish Process Model has a ninth phase, Support and infrastructure, instead of Overarching processes. Also, phase 8, Evaluate, does not have sub-processes in the Swedish model, whereas it has three sub-processes in the GSBPM.
- The sub-processes in phase 1, Specify needs, differ to some extent between the two models.
- In the design process, the Swedish model has a specific sub-process for designing dissemination and communication and also separates design of processing and analysis into two distinct sub-processes, whereas the GSBPM distinguishes a sub-process for designing variable descriptions. The Swedish model also adds a sub-process for planning the production cycle.
- The GSBPM distinguishes building tools for processing and analysis on one hand and dissemination on the other hand as two sub-processes, whereas they are in the same sub-process in the Swedish model.
- The Swedish model distinguishes creating the frame and selecting the sample as two sub-processes whereas the GSBPM has them as one sub-process.
- The sub-processes under phase 5, Process, differ slightly between the models.
- The GSBPM has sub-processes in phase 3, 4 and 5 for finalising the phase, such sub-processes are not explicit in the Swedish model.

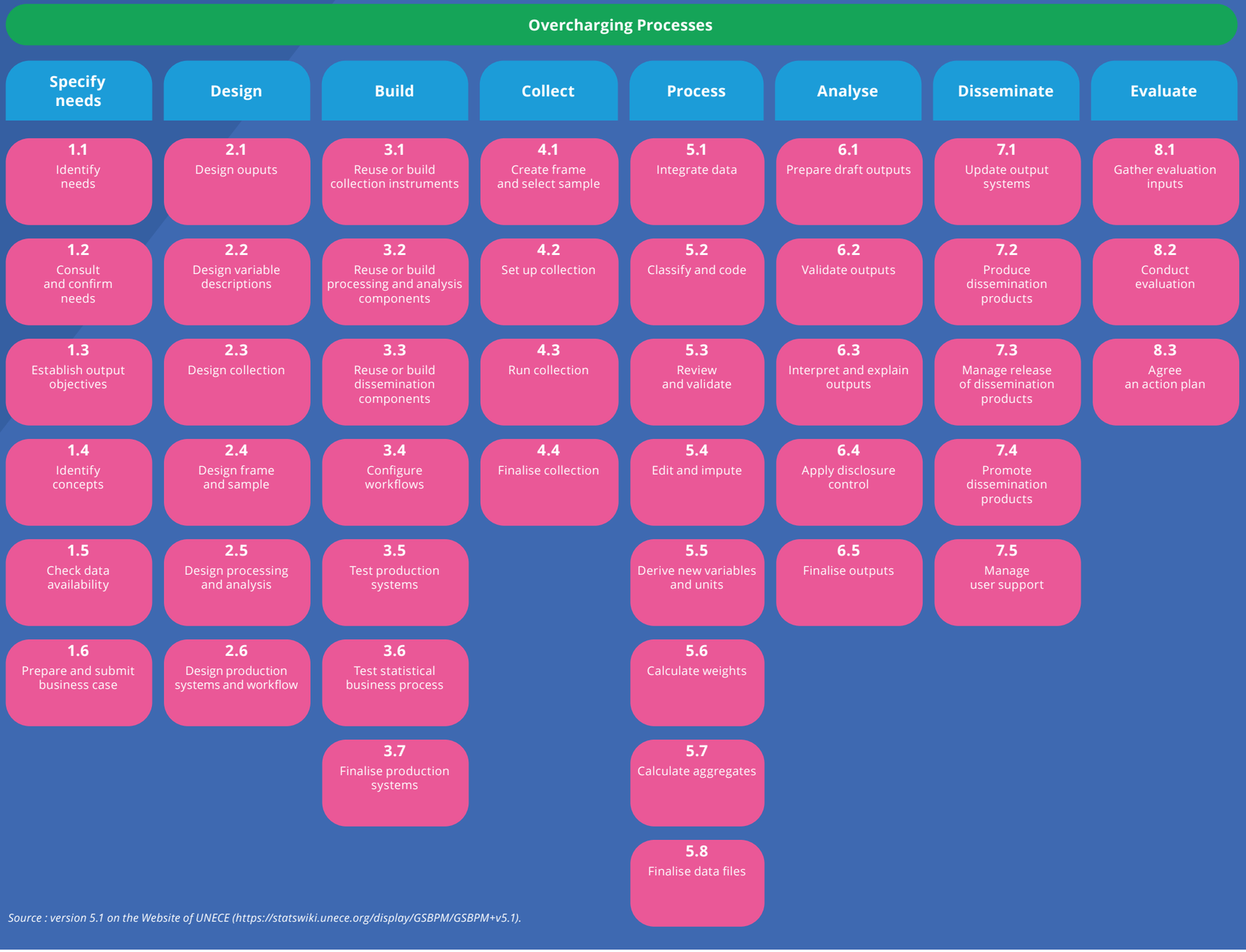
If you study the models more closely, going into the underlying texts of each phase and sub-process, it becomes clear that on a content level, the differences are actually very small, both models cover the same work steps, but in a few cases attribute them to different sub-processes. Therefore, we say that the Swedish model is closely aligned to the GSBPM but with some subtle differences. Both when the GSBPM was presented and when there have been major revisions to the GSBPM, there have been internal discussions at Statistics Sweden whether to revert fully to GSBPM, but so far these discussions have resulted in a decision to stick to our own model. It is well known in our organisation, the Process Support System is structured according to it and, as said above, the differences are small.

