

Workshop on Strategic Developments in Business Architecture in Statistics

(Geneva, 31 October – 1 November 2011)

Session (ii): From Vision to Strategy

Draft Strategy of the High-Level Group for Strategic Directions in Business Architecture in Statistics (HLG-BAS)

To facilitate the workshop the HLG-BAS has prepared this draft document, to be used as a basis for the discussions that will lead to a final strategy for implementing the vision. The strategy will be presented to the Conference of European Statisticians in June 2012.

I. Introduction

1. After the endorsement of the HLG-BAS vision by the Conference of European Statisticians (CES) in June 2011 there is the need to transform this vision into reality. A strategy document is a first step on that path.

2. In the next few paragraphs we will first try to agree on the function of the strategy in the realisation of the vision. Then in the following sections we will examine the various aspects of a possible strategy, propose some solutions and pose questions to the participants of the workshop to spark off the discussion.

3. The first step in achieving a goal is determining what we want to achieve. At this stage modesty is a real danger because it is very important to state the goal in clear and unambiguous terms. The goal does not have to be broken down into smaller, more manageable steps yet. The main point here is that we want to make sure that the statistical community is able to sign up to the overall goal, and commit to achieving it. In the context of the HLG-BAS, the vision paper is the statement of the overall goal.

4. The next step is to develop a strategy, to act as a catalyst to realise the vision. The strategy should be a high level plan without too much detail and stable over time. It is the "how" on a general level. It has to give guidance to those on a lower, tactical level regarding the type of results needed and it should define success. The strategy should have several levels at which the goals of the vision are translated into success factors. The strategy is the framework within which the tactical thinkers work, and helps to ensure they are working in the right direction.

5. The tactical level is the level where the difference between current reality and the vision are measured and the practical problems resulting from that are solved. This requires

people who are very good at finding innovative solutions. This will lead to a coordinated series of concrete projects each bringing the end goal of the vision closer, by following the guidelines set out in the strategy.

6. The purpose of the strategy is to enable the tactical level to define and execute projects that in the end will realise the vision, without wasting time in discussions about the big picture.

Workshop: be aware of the distinction between strategy and tactics. Maintain a sufficient high level in the discussions about strategy

II. General outline

7. Looking at the vision there are two main areas of change: statistical products and the processes used to produce them. Regarding products, the way statistical organisations decide on new products should be considered as well as the products themselves. For the production processes an even bigger change is needed as the types of data that will be available warrant a rethinking of current statistical methods and tools. It is highly likely that statistical organisations will undergo profound changes in the years to come.

8. In the following paragraphs we will look into the various aspects of the strategy. First we will look into products, then processes, then the organisational implications. In general, projects will be the tool of choice to create change, but more is needed. That is why this strategy has an additional theme; the organisational side of the realisation process of the vision. Another important aspect to consider is the arena in which we produce our statistics, the "rest of the world". Under the heading of "On defining the industry" we will give some ideas on how to proceed to put the statistical industry into perspective and to reflect on the role it is to play. Finally we will try to give an idea how we might define success in terms of realising the vision.

III. On products

9. In the HLG-BAS vision it is emphasised that new products are needed, more suited to the needs of our time. For our strategy it means that we need to find new ways to arrive at products. There are three important drivers mentioned, the current abundance of data, the changing needs of society / governments, and globalisation.

10. We propose to encourage research projects in these three areas, their relevance to be judged by HLG-BAS based on their contribution to achieving the vision.

11. We also need to think about the changing needs of our customers and potential new customer groups. This could mean that as well as providing traditional aggregate statistics, we will increasingly be supplying datasets at various stages of aggregation providing opportunities for others to add value.

Workshop: We need to arrive at a different way of creating new products. Proposals and/or projects for new ways to create products should be discussed. Will streamlined processes within a more industrialised environment be sufficient to allow us to create new products?

IV. On processes

12. A key element of the HLG-BAS vision is agreeing and adopting standardised and industrialised processes for the production of statistics, and the delivery of statistical services. Connectivity is the key to bringing the Generic Statistical Business Process Model (GSBPM) to life and to enable sub-processes and institutes to mould into one process if needed.

