Implementation of New Data Structures and Corporate Data Governance in the Central Statistics Office

Executive Summary

The CSO continues to have growing demands placed on it for more and more statistics. This is due to a number of external factors including the economic crash, the data centric environment we live in today and more and more research which requires good quality statistics. These demands have increased the amount of data in and out of the CSO. To ensure the continued production of quality statistics we must ensure that they are governed appropriately. This is possible by the provision of strong governance, standardised structures and robust policies.

This paper reviews the implementation of a change management project whose ambition was to align data to a standardised structure using a statistically universal business process model. Once the data was in aligned to this model, it would be possible to govern it corporately. The CSO has heretofore governed in silos, the silos are distinct divisions and this has been effective up to now. The Office has grown considerably (in terms of data and people) over the last number of years and the view is now held that a corporate governance approach, based on the experiences of other statistical offices, will now be more effective. Staff will identify data more easily at different stages of the data life cycle and the structure will have the same look and feel in each division. Governance of the data become easier because the structures are based on the same model. The change management that was required to implement this in one division is discussed in detail in this paper.
Section 1: Introduction to the Project

The Central Statistics Office (CSO) is the Government Agency that collects, processes, analyses and disseminates Official Statistics in Ireland. Its mission statement is “Statistics - Information for Ireland” [link]. It is important therefore that the information that the CSO provides has integrity (i.e. it is quality checked), its relevant (i.e. it has use to society) and its timely (i.e. we publish within a relevant time period).

In the last number of years these benchmarks have changed due to a number of external factors including the global economic crisis, the demand from users/researchers/policy makers to provide more statistics and pressure from the EU to ensure at all times a Quality Framework (reference ESCOP here).

In 2013, as part of his review of CSO, the newly appointed Director General published a series of projects or a work plan to address the growing demands and the associated standards that were needed to be implemented to ensure that the CSO remained as the primary trusted source of Official Statistics. This plan was known as CSO 2020.

One of the portfolio projects was a Quality Management Framework, which was based mostly on the requirements from the European Statistical Code of Practice (and requirements from our external providers. This framework was combined of smaller projects which reviewed the quality of the data lifecycle using indicators like, quality metadata (both input and output), strong documentation to ensure transparency of process, process mapping to have a standard graphical representation of all process and the governance of data as it travelled through the data lifecycle (form collection through to dissemination).

A project group was formed and published its recommendations towards the end of 2015, which were accepted by the management board of the CSO and on foot of this a number of strategic measures were taken (most notably the creation of two divisions: the Data Office and the Quality Division) in 2016 to implement these recommendations.
The challenge in this early part of the project and one that remains almost 4 years into this work is the change to the ‘status quo’, ‘the way we do things around’ here or what people perceive as the ‘norm’ that this proposed work demands. Change is necessary to ensure the CSO can implement and sustain the standards or requirements to ensure the quality standards that are demanded from many quarters including the Data Protection Commissioner, the European Statistical Code of Practice and our customers who rely on our statistics for policy or evidence based decisions.

Section 2: Initiating the Project and Planning for Change.

2.1 Background

The Quality Management Support and Assurance Division (QMSA) was set up in January 2016 and was comprised of a senior manager or head of division and three middle managers. Their mandate was to implement a Quality Management Framework for the Office. This mandate was driven externally by Eurostat (the European Governing body for all National statistical organisations in the EU), the European Statistical Code of Practice and others and internally by the National Statistics Board (the governing body of the CSO) and the Management Board, the senior managers of the Office.

The focus of this paper is the data and metadata management element and governance of the framework. Corporate data governance has not been the main focus of the CSO for a period of time, this is due to a variety of reasons but for a period of time, local governance of silos of data was robust enough to ensure the availability, quality and integrity of the data. External impacts including data protection, the privacy rights of the individual, the increase of data coming in and the amount of data going out and the increased sharing of data internally all contributed to the requirements for this to change. These are impacts that have changed focus for the management of data.

Introducing corporate governance to a large organization that was comfortable with their own ways and methods was a logistical challenge due to the many silos of data and
a huge change to the ‘way we do things around here’ which Drennan (1992) describes as the culture of the organisation.

2.2 Environmental Analysis

The household division was chosen as the first area to be involved in this change. It was necessary to look at the internal and external influences that would impact the specific project of implementing corporate data governance in the household division.