"Statistics Sweden has taken an active role in the development of the GSBPM over time, we have been part of the revision team in every revision since 2009."

Statistics Sweden has taken an active role in the development of the GSBPM over time, we have been part of the revision team in every revision since 2009. We were also active in the Eurostat project MEMOBUST (Methodology for the Modernisation of Business Statistics[1]) which actually does many of the things the Swedish Process Support System does: it collects methods and guidelines for producing business statistics, and it does it by sub process in the GSBPM. Statistics Sweden were active in that project and a driving force in basing the results on the GSBPM.

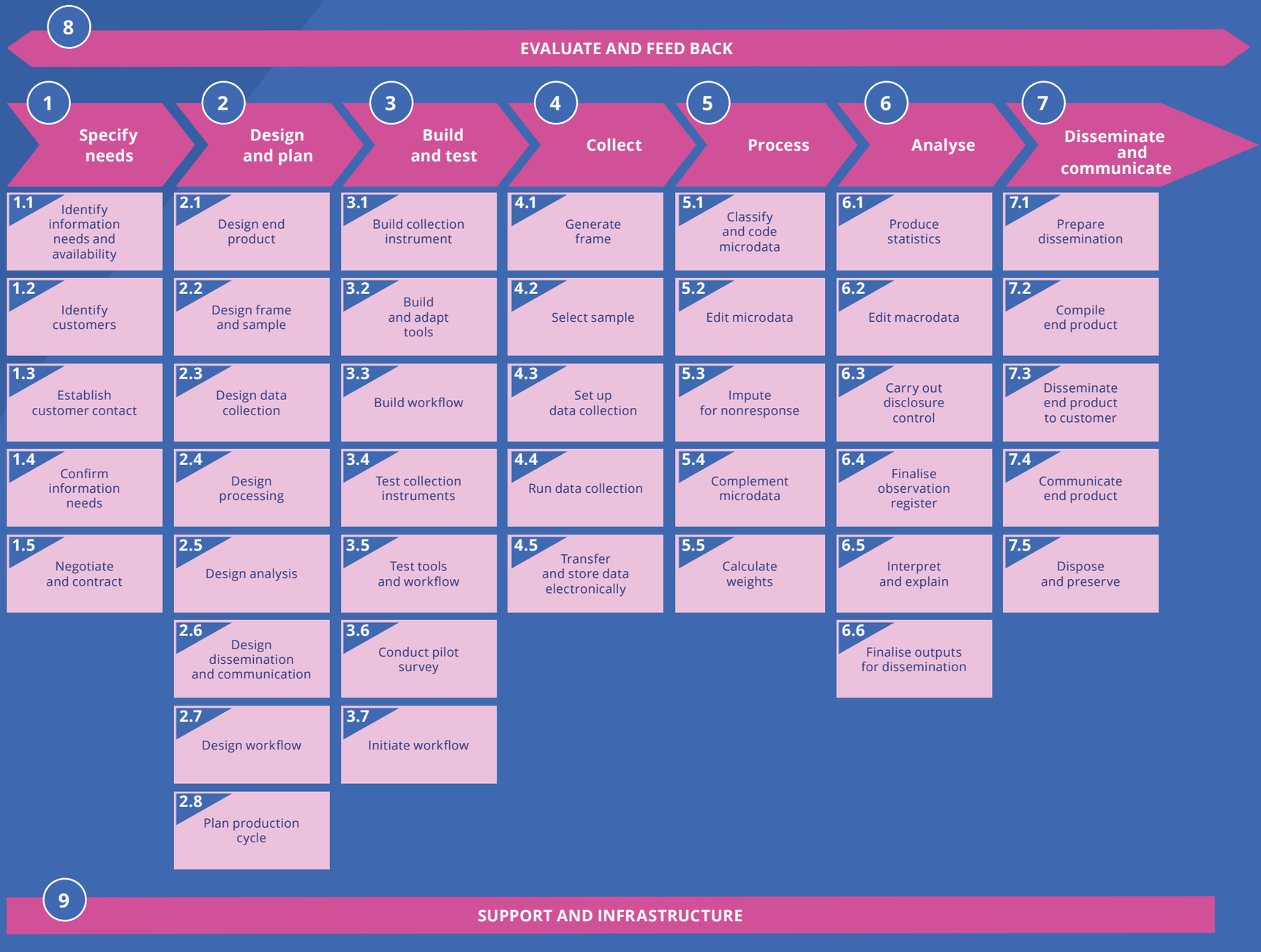
1. See *https://ec.europa.eu/eurostat/cros/content/memobust_en*.