13. The GSBPM and the Generic Statistical Information Model (GSIM - under construction) will enable a universal statistical "plug and play" architecture to be created. This architecture, which at the moment is already in the early stages of development in several statistical organisations and projects, will enable reuse and shared processing between organisations and countries. Projects need to be defined to create this architecture in a way that is independent of technical platforms. Convergence of current initiatives is important.

14. For a future with connectivity and plug and play as important characteristics of statistical processes, standards are very important to have and to administer.

15. With the changes in data acquisition and the dramatic increase of the volume of data available, new methodologies are needed. Survey methods should be considered mature by now and efforts should be directed towards topics such as noise and error reduction in large data sets, pattern recognition and other methodological tools appropriate for "Big Data".

Workshop: We need to define a development path for a standardized plug and play architecture. We should think about consolidating present initiatives in this field. We should create proposals for new methodologies with harvested data as starting point. What is the future of industry standards? We should lay down ideas of a viable ecosystem of standards.

V. On organisation

Generating change

16. One of the choices to be made is between evolution and revolution. Although we need to change fast, dictated by an increasing rate of change in the outside world, we cannot risk losing our current advantage, as well established statistical organisations embedded in the political culture of our countries. Big plans to change whole organisations and product sets in one go, are out of the question. However we do need to progress quickly. Perhaps we can learn from other industries that have become much more agile in response to changing environments. There change is often implemented by the system of internal "start-ups" that, when successful, will use the assets of the mother organisation to grow. This is also known as "destructive innovation". This also means we have to stop doing some things to free up resources for innovation.

Workshop: what other solutions are there to generate change to achieve the required agility?

17. Given the way we will generate change, we will have to decide how to assimilate this into our organisations (without harming the new developments). Industry is full of examples where a start-up, after initially being successful ended up as a failure because the way they conducted their business was incompatible with the mother organisation. A possible solution

to this kind of problem is the organisational network structure which has been used with success by a number of organisations.

Workshop: what other solutions are there for this problem?

Guidance and governance of the change process

18. After concluding that the current predicament is one that concerns the official statistical industry as a whole and realising that we lack the resources to solve these problems as individual organisations, we have chosen to act on an international level and do this from the top down. The challenge here is to really make this happen and not let it degenerate into a paper protocol. To enable the HLG-BAS to really drive these changes forward, we have to create a layered structure of guidance, governance and influence, separating the different abstraction levels of management. Paired with a clear monitoring structure this will enable the HLG-BAS to successfully bring about the changes needed without needing to get involved in the detailed tactical issues.

Workshop: define the different levels and the involvement of management levels in the organisations and propose a simple but working monitoring system.

Resourcing the operation

19. Many people are currently involved in international activities but the financing for these activities comes from various sources, and, partly as a result, coordination is often rather weak. This means that most of the time national and international statistical organisations have specialists from all kind of departments and budgets attending meetings and participating in workshops. Although quite a lot of people are internationally active, for the organisations themselves, international activities remain marginal. To be successful in realising the vision this has to change; the international cooperation needed to realise the changes has to be rooted firmly in the individual organisations. A first step in this direction is the clear support of top management for the engagement of staff in multi-national projects. There should be the explicit allocation of resources (human and financial) to contribute to these multi-national projects, possibly co-financed by international organisations. The HLG-BAS should have a role in motivating top management in committing their institution to contribute to multi-national projects.

20. We can not expect more resources in the future. Multi-national projects should be based on a common agreed strategy where all parties involved will ultimately benefit. National projects should also be aligned to the strategy for maximum efficiency. Their contribution should be measurable on the strategic level.

Workshop: what other possible solutions are there to make organisations really committed to give resources to this process?

