A systematic approach to improving whole farm planning project delivery

Carl Sudholz¹, Don Shaw², Sarah Wallis³ and Jenny Wilson⁴

¹ Victorian Department of Primary Industries, 110 Natimuk Road, Horsham, VIC, 3400
² Victorian Department of Primary Industries, McMillan Avenue, Swifts Creek, VIC, 3896
³ Victorian Department of Primary Industries, 89 Sydney Road, Benalla, VIC, 3672
⁴ Victorian Department of Primary Industries, 255 Ferguson Road, Tatura, VIC, 3616

Email: carl.sudholz@dpi.vic.gov.au

Keywords: Whole Farm Planning, Continuous Improvement, Extension, Decision Support

Introduction

The Enabling Decision Support (EDS) Methodology was developed by the Victorian DPI to guide the improvement of the FarmPlan21 whole farm planning service during 2009 to 2011. The EDS Methodology is a continuous improvement process specifically applied to capability and capacity development of whole farm planning services.

The FarmPlan21 service began as a pilot farm planning service in the North Central and Wimmera regions of Victoria in September 2008. During 2010 the service was expanded across new catchment management authority areas and enhanced by integration with the Victorian DPI's livestock extension services. This state-wide expansion required building the capacity and capability in the FarmPlan21 service (Wilson 2010a). The improvement methodology and preliminary results of the pilot are presented in this paper.

Methodology

The EDS methodology begins by identifying two separate, but associated projects: the Service Delivery Project and the Service Improvement Project. The Service Delivery Project is responsible for the delivery of FarmPlan21 and the Service Improvement Project is responsible for process improvement and capability development.

The EDS Methodology is a continuous improvement process designed to maximise impact of the development and improvement of a service. There are six defined stages that provide a complete process of the service improvement. These stages are described in Table 1, below.

Table 1: Descriptions of the EDS Project Stages

<table>
<thead>
<tr>
<th>Stage</th>
<th>Purpose</th>
<th>Continuous Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select</td>
<td>Select the farm planning service that will be improved. This is the Service Delivery Project. Identification will often begin with an environmental scan of services and client needs. A project scope is developed describing the improvement projects stakeholders, resources and outcomes. Identify, create or select the Service Improvement Project. This will often occur through the allocation of resources of the Service-Delivery Project to service improvement. In such cases, the Service-Improvement Project becomes a sub-project of the Service-Delivery Project.</td>
<td>Scope</td>
</tr>
<tr>
<td>Analyse</td>
<td>Detailed analysis of the selected service. The Analyse stage has two phases. First is to investigate the project stakeholders, processes and governance and set benchmark standards for service delivery. The second is to use evaluation to benchmark the service, prioritise focus and then develop an Action Plan for improvement activity.</td>
<td>Plan</td>
</tr>
<tr>
<td>Enhance</td>
<td>Conduct the design, development and delivery of improvement processes and activities as guided by the Analyse Action Plan. This may include staff training, product development and system improvement.</td>
<td>Do</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Evaluation of the improved service against the same benchmark standards determined in the Analyse stage.</td>
<td>Check</td>
</tr>
<tr>
<td>Consolidate</td>
<td>Purposeful review and reflection of the improvement process. Compare benchmarked change. Recommend further improvement activity. Review of the effectiveness of benchmarks. Learning’s, case studies and acquired knowledge is documented.</td>
<td>Review</td>
</tr>
<tr>
<td>Exit</td>
<td>The finishing process. Ensure a clean and complete exit by the improvement-project team. Includes the handing over of all responsibility of delivery to the service-project.</td>
<td>Exit</td>
</tr>
</tbody>
</table>
The stages outlined in Table 1 above are displayed diagrammatically in Figure 1, below.

Table 2 provides a summary of activities and outputs of the work conducted by the Service Improvement Project during 2009 to 2011.

**Table 2: FarmPlan21 enabling activities timeline by EDS Methodology stage**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Timeline</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select</td>
<td>Sep 2009</td>
<td>Project meetings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project Planning activities</td>
</tr>
<tr>
<td>Analyse</td>
<td>Oct 2009 to Jan 2010</td>
<td>Capability assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Documentation review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stakeholder Workshops</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staff phone and group interviews</td>
</tr>
<tr>
<td>Enhance</td>
<td>Jan 2010 to Jun 2011</td>
<td>Staff Training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project manuals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Client Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Database development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GIS Imagery Coordination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promotional resource development</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Aug 2011</td>
<td>In progress (at time of writing)</td>
</tr>
<tr>
<td>Consolidate</td>
<td>Dec 2011</td>
<td>In progress (at time of writing)</td>
</tr>
</tbody>
</table>

Source: Wilson 2010a; Wilson, Shaw & Robertson 2010; Shaw & Wilson 2011
From January 2010 through to June 2011 a range of improvement activities were conducted to build capability and capacity of the FarmPlan21 project as to enable the expansion of the whole farm planning service (Wilson, Shaw & Robertson 2010; Shaw & Wilson 2011).

