

UK MoD Assessment of Synplex

Introduction

The Synplex process was first evaluated by the UK Ministry of Defence in 2003, in the context of the defence transformation programme taking place in the Defence Logistics Organisation at that time. This is the report from that evaluation.

Shortly after the report was written some renaming took place. 'Synergistic Solutions' became 'Synplex', and 'Desyma Decision Technologies Inc.' became 'Complexity Solutions Inc.'.

The Synplex process has subsequently been used by the MoD, for example in supporting the development of the Type 45 support strategy.

DLO/DG S&LD/6/5/6

17 Nov 03

AN ASSESSMENT OF THE 'SYNERGISTIC SOLUTIONS' PROCESS
PROVIDED BY DESYMA DECISION TECHNOLOGIES INC.

Reference: ES(AIR)(VL)/2/1/3 – Output Clustering – Pilot project Rotary Wing – dated 5 Nov 03.

INTRODUCTION

1. Defence business, is by its nature complex and involves multiple non-linear processes, relationships and stakeholders. To address and solve complex issues involving multiple issues or criteria is a significant challenge for the human brain, without the support of a process and underpinning science. The latter can be provided in the form of tools to capture the whole, as the brain deals with smaller groupings of issues in turn.
2. Such issues faced the DLO Restructuring Study Team whilst considering how to conduct a pilot study of the IPT 'Clustering' concept and also deliver an action plan to deliver a 'Cluster' within the Rotary Wing environment. Desyma Decision Technologies¹, a Canadian company, amongst others, offers a methodology

¹ www.desyma.com. {now www.complexitysolutions.com }

known as ‘Synergistic Solutions’² to address and resolve such relationally complex problems. During the period of this work Desyma operated in the UK through an agent, called Future Focus³.

AIM

3. The aim of this study was to assess the effectiveness of Desyma’s ‘Synergistic Solutions’ approach with regard to solving relationally complex problems, using the Rotary Wing Pilot Project (Ref A) as a case study. This work also forms part of a wider ongoing DLO Org Eff study⁴ looking at available decision support processes and supporting tools which could assist decision making and complex problem solving within the DLO.

BACKGROUND

4. In order for organisations to make fully informed and effective decisions or develop strategies involving complex issues, the use of Decision Conferencing as part of a Socio-Technical process is increasingly seen as an efficient and effective way of doing this, both in the Public and Private sectors. Within the MoD, the techniques are being used by the ECC to compile the Equipment Programme, within Fleet to provide In-Service Support priorities to the WSA for certain Platforms and also to assist Strategy development.⁵ The Socio aspect is captured by the use of Decision Conferencing, where the Decision Makers and Subject Matter Experts (SMEs) are brought together and facilitated to address the targeted issue. The Technical aspect is addressed by the use of a software tool to capture and relate the views of the group, into an understandable and useable format to inform the group and the decision makers. Without such a tool, when tackling complex issues, it is hard for the brain to make the necessary comparisons and relational links, in order to make a fully informed decision. Desyma, amongst others, offers one such solution based upon complexity theory⁶. Similar Socio-Technical processes are also available from other UK companies e.g. Catalyze Ltd⁷. Desyma’s solution has been used by numerous American and Canadian companies and corporations for Strategic & Business Planning, Business Analysis, Project Planning, Process Re-engineering and Problem Solving.

5. As part of the DLO Restructuring Study, the Rotary Wing environment was chosen as a pilot project to test emerging views on how the DLO End State might best be delivered. Two Workshops were held (30 Sep – 2 Oct and 22 – 24 Oct 03), facilitated by Desyma and jointly co-ordinated by Future Focus and DLO Org Eff staff, to explore, capture and prioritise a multitude of Issues and Challenges identified by the RW SMEs, which included RW IPTLs, DOps RW, DLO HQ, Customer and Industry Reps. Their task was to address the following issue:

² Desyma promotional material/presentation is available in hard copy from Org Eff Sea.

³ Desyma have since withdrawn their association with Future Focus.

⁴ ‘Decision Support Processes and Tools Study’ by DLO HQ Org Eff Sea - due to complete in early 04.

⁵ Further information can be found at <http://www.decision-conferencing.com>.

⁶ The Praxis Equation: Design principles for Intelligent Organisation, Michael D McMaster, Knowledge Based Development Co Ltd, 1997 – Chapter 6 - Resolving Complex Problems.

⁷ www.catalyze.co.uk – Catalyze solutions are based upon Decision Theory and use Multi-Criteria Decision Analysis (MCDA) techniques within the Decision Conference environment. Contact Org Eff Sea for further info.

How to deliver by 1 Apr 04, the DLO business model for the RW ‘*environment?*’ across new to service and legacy capabilities, to deliver optimum output to Customers, through the E2E process, whilst maximising our financial contribution towards achieving the Strategic Goal.