A SWOT (Strengths, Weaknesses, Opportunities and Threats and a PEST analysis was done to gauge the possible reactions/influencers/blockers.

SWOT Analysis

<table>
<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
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<tbody>
<tr>
<td><strong>Well</strong> resourced</td>
<td>Project plan unclear, differing views of the look of success.</td>
</tr>
<tr>
<td>Clear mandate</td>
<td>Culture not ready for change</td>
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<tr>
<td>Support from senior management</td>
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<table>
<thead>
<tr>
<th><strong>Opportunities</strong></th>
<th><strong>Threats</strong></th>
</tr>
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<tbody>
<tr>
<td>New division, new beginnings</td>
<td>Level of resistance unknown</td>
</tr>
<tr>
<td>New structures, possible innovation</td>
<td>Parochial Self-interest due to silos and local governance.</td>
</tr>
</tbody>
</table>
Figure 1.

The SWOT analysis (Figure 1) proved informative and gave focus and clarity on the change itself and the risks associated with it. The threat that was most obvious and difficult to address was possible lack of buy in or the organization's readiness to change.

One of the strengths was the number of resources that had been put into this project and the willingness and experience of the newly formed team.

The weaknesses was the blank canvas and the not so clear vision of what success really did look like, it seemed that there was a variation on this vision and further clarity and discussion was required. This proved difficult during this phase of the project, as there were many diverse views. The Household project was to a sounding board, the primary ideas would be implemented and those with contention would be reviewed after this pilot/sub-project.

The PEST analysis (Figure 2) showed that the primary external influences were Political and Technological. The CSO is dependent on many data providers and data sources and therefore any risk around data management was considerable reputational. The importance of dealing with different types of data, large volumes of data including big data is important for the future of the CSO, we must have the capacity to compete therefore the data and the associate technology must be commensurate.

PEST Analysis

<table>
<thead>
<tr>
<th>Political Factors</th>
<th>Economic Factors</th>
</tr>
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<tbody>
<tr>
<td>The impact of the right to privacy and data protection legislation</td>
<td>The public purse is always a consideration in public sector, the CSO must be shown to be efficient in the use of the data that they are receiving.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Socio-Cultural Factors</th>
<th>Technological Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>The reputation of CSO, a considerable</td>
<td>The ability of other data centric companies</td>
</tr>
</tbody>
</table>
portion of data received is not mandatory therefore it is key CSO remains as the trusted advisor.

Figure 2.

It was necessary to do a risk analysis for the project plan. There were many types of risk to be considered - risk of the project failing, risk of disrupting the business and risk of assessing the requirement wrongly taking into account culture and strategy.

This analysis proved important when formulating the project plan, it educated the approach.

This analysis led the project team to a stakeholder analysis (figures 3 and 4). The factor influencing the projects were now apparent, it was necessary to review who the stakeholders were and how the project team would manage them. Bryson (1992) believes that stakeholders is anybody who the project effect. His power grid matrix educates us how to treat our identified stakeholder. It was important that we identify our stakeholders before we commence the project.

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Stakeholder power / interest matrix

Power

<table>
<thead>
<tr>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep satisfied</td>
<td>Monitor</td>
</tr>
<tr>
<td>Encourage and influence</td>
<td>Keep informed</td>
</tr>
</tbody>
</table>
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Figure 3

Figure 4
<table>
<thead>
<tr>
<th>Low Interest – High Power (keep satisfied)</th>
<th>High Interest – High Power (encourage and influence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some members of management board</td>
<td>Director General</td>
</tr>
<tr>
<td>Some senior team members</td>
<td>Some members of mgmt. board</td>
</tr>
<tr>
<td>External bodies (Eurostat, Data commissioner, National Statistics Board)</td>
<td>Heads of division</td>
</tr>
<tr>
<td></td>
<td>Respected team members</td>
</tr>
<tr>
<td></td>
<td>Internal Data Protection Officer/Data Office</td>
</tr>
<tr>
<td></td>
<td>Project Governance Board</td>
</tr>
<tr>
<td>Low Interest – Low Power (monitor)</td>
<td>High Interest – Low Power (keep informed)</td>
</tr>
<tr>
<td>Some team members</td>
<td>Some members of Other divisions who believe this may help</td>
</tr>
<tr>
<td>Other CSO teams</td>
<td></td>
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<tr>
<td>Services – HR, Finance,</td>
<td></td>
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*Figure 4 & 4a*
2.2 The project plan

The project plan was based on the GSBPM (Generic Statistical Business Process Model) (http://www1.unece.org/stat/platform/display/metis/The+Generic+Statistical+Business+Process+Model) to manage and govern the data. This model splits the data life cycle into collect, process, analyse and disseminate and the project was at a very simple level proposed to align the data to this model. The analysis of external and internal influences and the stakeholder’s analysis provided the project team with a roadmap or a project plan (Appendix 1) that would be integrated into the project plan.