As at the time of writing, activities of the EVALUATE and CONSOLIDATE stages were in progress. Indicative results from these final stages are provided below.

**Results**

The results of the FarmPlan21 improvement are described specific to the stages of the EDS Methodology.

**Improvement Benchmarks**

The SELECT and ANALYSE stages where used to identify, prioritise and benchmark, focus areas for service improvement. Table 3, provides a summary of this investigation as conducted with the FarmPlan21 service.

**Table 3: FarmPlan21 investigation activities by EDS Methodology Stage**

<table>
<thead>
<tr>
<th>SELECT¹</th>
<th>ANALYSE² (Benchmarks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Consolidate service capacity needs</td>
<td>• Consistent service delivery model is adopted</td>
</tr>
<tr>
<td>• Evaluate options for geographic expansion</td>
<td>• Maintain regional relevance</td>
</tr>
<tr>
<td>• Facilitate the development and consolidation of farm planning content and modules</td>
<td>• Service meets investor needs</td>
</tr>
<tr>
<td>• Develop and grow functional components Department farm planning service delivery</td>
<td>• Service is targeted, relevant and effective for the client</td>
</tr>
<tr>
<td>• Build staff capability to deliver to a consistent standard</td>
<td>• Client database is used for client profiling and client data capture</td>
</tr>
<tr>
<td>• Provide technology capacity and capability to service delivery</td>
<td>• Client information is aligned to client segments</td>
</tr>
</tbody>
</table>

¹. (Wilson 2010b) Section 1.5 – Objectives
². (Wilson 2010b) Section 2.1 – Requirements for FP21 expansion

**Improvement Activities**

Table 4, provides a summary of the specific actions to be taken, what was done and the indicative results collected thus far.

**Discussion**

**Service delivery and Service improvement are different functions**

The EDS Methodology recognises that service-delivery and service-improvement are two very different functions in the project management life cycle. For this pilot the Service Improvement Project assumed responsibility for developing new business processes and promotional material. This enabled the service delivery staff to focus on delivery. Therefore, the improvement process did not limit the effectiveness of the service delivery staff or their outputs.

**Targeting the effort**

The work resulted in the FarmPlan21 project doubling its outputs within 12 months. This is a strong indication that the improvement work guided by the EDS Methodology was effective in increasing the capability and capacity of FarmPlan21 service.

Evidence of the improvement effect is to be collected during the EVALUATE stage activities planned for August and September 2011. This information will measure the impact of the improvement activities. It is intended that this evidence will provide with confidence a measured impact of the value gained from the improvement work.

The EDS Methodology leads to targeting improvement activities into three categories: Staff training, promotional materials, business processes and information resources. This approach provided consistency and continuity across the range of the service delivery areas. This ensured that the stakeholder interviews and staff feedback was used to design and implement improved...
processes, resources and training. This is expected to lead directly to an improved service delivery that better meets the needs of all stakeholders involved.