Implementation of the changes and solutions

21. Although individual projects will do a lot of implementation work, high level guidance and intervention will be needed to retain the big picture and facilitate strategic changes of a more permanent nature (re-organisations are typically beyond the scope of individual projects). However successful the individual projects may be, they will not have

the impact we are looking for if they are not accompanied by appropriate organisational structures and processes. An analysis of strengths and weaknesses of current practices could help identify what is needed here.

22. We propose to periodically have an international project that acts as an umbrella project for a number of successful statistical or IT projects, to create an implementation proposal for adoption by individual organisations. By underwriting the proposal the organisations commit themselves to implementing the proposals. This way it will be possible to create inter-dependent structures like shared processing etc.

Workshop: Will the mechanism of underwriting be the right one? If so, do we need also a kind of underwriting protocol for individual projects on a lower level?

VI. On defining the industry

23. We as a statistical industry need to define our position in the world of information producing entities. As formulated in the Vision "we must realise that we are becoming part of a more complicated network of data providers and information producers". Thus, we need to find ways to harmonise our language and jargon amongst ourselves and with other parts of the information industry. This will help us better articulate, in a common language, why we propose the current industrialisation strategies in regard to product and process.

24. If we can communicate more clearly and consistently with governments on why investments in industrialisation - including international collaboration - are beneficial in terms of their interests and the communities' interests, we stand a much better chance of getting the funding needed. It will also enable us to communicate more clearly with our staff, to whom international collaboration as a strategy for moving forward still seems vague and uncertain in practice. We could think along the lines of the motto "simplicity breeds clarity" (Steve Jobs).

25. What we are looking for is ways to transcend our current business and to bring in knowledge and culture from outside our institutes. Examples of this are collaborations with the big Internet search engine companies and other data intermediaries.

Do we need a group that can, in an industry-wide fashion, create a consensus about the "Big Picture" for industrialisation, not only the inside but also the outside of the industry, or should we do these things as projects?

VII. Definition of success:

26. For the strategy to be a tool in the hands of the tactical thinkers, it has to define success criteria. If we look at the vision it is clear that we are chasing a moving target. The world is changing much faster than we will be able to accommodate. So, our measure of success will not be the completion of a single big task but the realisation of a process. This process will be our continuous adaptation to this changing world and our rate of adaptation or change is one of our key success factors. Another key factor is the cost of this adaptation process. At the moment the costs of change in our organisations, be it in processes or products, are very high, sometimes prohibitively. We will be very successful if change

becomes our main process, and the creation of new products and processes becomes a routine task with low costs (this is the key to many industries, they somehow find the meta-recipe to what they are doing and presto! how many soap series do you want or car models or garments). Success can also be measured as the proportion of budget allocated to processes and activities belonging to the vision, compared to the proportion of budget allocated to the traditional way of running our businesses.

Workshop: should we define some kind of dashboard to measure success?

VIII. Phases and milestones

27. Looking at the distance between current reality and the vision, we will need to think in terms of a number of milestones to make the realisation of this vision conceptually digestible. Proposed milestones are:

(1) Strategy defined and first adjustments to programs of work of individual groups. This will also include an evaluation of gaps and overlaps in the work of existing groups. For example it may be necessary to have a group to look at the legal and licensing barriers to more effective collaboration. This milestone should be achieved by the June 2012 plenary session of the Conference of European Statisticians.

(2) Adoption of strategy and documented commitment of CES members. This milestone should be reached at the June 2012 plenary session of the Conference of European Statisticians.

(3) First implementation project to be agreed and resourced by selected CES members. This should happen before the end of 2012.

(4) All CES members have completed the necessary organisational changes to facilitate enhanced international collaboration, and therefore demonstrated their commitment to the HLG-BAS vision. This could happen by the end of 2013.

(5) The first networked functions become available for use (shared production, active coordination) - 2013-2014.

(6) Change becomes routine and the ability to change becomes a measurable parameter to be discussed at CES plenary sessions - 2014-2015.

(7) The CES plenary sessions provide a platform for the strategic direction of the official statistics industry. This is a logical consequence of the achievement of the above milestones.

Workshop: can we define other phases and is the timetable feasible?