Kotter (2007) argues that creating urgency is important to make the change work. The data was organised heretofore with local governance, limited standards and infinite retention. We ensured when socialising this proposed plan, specifically targeting the high interest, high power stakeholders, that we created this ‘sense of urgency’ by detailing the risks if this change or series of changes didn’t occur and that an opportunity that had now presented itself to remedy this issue was a missed opportunity. The management board endorsed and oversaw the high level plan in its initial stages; this was an acknowledgement of the ‘urgency’.

The project plan was set out and presented to the governance board setting out the background, the research, the proposed phases, a communications plan (see Appendix 2) and the metrics or indicators of success. A brief synopsis of the plan (detailed in Appendix 1) is:

November 2016: Phase 1: Measure and assess requirements - gap analysis

Consider inter divisional dependencies and requirements

December 2016: Phase 2: Present draft architecture to divisional staff (Iterative)

Show proposed timetable for change

Set out risks and ramifications

January/February 2017: Implement change, move data to new structure
Timetable moves in tandem with publication schedules

Benchmark data and monitor and measure

March/April Review, review and Measure

The board accepted the plan, made some minor alterations but believed it to be sound. The reality was the project was a simple shift of data to standardised locations using a framework used by in excess of 50 statistical organisations, with strong governance standards being implemented after the move. The metrics included:

- The number of files and folders that were reduced,
- Adherence to data protection guidelines (which would be measured by an audit),
- A shift in the maturity model which was created based on a series of questions from key users and
- A general agreement, in the form of a user satisfaction survey, that it was easier to use the new structure and find the data.

The project team proposed the household division would be the first division to implement this change. This wasn’t welcomed; this division produces all our unemployment figures and is one of the high profile publications. The Quality team chose household division as it holds a large amount of data, including a considerable amount of personal data and it is high profile, which would ensure that success would be well known success. As well as the previous factors, the Head of Division is well respected and not afraid of change. He accepted the risk and wanted to eliminate it and felt it was time this work was done. He formed part of Kotters (2007) ‘Coalition of Change’ and proved a worthy advocate to endorse the model (Appendix 3) and the work in household approved by the board. The board accepted the project would happen, after persuasion, in Household division but they would accept no disruption to the day to day work.

*Once the plan was agreed by the board, the stakeholder map was reviewed (and was reviewed quite a number of times subsequently) to reassess where each member of the board was positioned and the level of communication that was required. This map was regularly consulted over the course of the project to review the location of certain*
stakeholders and if there position had changed. The team realized that different stakeholder would need to be managed differently over the course of the project very quickly.

Kotter (2007) sets out clearly the path for managing change, steps 3 and 4 in his 8 steps to transformational change is to create a vision and communicate the vision. This was key to the initial stages of managing the change. We took every opportunity to set out the ‘vision’ of a better-managed data. We did lunchtime talks, presented to the Senior Managers Group, designed posters and pull ups and as a division set up a new internal web page dedicated to Quality with data management as one of its core values. Kotter’s (2007) step 6 planning for and creating short-term wins was key to our plan. The scale of the plan was so large, it was important for the short term wins to be acknowledged, understood and celebrated.
Section 3: Implementing Change

The implementation phase of this project commenced in early January 2017. The preceding phase of design has been finished and the next phase was to move pertinent data was ready to its new environment.

3.1 Key issues around implementation

It is important to note that while Household division may have seen this as a move of their data there were other elements of the project working in the background. Policy development to reinforce the design and decisions that had been made in the previous phase, procurement and purchase of software to monitor, alert and sustain the data growth that had gone unmonitored heretofore and the slow development of a metadata system to give more visibility into the data.