Figure 1. Level 1 and 2 of the Generic Statistical Business Process Model (GSBPM)



Source : version 5.1 on the Website of UNECE (https://statswiki.unece.org/display/GSBPM/GSBPM+v5.1).

Figure 2. The Swedish Process Model is structured in 9 phases



THE SWEDISH SYSTEM FOR OFFICIAL STATISTICS

The official statistics in Sweden are regulated according to the Official Statistics Act (2001:99) and the Official Statistics Ordinance (2001:100). Since 1994, Sweden has a decentralised system for the production of official statistics. Today, 28 government agencies are responsible for official statistics within their respective areas.

The statistics themselves are divided into subject areas, statistics areas and products. At the moment there are 22 subject areas, 112 statistics areas and 356 products. Each agency is responsible for one or more statistical areas, this also means that there can be more than one responsible agency within a subject matter area.

Statistics Sweden[2] has two roles within the system: one is to be one of the 28 agencies responsible for statistics (for 45 statistics areas within 13 subject areas), and the second role is to act as the National Statistical Institute (NSI) and to coordinate the whole system of official statistics and evaluate the quality of official statistics.

Since 2002, there is a Council for Official Statistics which consists of heads of the responsible agencies. The board has twelve delegates, of which six are permanent and six are rotating on a three year schedule with two new delegates appointed each year. The Council is chaired by the Director General of Statistics Sweden.

Today, Statistics Sweden is organised into:

- one collection department;
- four subject area departments;
- a department for development of processes and methods;
- a communication department;
- an IT department.

In addition, there is a personnel department and an administration department. There is also a central executive office that supports the management of the agency. The executive office also meets the assignments and requirements as a government administrative agency and employer ***(figure 3)***.

WHY DID STATISTICS SWEDEN DECIDE TO IMPLEMENT A PROCESS MODEL?

If we look back to around 2005, the production environment at Statistics Sweden was highly decentralised. This was partly a result of moving from a mainframe computer solution to a PC based computer environment in the late 90s (many of those systems had also been rapidly developed or changed in the late 90s based on a fear of the possible effects of the so called "millennium bug"), and partly because the organisation itself was highly decentralised, with each subject matter area being responsible for their own production process and having their own methodologists and IT specialists. This had more or less led to each subject matter area having its own IT system for producing statistics, using their own developed routines. The variation was large in how every task in the production

2. *Statistiska centralbyrån (SCB).*

process was carried out. Moreover, the IT systems were in many ways already old and in need of rebuilding, while they were also not fully documented and expensive to maintain. It was also expensive and difficult to introduce new methods and technical solutions for them in the IT environment.

Two examples of this were Web data collection and the new methodology for selective editing. In both these cases it was deemed inefficient to develop survey specific solutions, instead it was natural to develop common central solutions. But to implement these across the organisation, a large number of integrations to survey specific systems needed to be built. This resulted in what you could call a "spaghetti architecture" where a lot of time had to be devoted to maintain all integrations.