THE ‘SYNERGIST SOLUTIONS’ PROCESS

6. The ‘Synergistic Solutions’ process is based upon the use of facilitated Decision Conferencing workshops and the use of a bespoke software package to capture the relationships between the issues and challenges generated by the attendees. A key point to note is that the success of Decision Conferencing is significantly dependant upon the need for continual attendance by participants throughout the process, in order that the group’s level of understanding is raised together. It also prevents going over old ground when someone enters the group half way through the process, when retrograde steps can occur. In outline the process used was:

- Planning meeting with the ‘owner’ of the issue:
 - Review the situation as it currently exists
 - Define the issue (initial definition)
 - Agree on the desired outcome
 - Design the team
- Internal Communications between the client, team members and their organisations
 - Identify the issues to be worked on
 - Obtain the commitment of time
- Planning meeting with the ‘owner’ to formulate a Trigger Question in order to generate team thoughts on the issues and challenges related to the key issue being addressed.
- Send out Background info and Trigger Question to Workshop attendees.
- Workshop(s) (2 x 3 days or 3 x 2 days):
- Generation and capture of issues and challenges (environmental scan/reality check)
- Assess issues and challenges in terms of how they influence or aggravate each other ending up with an influence map.
- Capture and record any assumptions, strategic issues.
- Select those key issues and challenges captured by the influence map, which are considered a priority.
- Define success criteria any plan must meet (‘Must Meet Criteria’)
- Develop and agree clear Objectives to address the key issues and challenges.
- Develop a list of key actions to deliver the identified Objectives.
- Within groups develop at least 3 options/plans to address the key issues/challenges and to meet the identified Objectives.
- Review the Action Plans/Options against the “Must Meet Criteria”
- Select the best implementation plan or develop a hybrid and translate that into an overall Project Plan consisting of timed and sequenced actions with clearly identified leads for each Objective and owners of the associated actions, from within the group/workshop participants.
- Consider time duration and resource implications of each action and collectively, for the chosen Plan.

7. In simple terms, the RW SMEs were locked in a room without windows for three days at a time. The aim was to pool all available experts and empower them to make ‘strategic’ decisions. Delegates were asked to generate the Issues and Challenges as they saw them against a Trigger Question which was:

“Given that the new business model⁸ will require new structures to allow it to work effectively and efficiently, **what are all the issues, challenges, problems and opportunities we face in optimising the RW ‘cluster’ to deliver the optimum output to customers?** (within the framework of the E2E processes and maximising our financial contribution to the Strategic Goal). “

8. At the first workshop, Desyma used their bespoke software tool to capture and sort, (based upon the participants’ judgements) the multiple issues and challenges etc. into an influence map; in essence a reality check or environmental scan of the current and associated RW problems. The group also informed and added to, given assumptions and captured strategic issues out with their remit. Once content with the influence map, the group developed a set of success criteria which any plan developed, must satisfy. The team agreed the issues and challenges which were most important and needed solving first. Against these key issues and challenges, the group developed SMART objectives which, when met should solve the problems.

9. At the second workshop, participants developed a list of key actions to deliver the identified Objectives. Participants then took ownership of the Objectives with lead and supporting roles agreed. The group then developed an overall time sequenced plan to deliver the Objectives, address the Key Issues and satisfy the Must Meet Criteria.

10. The group also looked at options for budgetary structures and the roles of 2* Domain leads as well as ways of making sufficient headroom in terms of time and resources to deliver the Plan. The Final plan will be put forward for consideration by the DLO Top Team on 24 Nov 03. The commitment shown by delegates was impressive. It was a commendable achievement to concentrate all RW IPTLs and other experts in one place for 3 days at a time. The assembled expertise and brainpower generated a joint understanding which enabled the workshop to analyse, in depth, the key issues surrounding the DLO. The group demonstrated their commitment to the RW environment change and now fully own the proposed Plan. This work may well pioneer the way in which the DLO Restructuring Study Team will move forward. The workshop has also provided a number of significant issues for the DLO and Defence as a whole to consider.

ANALYSIS

11. The following criteria were used to assess Desyma and the ‘Synergistic Solutions’ process:

- a. Client awareness and handling.

⁸ Now known as the End State.

- b. Corporate Experience.
- c. Flexibility of Desyma and their process.
- d. Applicability of the process.
- e. Utility / Ease of Use / Tempo.
- f. Facilitation Expertise.
- g. Quality of Deliverables.
- h. Participant ownership of Issues, Objectives and Action Plan at end of Workshops.
- i. Cost / Benefit / Effectiveness.

12. Client Awareness and Handling. Desyma quickly familiarised themselves with how, within the MoD, the DLO and FLC relationship functions and achieved a requisite overview of the Smart Acquisition process. There were some initial issues regarding charges for their services, through their UK Agent (Future Focus), which were resolved through negotiation before the Workshops commenced.

13. Corporate Experience. Desyma's promotional material shows evidence of considerable interventions at the Corporate Level across a multitude of large Canadian/US/UK and European businesses and Public Sector organisations. It became evident during the Workshops that Desyma were able to draw upon a considerable depth of corporate experience and best practice.