The change to be implemented was new structures for data in the very short term but the sustainability of these new structures was the real goal. If the data were located in a standardised governed location everything else - monitoring, governance, metadata, quality - would follow. The implementation was now going to inform if the design was correct and how governance and monitoring was going to work in the short to medium term after the move.

3.2 Household Division and the implementation plan

We had agreed with these Heads of Divisions and the Management Board that the implementation plan would be as non-disruptive as possible and would be done by negotiation as opposed to coercion. The implementation plan involved meeting approx 3 times with each distinct area or team. The IT team (2 people), the specific area team, the author as the change manager/agent; my own head of division and the teams head of division were optional invitees at each meeting.

The meetings were guaranteed to be 30 minutes and the author, as the project manager led all meetings. The structure was:
1st meeting: Explain the rationale behind the change - risk, lack of integrity, better quality data and the possible opportunity to innovate or improve. The ‘As Is’ was also presented, the look of their data structure at present, the proposed ‘To Be’ with a brief explanation of the GSBPM and how it represented everybody’s work processes. A presentation of the agreed model (Appendix 3) was planned and where the teams work was relevant.

At the end of this meeting the team were given an inventory and picture of their data structures to decide on what was needed and what could be archived and how possibly it could be designed based on the model.

2nd meeting: (held roughly 2 weeks after the 1st meeting) A general discussion on what they saw in the inventory, what they decided should be kept or left and a timeline for when this work could occur.

After this meeting the IT team would agree a definite date and move the data to the new structure. A key part of this was that the older data was remaining i.e. it was safe and not gone.

3rd meeting: (held about 2-3 weeks after the 2nd meeting) A review of the new structure, what did they think, what problems did they have, did they leave anything behind. Was there are benefits? What would we do now?

3.3 Revisions to Project Plan

These meetings started in earnest in January and the focus was on the Collection side of household. (This survey has been in existence since 1998. The data holdings are vast, with considerable historical data, therefore the volume of data to be reviewed was daunting.)

There were 4 teams involved in this part of the division who are involved in diverse elements of this survey. The head of division attended the initial meetings and he explained the plan and was encouraging. These meetings were tough however and at some, there appeared to be more reason to retain the status quo than to change. There
was strong resistance to the change, issues like disruption, ironically risk and tellingly ‘lack of understanding or communication’.

It became clear very quickly that there wasn’t enough communication or possibly communication with the wrong people before these kick off meetings. The implementation team took a step back and reviewed the feedback. Stakeholder analysis was reviewed again and a more detailed communication plan was agreed based on our experience.

The change made, was the first meeting was now to be an exploratory one, reviewing what the team did, trying to understand how this model could work and improve the day to day running of the work by simply explaining it and the reason for its development. It also included mapping their work to the GSBPM to explain how the ‘model’ was agreed. The team was now made to feel that they were part of the decision process as opposed to the decision being made before the meetings.

*Kotter and Schlesinger (2008) also discuss the strategic continuum.*

<table>
<thead>
<tr>
<th>Fast</th>
<th>Slower</th>
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<tbody>
<tr>
<td>Clearly Planned</td>
<td>Not clearly planned at the beginning</td>
</tr>
<tr>
<td>Little involvement of others</td>
<td>Lots of involvement of others</td>
</tr>
<tr>
<td>Attempt to overcome any resistance</td>
<td>Attempt to minimise any resistance</td>
</tr>
</tbody>
</table>

**Figure 5 - Strategic Continuum**

*Kotter and Schlesinger (2008) believe there are many strategies in dealing with resistance to change and it might not be one but a combination of many. Some of their suggested strategies are Education and Communication, Negotiation and Agreement or on the other side - Coercion. It is clear that at the initial stages of this project to combat the initial*
resistance, Education and Communication was a helpful strategy and possibly one that should have been used more.

This continuum is representative of the change that was being implemented and the reaction that was being received because the change was slower, was planned but with not enough emphasis on communication and attempts were made, meeting regularly with all staff to minimise the resistance.

The meetings were now extended to four meetings, the new first meeting was really based on the new and updated communications type meeting and despite all the emails it appeared the channel of ‘face to face’ was the most effective.

The change to the plan appeared to work and the second meeting (which was really now the third meeting for some of these groups) was more successful. The teams appeared to be more involved in the change and timelines and data was agreed. The IT team discussed logistics and the data was moved to the new structure.