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Also, a lot of senior experts within the organisation were due to retire over the next few years, experts who had a lot of knowledge about the local statistical production processes. This was also true for many of the IT specialists. Much of the knowledge about how each survey in itself and its specific system worked would have to be transferred to new persons.

Statistics Sweden took a strategic decision so start a modernisation and standardisation project based on this, the so called *Lotta Project*[3]. The purpose of this project was to move from a large number of production systems to a smaller number and to make the statistical production more efficient. To reach this goal, it was decided to *move towards a process oriented approach to the statistical production process and to gather, develop and decide on standard methods, routines and tools for all sub-processes.* This would also "institutionalise" knowledge of the standard procedures.

As one part of this project, Statistics Sweden developed and decided on a process model to describe the production process. This was based on work done by Statistics New Zealand and resulted in the Swedish Process Model in October 2007 ***(figure 2)***.

IMPACT ON THE ORGANISATION

The decision to move to a process oriented view on the statistical production process would have impact on the organisation at Statistics Sweden, and it would also put the newly developed process model itself at the centre of attention. To drive the move towards standardisation and common IT tools it was decided to form a process department with process owners for sub-processes within the statistical production process. The process owners would be responsible for developing and maintaining standard methods, routines and tools. Also, all methodology and IT staff were centralised to the process department WHIC. The process department was established from January 1, 2008.

3. The Lotta Project was named after the person whose name day fell on the day the project started, May 13. The project and the process organisation are described in (Jorner, 2008).

Figure 3. Statistics Sweden's organisation

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Available at: *https://www.scb.se/en/About-us/main-activity/organisation/.*

It was also decided to develop a Process Support System that contained all the standards that had been decided on, and that this system would be based on the process model. Process owners were appointed for five areas based on the sub-processes in the Swedish Process Model:

- Specify needs and Disseminate and communicate;
- Design and plan and Build and test;
- Collect;
- Process and analyse;
- Evaluate and feed back and Support and infrastructure.

For each area, one process owner and one deputy process owner were appointed. Each area was also given a budget for both maintaining existing standards and tools and developing new standards. Large IT development projects would be initiated by process owners but financed by the Statistics Sweden portfolio (which would also include other types of projects such as development of statistical content, but would be dominated by process development).

The people working in the statistical production would still be working in subject matter departments plus data collection and communication. This meant a matrix organisation was set up, containing both (sub) processes and statistical products.

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Two of the latter endeavours of the Lotta Project were to prepare for a first decision on standards and a decision on how the Process Support System would be designed. The first meant going through existing tools, methods and routines used at Statistics Sweden, and listing those that would be standards in the new process oriented way of working. A lot of the detailed projects under the Lotta umbrella had established standards and tools. This endeavour would also go some way in identifying areas were standards were still missing and needed. The director general decided the standards and the process owners were to maintain and develop them further.

The second work resulted in the decision to build the Process Support System as a MS SharePoint system where all standards and tools were to be described and accessible for users. Besides IT tools it would also contain standard routines and support in the form of checklists, templates and other things necessary to follow the standards. The responsibility of filling the Process Support System with content was given to process owners. A lot of work was devoted to this, involving many people from across the organisation, and a first version was released in September 2008. The Process Support System had, and still has, a rather simple structure, built on a clickable version of the Swedish Process Model. Each phase and sub-process (which can in turn be divided into more detailed sub-sub-processes or additional pages when necessary) has a page divided into four parts ***(Figure 4)***:

- A short description of the (sub) process and the purpose of it.
- Input: things that need to have been done before starting this process, and where the information needed comes from (with links to previous sub-processes when applicable).
- Realisation: a detailed description of how to run the process, including links to appropriate tools and descriptions of standards to follow (including templates, checklists, etc.).
- Output: The results coming out of the process.

The Process Support System is still in full use today. It has a somewhat different role than the process model itself, the main purpose is to present the normative standards decided upon by Statistics Sweden that must be followed by all process users (there is a specific process to apply for exception if for some reason you cannot adhere to a standard). While the descriptions of the phases and sub-processes in GSBPM for example are generic, the descriptions in the Process Support System are detailed, specific and tailored to Statistics Sweden.

The use of the process model has made it easier for us to create new standard IT tools, and also to make it easier for those tools to communicate with each other, since we connect the tools to the processes. These tools have also made the production more efficient, especially in the data collection stage. The standardisation has meant that the cost of learning IT tools has decreased ant it is easier to have people working on many products. While standardisation also comes with some possible loss of flexibility, in general we think that we achieved many of the goals we set up before starting the process orientation.