14. Flexibility of Desyma and Process. During the workshops, Desyma ably retained their focus upon the agreed deliverables but remained flexible to the group's needs and issues as they arose. They were able to take on additional tasking mid-workshop and deliver. The process appears to be sufficiently flexible to deal with a myriad of complex issues and problem types.

15. Applicability of The 'Synergistic Solutions' Process. The use of facilitated Decision Conferencing to address issues and challenges and to develop Strategic Thinking in an informed way is considered to be most effective. Its success relies upon dedicated time commitment from participants, with engagement from start to finish. The Desyma software can be used to address Strategic & Business Planning, Business Analysis, Project Planning, Process Re-engineering and Problem Solving. It appears ideally suited to support any future DLO Restructuring work. However, the Desyma Software tool **cannot** be used to conduct Balance of Investment (BOI) tradeoffs in terms of Cost/Benefit/Time/Performance/Risk.⁹

16. Utility / Ease of Use / Tempo. The Decision Conference process may appear, by its nature, time consuming in the short term, however if the quality of the product is sufficiently high this far out weighs the time investment of participants, particularly if long standing or strategic issues can be resolved. The application of the Desyma software product was quickly understood by participants through their collective use and visibility of the tool and its product. The software is licensed and requires a trained user. It provides an auditable trail of the captured issues and challenges, definitions and shows relational judgements made by the group.

⁹ Catalyze software packages are ideally suited to BOI - Cost/Benefit analysis, including adjustment for Risk, and also support Strategic development and optimisation of Outputs.

17. Facilitation Expertise. Desyma were experienced and adept at group facilitation, were able to draw upon significant corporate knowledge and were sensitive to the group dynamics. They also drove the group, as appropriate, to achieve the required deliverables within the timescales.

18. Quality of Deliverables. The specific Desyma contracted deliverables were:

- a. A deep understanding of all the key factors underlying and controlling the ‘issue’ and in particular how these factors relate to each other within the overall context of the current, complex situation.
- b. An ‘influence map’ (structural model) of the key leverage issues and their relationships that will open up opportunities for effective action.
- c. A deep respect for, and new ability with, the type of conversation that is necessary for fast resolution of other complex issues.
- d. An Action Plan for resolving the situation.

It was clearly evident as the Workshop progressed that the group had developed a deep understanding (Deliverable a.) of the key factors and how they related to each other as reflected by the comprehensive ‘influence map’ (Deliverable b.). The Decision Conference style of approach (Deliverable c.) and the language used within them, to address complex issues, was bought into by the participants. Lastly, an outline Action Plan (Deliverable d.) was developed and then expanded upon within Microsoft Project by the Workshop participants for time duration and likely resources required. The Action plan satisfied the ‘Must Meet Criteria’.

19. Participant Ownership of Solution. At the end of the second day of the last Workshop, the Desyma facilitators were able to stand back, whilst the participants facilitated themselves in the detailed production of the Action Plan, demonstrating they had obvious ownership of the Plan and resolve to address the ‘issue’.

20. Cost / Benefit / Effectiveness. The total Cost for 6 Days of concentrated effort to produce a solution to the complex ‘issue’ was approx £54K (not including participants’ salaries) broken down as follows:

- a. Desyma/Future Focus (Discounted) Charges £30K (ex-VAT) (Normal Charge £50K (ex-VAT) + expenses)
- b. Workshop and Business facilities, Accommodation and Meals for a Total of 41 People (most full and some part-time participation) - £24K.

If the proposed solution to the ‘issue’ is endorsed by the DLO Top Team, the perceived benefits¹⁰ that will be delivered in terms of transforming the RW IPT business, effectiveness and finance, would appear to far out way the Costs in terms of money and manpower effort and time expended, with a proposed solution being delivered in a relatively short time scale. The benefits of the proposed solution remain to be realised, however, the high level of commitment demonstrated by the RW change champions suggests a high potential for realising the desired end state.

¹⁰ See Reference – Paras 10, 11 and 12.

SUMMARY

21. In summary, it is considered that the process of Decision Conferencing (DC) is an effective and efficient means of addressing complex issues, when considered against the potential benefits that can be realised in the delivery of coherent solutions. Additionally, the DC process achieves ‘buy in’ of those key stakeholders directly affected and tends to create informed and motivated Change Champions. The Desyma ‘Synergistic Solution’ was professionally managed and delivered. It met the contractual deliverables and was flexible enough to deal with arising issues and further demands. It is also considered to be an effective way of dealing with the ‘Cluster’ issue. The Desyma process cannot be used to conduct BOI.

RECOMMENDATIONS

22. It is recommended that:

- a. Serious consideration is given to using Desyma in any further DLO Restructuring development or implementation work, particularly Clustering.
- b. the ongoing Org Eff study regarding Prioritisation and Decision Support processes and Tools continues, particularly looking at Decision Conferencing and ways to support:
 - i. Strategic decision making
 - ii. Strategy development
 - iii. BOI in order to make optimised and Risk adjusted decisions.