These moves were due to be finished at the end of February but due to publication schedules, the addition of extra meetings and at times non-enthusiasm the deadline shifted but the data moved to it new structure for these teams. The review meeting, for these teams, discussed how they reacted, did they see it as an improvement. The overall consensus was that it was a good move but it was muted.

It is necessary to allude here to the culture of the CSO, this was a constant consideration throughout this project. Senior and Swailes (2015) discuss the Iceberg analogy where certain elements of the organisation are above the sea level and others, namely the attitudes; behaviours are below the visible sea level. The Office has gone through a number of ‘changes’ over the last number of years and there is a healthy cynicism about their possibility of sustainability based on the experience of some of those involved. One of the clearest feedbacks that the project team received was that there was always enthusiasm for change projects at the beginning but follows through or as Kotter suggests consolidation and institutionalizing new approaches was not also, in their experience, the most important part of the change plan.

3.4 Implementation Issues
For the next group of teams we changed the approach as agreed to add this communication/explanation style meeting. These two teams worked on the output side of the Household division and had data pertaining to dissemination and publication. The implementation or communication plans hadn't accounted for the difference in approach. These teams were focused on current and longitudinal data and while they understood and accepted the reasons for the change they felt their purpose was so important that their work was too invaluable to be disrupted for any period of time.

Kotter and Schlesinger discuss the requirement to diagnose resistance before the implementation of change. They cite a number of reasons for resistance including parochial self-interest, low tolerance for change, different assessments and misunderstanding & lack of trust. The difference between the two teams is represented well by Kotter et al. The first team, whose work is not considered by the team themselves as high profile showed significant lack of trust and possibly misunderstanding. The second team simply had a low tolerance for change or possibly a parochial self-interest where they were afraid to lose some of this power or sense of importance with the advent of a change.

This time, the implementation team needed some senior influence to manage this particular resistance. We had celebrated some wins with the earlier teams, the project had had some small success and we used these to encourage the director general to convince the division (we didn't single out the later teams) that they were on the right road and the work they were doing was solid. This was the right move, this 10 minute address did assuage the disseminate team. Kotter's (2007) coalition of change was proving a key enabler during this project.

Katzenbach, Seffen and Kronley (2012) detail 5 principles that, if followed, should help an organisation achieve better performance. Two of them, 'Focus on a few critical shifts in behaviour' and 'honour the strengths of your existing culture' were important for interim successes for us. The project was always a long-term project, being restricted initially to the Household division reduced it but during these key 2-3 months we advertised and applauded those who embraced the change. We presented these changes, we advertised them on Pull-ups and we congratulated publically those who were 'brave' to take the leap. As well as this we acknowledged during all the
implementation meetings the local governance that was evident, the pride people took in their work and their commitment. Kotters (2007) guiding coalition was growing and toward the end of March, other Heads of Divisions were looking for us to help.

Section 4 Evaluation of the Impact of the Change.

The Objectives set out in Appendix 1 were at many levels. It is important to reiterate that the long term vision for this project was to ensure Quality data during and post data lifecycle. This message was continually referred to during the course of approx. 46 meetings. The delivery of this vision was broken down into parts for the project plan but the main thrust of this shorter-term almost pilot plan was to align the data to the GSBPM to guarantee:

- Short term and long term availability of data
- Guaranteed security of data
- Proportionality of data - only keeping what was required
- Good data quality - a byproduct of good metadata

At the initial phases of this project and for the Project Initiation Document, the project manager must describe what success looks like, it was important for the project team to be able to measure as well as see what success looked like. To this end it was key that we were able to provide metrics around the project.

4.1 Measure of outcomes from the change

A large amount of data had been moved from one location to another and the relevant teams had decided to discard some of their data for the move. Some chose to delete it and some chose to simply leave it behind, safe in the knowledge that it was there if they needed it. In the Household division, this resulted in a reduction of 35 - 40% of data. This figure was staggering and indicated the lack of governance of data over the last number of years. One aspect of the culture of the CSO, that became evident during the course of the project, is nervousness around loss of data and this has resulted in a huge amount of superfluous data being stored over the long term. This metric (published in
CSO in file numbers) was welcomed and gave the project impetus. It was a clear number, an indicator and those who were involved were proud that they were the early adopters; this metric (more particularly the associated graph) has become a symbol of change for this project.