Figure 4. An Example of Structuring a Process Support System

ISO 20252 CERTIFICATION AND IMPLEMENTATION IN THE PROCESS SUPPORT SYSTEM

The importance of the Process Support System and thereby also the Swedish Process Model was enhanced further throughout 2008 to 2014. Already in March 2008, a decision was made by the director general that Statistics Sweden would apply for certification according to the international standard ISO 20252 (for organizations conducting market, opinion and social research). Pre-research started and showed that there was lots of work necessary for Statistics Sweden to be fully compliant with the standard. This work involved interpreting some parts of the standard further but mostly included development of standards. It was carried out in a project between December 2008 and December 2009, in order to have most standards in place when 2010 started.

> *"If a product adhered to the standards described in the Process Support System, it would also automatically be compliant with the demands from ISO 20252."*

In an ISO certification process, the Quality Assurance System must have been in place and used for some time before certification was possible. For each criteria in the standard, Statistics Sweden decided whether to have a common solution or instructions to the various products on how to comply with the standard. It was decided that both common solutions and instructions would be included in the Process Support System, with the specific aim that if a product adhered to the standards described in the Process Support System, it would also automatically be compliant with the demands from ISO 20252. This integration of the ISO 20252 demands into the Process Support System also gave Statistics Sweden the possibility to put higher requirements than stipulated by the ISO standard on the products in cases where we considered it necessary and combine our internal standards with the criteria from the external ISO standard.

The Process Support System was almost fully updated by the end of 2010, but the need for a new telephone system compliant with the demands of monitoring telephone interviews made certification impossible until that had been implemented. That took quite some time. Statistics Sweden were finally certified in March 2014. The journey towards certification is described in (Hoff *et alii*, 2010) and (Bergdahl *et alii*, 2014).

FACTORS OF SUCCESS: INTENSITY, SPONSOR, DRIVERS OF A GLOBAL APPROACH

The Lotta Project, the implementation of the Process Model closely aligned with GSBPM, the creation of the Process Support System, the creation of the Process Department and the ISO 20252 certification were all closely connected and implemented in an intense period of time (2006-2010). Demanding as all these changes were over those few years, it is also one of the main factors of success.

There was a profound sense of urgency across the organisation, the changes were driven and supported by top management and the changes were handled in a coherent manner, even if people not directly involved maybe didn't feel that way while standing in the middle of a hurricane of changes: it is very likely that the changes would not have succeeded if they had been implemented one by one.

The standardisation and the Process Support System would probably not have succeeded without an organisation of people to drive the development and implementation (the process owners). Without the goal of certification according to ISO 20252, the Process Support System might not have become a central tool of support and guidelines for the different products. And without the Process Model, it would have been much more difficult to spread standards and guidelines throughout the organisation. The Process Model gave everybody a common understanding of the phases in the statistical production process and it gave the organisation a framework to both describe and find standards, guidelines, tools and support. The Process Model and the Process Support System also give a good framework for auditing compliance with existing standards.

CHANGES OVER TIME

Between 2010 and 2016, the organisation and the systems were relatively stable. There was a lot of focus on developing common IT tools for different processes and IT was moved from the Process Department into a department of its own in 2010, but the IT development was still initiated by the process owners. The Process Department and the IT Department worked closely together. The internal standards and routines were still the responsibility of the Process Department and were updated continuously. The system with a Process Department and process owners only evolved a little, with some changes in the responsibilities and which sub-processes were the responsibility of each process owner, but the main organisation was unchanged. A more detailed description of the common production environment can be found in (Erikson and Odencrants, 2016).

"There had been discussion around the boundaries and responsibilities between the Process Department and the R&D Department."

From 2017 there have been some larger organisational changes. There had been discussion around the boundaries and responsibilities between the Process Department and the R&D Department. There was a need to increase the capability of the development in the office and to have higher efficiency in projects, and also to have a faster implementation of project results. This led to a decision to merge the two departments into a new Department for Development of Processes and Methods. Statistics Sweden also decided to implement a new maintenance model. Both these decisions led to changes in roles and responsibilities.