Table 4: FarmPlan21 enabling activities by EDS Methodology Stage

<table>
<thead>
<tr>
<th>Area¹</th>
<th>ANALYSE² (Priority)</th>
<th>ENHANCE³</th>
<th>EVALUATE-Success measures⁴</th>
</tr>
</thead>
</table>
| Staff Capability | • Group facilitation skills  
| | • Resources registry  
| | • Enable skills access and sharing  
| | • Facilitator position descriptions  
| | • Computer literacy  
| | • Assessment processes  
| | • Outcomes evaluation  
| | • Reporting standards | Staff Training | • Whole farm planning delivery  
| | | • Conducting follow-up  
| | | • Client Management database training  
| | | • GIS training  
| | | Promotional  
| | | • Internal promotion of FarmPlan21 services  
| | | • FarmPlan21 road shows  
| | | Business Processes  
| | | • Established Farm Planning Community of Practice  
| | | | | | • VIC DPI service providers are more confident in delivery  
| | | | | | • Increased level of participant satisfaction  
| | | | | | • Increased awareness of FarmPlan21 within VIC DPI  
| | | | | | • More competent program data collection and interpretations  
| | | | | | • Increased confidence in using GIS tools in workshops.  
| Business Capability | • Investment is the key driver of change  
| | | • Streamlining benefits require verification  
| | | • Demonstrate benefits of cross portfolio collaboration  
| | | • Consideration of core enabling requirements beyond scope of operational staff is required | Business Processes | • Integrated service delivery model designed and tested  
| | | • Project sub-committee formed to develop project model and capability requirements  
| Products & Information Resources | • Communication needs adequate resources  
| | • Resources needs to be centrally coordinated and regularly peer reviewed  
| | • New modules required based on client feedback  
| | • Cost recovery practices need to be consistently applied  
| | • Consistent communication targeted to segment, sector and cross sector needs  
| | • Communication must consistently recognise all contributing agencies | Business Processes | • Established follow-up and review processes  
| | | • Facilitator’s internal collaboration space using Quickr collaboration software.  
| | | • Guidelines for targeting client sector and segment specific marketing material  
| | | Information Resources  
| | | • FarmPlan21 training manual  
| | | • Module development kit  
| | | • New modules on Water; Climate Change; Pest Plant and Animals; Fire Risk Management; Soils  
| | | • New short courses  
| | | Promotional  
| | | • Fact sheets and updates  
| | | • Industry specific posters  
| | | • Website re-development.  
| | | • FarmPlan21 logo | | | • Improved consistency of resources  
| | | • Improved quality of services  
| | | • Services more client focused  
| | | • Greater variety of services available  
| | | • Greater implementation support  
| Tools & Technology | • A common database for the service is required.  
| | • GIS support needs to be resourced to provide the mapping demands of the service | Business Processes | • Developed FarmPlan21 Client Management Database  
| | | • Established state-wide computer bank  
| | | • GIS Imagery coordination  
| | | • Established GIS specialists team  
| | | • Introduced GIS standards | | | • Increased effectiveness of client feedback  
| | | • Improved client segmentation  
| | | • Improved utilisation of GIS technology  

1. Pilot Expansion of FP21 Report (Wilson 2010b) - headings from Section 6.4  
2. Pilot Expansion of FP21 Report (Wilson 2010b) - Modified Bullet points from Section 6.4  
3. FP21 Evaluation Report (Shaw & Wilson 2011) Table 7&8 - Actions  
4. FP21 Evaluation Report (Shaw & Wilson 2011) Table 7&8 - Results  

In 2010, this work enabled the FarmPlan21 project to deliver new Farm Planning Services to 400 farmers in six new catchment regions (Shaw & Wilson 2011).

**Improvement takes resources and time**

The improvement of the FarmPlan21 service would not have occurred without the dedicated resources of the Service Improvement Project. This work provides some evidence towards validating how dedicated resources to service improvement can enhance service efficiency and impact.

Effective improvement takes time. Activities such as staff training and business process development require considerable effort before their impact on service delivery is realised.

**Consistency in evaluation is vital if impact is to be measured**

There must be at least some consistency regarding the benchmarks used in the evaluation activities of the ANALYSE and EVALUATE stages. In this pilot, consistent measures were not used by the two evaluations and therefore the results cannot be directly compared. In this trial, impact of the improvement activities cannot be empirically measured. This is an area of focus for future applications of the EDS Methodology.

**There is more to this than farm planning**

The authors see no reason as to why this approach could not apply to the improvement of any decision support service. In theory, the EDS methodology should be able to coordinate a wide range of evaluation methods, against any determined benchmarks for service delivery.

**Conclusion**

This trial of the EDS Methodology has demonstrated that the Victorian DPI whole farm planning services can be improved through a systematic approach. The approach described here has been successful in targeting the improvement and expansion of the FarmPlan21 service in Victoria.

Further work is now needed to test the methodology in full application with a range of Decision Support services beyond whole farm planning.

**References**


Shaw, D & Wilson, J 2011, FarmPlan21 Evaluation Report, Department of Primary Industries, Melbourne.

Wilson, J 2010a, Enabling Strategies Project Management Plan, Department of Primary Industries, Melbourne.


Wilson, J, Shaw, D & Robertson, C 2010, FarmPlan21 Achievements Summary, Department of Primary Industries, Melbourne.