Another clear metric was the reality of this structure passing a data protection audit. The recommendations made by the Office of the Data Commissioner and the 8 principles of data protection (https://www.dataprotection.ie/docs/Data-Protection-Rules/y/21.htm) were taken into consideration when designing this structure. Policies written prior to the implementation of this project framed concisely the requirement for the data to be secure, agreed retention periods and a proportionate amount of data to be stored. These were also considered, reviewed and implemented in the project as part of the governance structure. The household division has documented these agreements in line with the relevant policies and the appropriate retention policies have been applied i.e. data that is no longer required (a measure of proportionality) has been removed. An audit hasn’t taken place at this stage but the involvement of the Data Office in CSO, IT and the Quality unit has ensured that the risk has been removed.

A user satisfaction survey (see Appendix 5) was issued in April 2017 to review the success of the plan. This overall data management project is a corporate project but it was agreed with the project board that there would be a ‘standstill’ period for review before starting this work with another division. The feedback from the survey (see appendix 4) was important in understanding the impact of this project on the user and the day-to-day work of the business. A survey of this type should be issued every 6 months for the next 2-3 years to gauge the impact, if any, of the changes. It is proposed in the longer term objectives of project plan that the impact will be most effective when staff move between areas, the similar structure will make storing and locating key data an easier task. The location of final data sets and corresponding code will be similar across the board.

The traditional structure of the data, as mentioned previously, was stored in silos which were aligned to divisions. Metrics and dashboards were difficult; it wasn’t easy to compare one division with another. The diversity of the statistics that are collected in CSO is considerable but if the structures were standardised, quality metrics could be
applied across the board. One of the byproducts of this work was a metadata management system that was piloted in the household division. This was a system that would hold initially reference metadata i.e. where was the data stored for the data lifecycle, who was the owner what was the retention period and other pertinent metadata that would improve the day to day work and embed the phase I element of this project. It would serve as a framework for the work that was already done in the Household division.

A difficult measure at this early stage is the impact on the quality of the data. CSO currently measure their time from collection to publication as a key metric. The change in structure of the data has very little impact on the current data lifecycle. The immediate impact is visible for the historic data, standardisation and alignment with the GSBPM allows teams to see older data and to be assured of the validity of their choices. This metric will be determined over the next 6-12 months, needless to say it will always be determined as a negative metric if the change isn’t sustained.

Section 5: Discussion and Reflections

There are two projects being discussed in this paper, the first a large transformational type project on the implementation of better data management standards and structures intrinsically linked to a strong corporate governance, the second (the primary focus of this paper) a pilot or small scale implementation of the larger one in one (large) division. The latter, a very time bound project with most of the stakeholders having a cautious, possible cynical approach and not really seeing the vision. (Possibly because they chose not to see it.)

The evaluation of the project is not strong enough; it should have had more detailed metrics to assess the roadmap for the next part of the bigger project. The file statistics are eye catching and give an indication of the scale of the problem but to assess the real success of this project more work should have been considered around the process included in the change.
The user satisfaction survey (Appendix 5) indicates what the teams thought of the process, despite the communications plan, the meetings etc. the change hasn’t proven, possibly indicated its embedded and sustained in the organisation (it may be too early to assess). The user satisfaction survey would suggest that there need more work with the teams involved. The file statistics and the successful data protection audit suggest that some of McKinsey’s 7s are addressed (Structure and System) but the softer side of staff and skills may still need some attention. Kotter (2007) discusses this in two of the eight steps to transforming your organisation - he argues consolidating improvements and producing still more change and institutionalizing new approaches are key to sustained change. In Step 7 he discusses, consolidating improvements, he further argues the need to reinvigorate the process with new projects, themes and change agents. These steps are key now if CSO are to consolidate the change that has occurred. There needs to be continuous initiatives around data management and data governance.

5.1 Hard V Soft Change

This change was a combination of hard and soft change and the tangible metrics or results are more hard change orientated. On reflection (and with the knowledge of literature and studies) this change should have been considered for an organizational design project in combination with the data structure. Two outputs from the evaluation phase are hard and two are soft but the plan was based on a hard change approach, which may not or may not have been the correct approach.

In order to improve the outcome and to ensure the sustainability of the change, a closer look at the process and the people that were two key elements of the change plan (appendix 1). This project forms part of a larger project and this is certainly a lesson that must be carried forward to the next part of the project. Communication via meetings was successful but it was not really an opportunity for those involved to put their ideas forward, the plan was agreed at this stage and the time was so tight, variation was not always possible.