The previous process owners were replaced by maintenance leaders, and with one single process owner for the statistical production process as a whole. Since maintenance leaders would now be situated at different departments within the organisation, the maintenance of the Process Support System was also a little more decentralised, it is now up to the group of maintenance leaders together with the process owner to keep it coherent and up to date. But the role of both the Process Support System and the Process Model is unchanged. The Process Support System still contains the standards to follow, and the notion that if a product follows the Process Support System it will automatically be compliant with ISO 20252 still holds. It's the organisation around the system that has changed, not the system itself or its purpose.

COMPLIANCE WITH THE PROCESS SUPPORT SYSTEM

Since the demands of the ISO 20252 standards were built into the Process Support System, there has been a high pressure on process users to use the Process Support System and its standards.

Compliance is audited both by an external auditor who annually audits compliance with the ISO 20252 standard (using a randomised sample of products), and by internal quality auditors who audit both compliance with the Process Support System and the quality of the system itself and the guidelines it contains. The internal quality audit organisation aims to review the use of all sub processes on a rolling scheme over a three year period.

While the audits do find deviations from existing standards, in general it is fair to say that compliance across the organisation is rather good. The system has been in use for ten years, so the organisation is now used to it and the products owners know that they can and will be audited on their compliance. The external ISO auditors have expressed that they are very impressed by the Process Support System, and has deemed it an excellent system to assure both compliance with the standard and high quality in the statistical production process. While the description above shows that the creation and implementation of a process oriented approach to statistical production in Sweden has to a large extent been successful, it has definitely not been without challenges. The three main challenges that have been faced during this period are acceptance, making it easy for process users to find the relevant information and keeping the information up to date.

THREE NEW CHALLENGES: ACCEPTANCE...

Standardisation always comes with acceptance challenges. Some people question why they should change something that is working. A standard procedure might be good for the bureau as a whole but not always for every single user. The need for standardisation is questioned by experienced people who know current routines by heart and from experience. Standardisation might be seen as stifling creativity. And the standards themselves and the value of implementing them (for example to gain a certain certification) are also questioned. All these cases happened in our implementation.

> *"The need for standardisation is questioned by experienced people who know current routines by heart and from experience. Standardisation might be seen as stifling creativity."*

The Process Model was questioned as being too simplified, not taking into account differences between different types of products and the complexities of statistical production in practice. The standards were questioned, as well as the decision to become certified. Experienced staff expressed concerns that they would become slaves under checklists and that the necessity of free thinking would be limited.

These discussions can still arise now and then, when people think that there are better ways of working than to follow existing standards, and that they are not allowed to try those ways freely. In order to counter these arguments, it has been important to openly discuss the value of standardisation, create a sense of involvement from process users in developing standards, and to have a strong support from management for the changes. In the development, the strong management support was the most important factor in tackling this challenge. We have also tried to work continuously

with this challenge over time and while there is still an acceptance challenge, today it is more concerned with specific standards, templates and IT tools and how to use them rather than the whole idea of process orientation and standardisation. This in itself is a positive thing, and much more possible to deal with. It should also be said that Statistics Sweden had a period around 2010 where there were some large errors in our statistics, and we had to work hard to raise quality in our production. In this work, standards were actually a great help and this also raised the acceptance for our process oriented way of working.

... FINDING THE RELEVANT INFORMATION...

The process model and the Process Support System contains a lot of information. And not all standards are applicable for all types of surveys. For example, some standards are only applicable to sample surveys with primary data collection, while others apply to surveys based on administrative data. There are a lot of standard routines connected to different modes of data collection, and surveys differ in which modes they use. There are strict rules to follow for mandatory surveys that are not applicable to voluntary surveys. There are differences between dealing with persons and with enterprises, etc.

This means that for many sub processes, it will be necessary to find the standards that are applicable to the products, and only those standards. This can be a difficult task sometimes. It also comes with a risk of missing important information. We have tried to tackle some of these challenges by dividing sub processes further, and also by creating some overarching documents, for example for register based statistical production and for editing and validation across the whole production process. But this has only partly solved the problem. There are still lots of people who feel that it is difficult to find all the necessary information, and this also affects acceptance for the standards in general. People who don't find what they are looking for are more likely to have a lower acceptance for the system as a whole. This is the most important challenge that we still need to tackle and work with continuously.

"There are still lots of people who feel that it is difficult to find all the necessary information, and this also affects acceptance for the standards in general."