5.2 Resistance to Change
It should be evident from earlier sections, that the culture of the organisation is suspicious or nervous of change, words like ‘change fatigue’ were used during some of the initial meetings. While the project team did, during the course of the implementation, use Kotter and Scheslingers (1979) recommended method of addressing resistance to change by negotiating and communication, it is unclear at this point if the change will sustain. Its not always clear which phase of Lewins change management module the CSO is currently engaged in.

Unfreeze -> change -> Freeze

During the course of this project there was an appetite for change but a desire for sustained and embedded change therefore it’s unclear if the CSO is in a ‘change’ phase of Lewins model. The project was unable to gauge what phase the Household division was in during this process.

Figure 6 Senior & Swailes Organisational Iceberg

More emphasis may need to be placed behavioural change. Figure 7 below shows how it takes longer time and effort to ensure behavioural change. The results from this project would suggest that outward images certainly (file structure, different types of communication, different change agents) have changed but it is important that we continue this work to change behaviours to insure more corporate data management awareness. This won’t be achieved during a 3 month project but by continuous work and effort to embed the change.
Figure 7. IPA expected levels of change over time and effort.

Section 6: Recommendations

This paper details the necessity of a change, the long journey through initiation, planning, assessing the risk, detailing the plan, engaging with stakeholders, forming a communications plan (Appendix 2), re-engaging with stakeholder, implementation of the plan and assessment of the implementation. The lessons are manifold and the recommendations are aligned but there is no, it seems, simple solution for transformational changes. It is difficult and this is probably the key recommendation that we acknowledge that if we need to embed a change we have to a realistic, solid plan or series of plans. There is no quick fix.

Katzenback (2012) et al discuss the merits of matching strategy with culture, this is the first of my recommendations and plagiarised from this paper. The key recommendation for the CSO is to recognise and measure the culture. The statement of strategy that is published every 3 years should acknowledge our culture. If the organisation doesn’t realistically have an innovative culture then the strategy should not try to suggest that this is the goal for the next three years rather it provide the structure or the chance for cultural change for innovation to flourish.

Katzenbach also suggests that you should honour the existing culture; this was an important element of the success of this project. Those who participated were
respected, they were treated as the subject matter experts and the project team was simply there to enhance not to throw away. This should form part of every project with an acknowledgement, previous change projects have failed in the CSO for external experts coming on site and suggesting that there was a 'better way'

The next recommendation is to realise the importance of deciphering if change is hard or soft change. Schaffer and Thomson argue that “successful change programs being with results” and give examples throughout this paper of how results driven transformations are more successful than activity centered programs. If change is required it important that the right approach is undertaken to ensure that the change is embedded and not simply a once off enthusiastic team with no long term plan. There is certainly a necessity for the CSO to review the merits of organisational design if this change is to be embed itself into the Office. Results based change are effective in the short term and can gain momentum for a period of time but it is important to acknowledge the process and the people and how this can be changed,

Communicating the plan and its faults and its successes is also something that the CSO needs to do better. The amount of project information is never lacking but after this project, further analyses into the channels of communications are important. The recommendation here is fuzzy, no concrete solutions just the experience of realizing how people like to know sometime salient points and sometimes everything about the project. The skill is knowing the different times.

This project was deemed a success by the Office, senior managers, heads of division, external bodies like ESCOP, NSB can see that the data is managed more closely and risk has been reduced. Corporate governance of a model aligned to a widely recognised business process model is a really good progress and there is encouragement for the team to continue. The user satisfaction survey would suggest that there is good done but more to do and this is the challenge. This project will continue and hopefully the lessons learned will improve the next iteration.
References


European Statistical Code of Practice (ESCOP)

Generic Statistical Business Process Model (GSBPM)
http://www1.unece.org/stat/platform/display/GSBPM/GSBPM+v5.0
## Appendix 1 - Communications Plan

### Communications Plan

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Purpose of Communication</th>
<th>Source of Information</th>
<th>Method to be used</th>
<th>Who does it</th>
<th>When/how often</th>
<th>Sensitivities</th>
<th>Expected Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Board</td>
<td>To be kept up to data of headline events. No surprises, aware of all changes</td>
<td>Project Manager/Project Sponsor</td>
<td>E-mail Update of project plan Verbal updates (where possible)</td>
<td>Project Sponsor/Project Manager</td>
<td>When they need to i.e. if there is a problem otherwise on a needs basis</td>
<td>Don’t ask for extra resources, keep it current and to the point</td>
<td>Endorsement for good and bad</td>
</tr>
<tr>
<td>Senior Household Team Members</td>
<td>To be kept aware of all activities, everything</td>
<td>Project Manager/Project Sponsor</td>
<td>Verbal, meetings every week</td>
<td>Project Manager/Project Sponsor</td>
<td>Weekly meetings but if necessary more often</td>
<td>Constructive Criticism, aware of publication pressures</td>
<td>Good honest feedback, warnings about any ‘unseen’ issues</td>
</tr>
<tr>
<td>External Bodies (NSB, ESCOP)</td>
<td>Closure report, possible interim report</td>
<td>Management Board</td>
<td>Report</td>
<td>Board members</td>
<td>Item agenda on board meeting, possibly an update in the interim required as well</td>
<td>High level, demonstrate vision. Long term goals</td>
<td>Endorsement, continue with the work.</td>
</tr>
<tr>
<td>Director General</td>
<td>To be kept up to data of headline events. No surprises, aware</td>
<td>Project Manager/Project Sponsor</td>
<td>E-mail Update of project plan Verbal updates</td>
<td>Project Sponsor/Project Manager</td>
<td>When they need to i.e. if there is a problem</td>
<td>Don’t ask for extra resources, keep it current and to the point</td>
<td>Endorsement for good and bad</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>Purpose of Communication</td>
<td>Source of Information</td>
<td>Method to be used</td>
<td>Who does it</td>
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<td>Sensitivities</td>
<td>Expected Result</td>
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</tr>
<tr>
<td>Respected team members</td>
<td>Open communication to ensure all aspects of</td>
<td>Project Manager/project team</td>
<td>Verbal, meetings</td>
<td>Project Manager/project team</td>
<td>Regularly</td>
<td>Household team representative</td>
<td>Forms part of coalition of change, creates the right atmosphere</td>
</tr>
<tr>
<td></td>
<td>project discussed</td>
<td></td>
<td>as often as</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>required</td>
<td></td>
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<tr>
<td>Data Office</td>
<td>Kept aware of salient events i.e. data</td>
<td>Project Manager/project team</td>
<td>Regular reports, semi regular meetings</td>
<td>Project Manager/project sponsor</td>
<td>Monthly meetings, verbal</td>
<td>No blame culture on the as is -</td>
<td>Decision making on certain issues and support on tougher decisions.</td>
</tr>
<tr>
<td></td>
<td>protection issues</td>
<td></td>
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</tr>
<tr>
<td>Project Governance Board</td>
<td>Kept aware of milestones and project</td>
<td>Project Manager/project team</td>
<td>Monthly update</td>
<td>Project manager/project sponsor</td>
<td>Monthly update reports</td>
<td>Overview of all projects, possible criticism for</td>
<td>Sanction and endorsement</td>
</tr>
<tr>
<td></td>
<td>activities</td>
<td></td>
<td>reports</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Group</td>
<td>Communication Methods</td>
<td>Timeframe</td>
<td>Culture/Endorsement</td>
<td></td>
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<tr>
<td>IT Division</td>
<td>Email, reports, meetings, verbal, ‘drop-in’</td>
<td>Regular meetings, every week (at least) during project and every month for 6 months after April</td>
<td>Culture of ‘No’, risk averse</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Endorsement, help, advice, shared vision, collaboration</td>
<td></td>
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</tr>
<tr>
<td>Team members from other divisions</td>
<td>Public reports, lunchtime sessions, intranet, informal conversation</td>
<td>Updates</td>
<td>Possibility of bad press if not managed properly</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Endorsement, positive t-time talk</td>
<td></td>
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</tr>
<tr>
<td>Some team members</td>
<td>Public reports, lunchtime sessions, intranet, informal conversation, encouragement</td>
<td>As often as feasible</td>
<td>Negative, cynical, saboteur</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Some level of endorsement.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Appendix 2 New Model for Structure
Appendix 3 Data Management Maturity Model

Data Management Maturity Model v1.0

Maturity levels
Appendix 4 User Satisfaction Survey – Household division

![Graph of User Satisfaction Survey](image-url)