... AND KEEPING THE INFORMATION UP TO DATE

As said above, the Process Support System contains a lot of information. And to have acceptance within the organisation, it is very important that everything is up to date and still relevant. This has two implications. First, when our routines or standards change, it is important that the information in the Process Support System is updated accordingly. This can sometimes be problematic, especially when the people who update or develop a standard are not the people responsible for the information in the Process Support System. It is one thing to develop a standard or a tool, but describing it in routines that fit in the Process Support System can be something else. This means that sometimes the new standard is not described immediately in the Process Support System, which is problematic. In some other cases, the changes affect several sub processes maintained by different maintenance leaders which could lead to inconsistency if not all relevant parts are updated at the same time. And in yet other cases it can be difficult do decide where the information fits best, for example if it should be in a design process or a realisation process, or possibly under Support and infrastructure.

Another problem with keeping the information up to date is that not all standards actually change over time, at least not very often. This means that some standards developed five or even ten years ago are still relevant to use in the same way today. But just seeing a process which was created and last updated in for example 2013 can make people uncertain as to whether the information is still relevant today. And if people are uncertain if the information is up to date, it will affect the acceptance of the whole system. We have tried to address this problem by giving each sub process not only a date for the latest update, but also a date for when the information was last verified as being relevant. This gives us the opportunity to say for example that the information was updated in 2013 but verified in 2020 and hence up to date. This has been an improvement and seems to be a good way to tackle this challenge.

FUTURE DEVELOPMENT: THREE TRAILS TO FOLLOW

The implementation of a process oriented statistical production process based on the Swedish Process Model has been largely successful, despite the challenges described *supra*. The Process Model is well established as a way of describing the statistical production process, and the Process Support System based on the Process Model is used throughout the organisation. But that doesn't mean there's no room for improvement or further development. We have identified three possible further developments that are the most important to start working on.

- **Better usability**: as was seen before, the biggest challenge is for people to be able to easily find relevant and up to date information, thereby keeping acceptance at a good level. There are several ideas on how to increase the usability of the Process Support System, including more tailored views for different types of statistics, and also more overarching descriptions for topics that cover several parts in the production process. There are also thoughts about including more of the legal framework concerning statistical production, as well as a connection to strategic movements based on the new Statistics Sweden strategy. Including more information will require additional thinking on how to present it though, so that usability is not lowered through too much information rather instead of raised through having more relevant information.
- **A more tailored usage for products**: already from the start, there have been ideas to create a radically different view on the Process Support System and to tailor it so that each product gets the information it needs and nothing more. The idea is that it should be possible to determine which information a specific product needs based on having access to information about its basic design choices. We have tried and implemented some of these thoughts in a basic System for Quality Assurance in our data collection: each product gives information about its design, and from that information a list of Quality Assuring Activities is formed for the product. This basically means filtering relevant activities from a gross list of possible activities based on the design choices. Already this simple version is promising ***(Figure 5)***, but in order for it to fully work, it needs to cover the whole statistical production process. It requires to be more intelligent than today in presenting support tools like templates and check lists adapted to the specific design choices. To be fully useful for the people working in the statistical production?, it also needs to allow for adding survey specific information and descriptions of how the product uses a specific standard. The design choices are also used to create an area for each product where it gets access to relevant tools and where process data on the production can be presented. This is also limited to data collection today, but there are plans to extend this use to all parts of the statistical production process.

A Process Support System for the whole community of Official statistics in Sweden: as described *supra*, the responsibility for Official statistics in Sweden is divided between 28 authorities. The Process Support System has so far been used only by Statistics Sweden, but a discussion has started whether it could and should be used also by the other authorities. This would mean that there would probably have to be two versions of the Process Support System, one more generic for all authorities and one more specific for Statistics Sweden. To achieve this, building on a common ground in the form of the process model will be essential, without that it would be very difficult to have a common understanding on what to connect standards and routines to. If other authorities have their own process models, this could also mean that some adjustments and compromises would have to be made to have one common model. A test with a limited scope will be carried out in the spring of 2020 to see whether the information is of use to other authorities.

> *"There would probably have to be two versions of the Process Support System, one more generic for all authorities and one more specific for Statistics Sweden."*

Based on these possible future development, it is clear that the process model and everything connected to it will continue to play an important part of the infrastructure of Statistics Sweden.

Figure 5. System for Quality Assurance for one specific survey

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