



Newsletter

February
2015



Solving complex networks of interdependency in aerospace and defence

Plexus Planning ramps up expansionbased on accelerating success

Welcome to our first Newsletter of 2015, where we are pleased to report a very successful 2014, which saw orders increase by 116% compared with 2013.

There were orders for both new and continuing projects from many of our existing clients, including: Airbus, Boeing, Rolls Royce, and United States Navy

“ Orders up 116% ”

We are especially pleased that some of our long standing clients, having proved the substantial business benefits of our Interdependent Systems Management (ISM) solution, have chosen to embark upon a multi-year contractual commitment to use and to extend the deployment of Plexus Planning within their organisations.

This is a positive endorsement of the many functional benefits of ISM provided by the Plexus Planning solution and confirmation of the significant business value that can be delivered.

As a further endorsement, Plexus Plan-



ning is now on the officially approved list of Boeing business software applications.

We would like to thank all of our clients for their business during 2014 and we look forward to continuing to work with you to help you improve your businesses during 2015.

As a result of the increased investments made during 2014, together with the growing number of client-focussed enhancements that are either in development or in the pipeline, we plan a number of new releases of the Plexus Planning solution during 2015.

Each of these will expand the capabilities to support an increasing range of ISM scenarios and operational enhancements.

Alasdair Pettigrew – Chief Executive

“ multi-year contractual commitment.....confirmation of the significant business value that can be delivered ”

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New user: Siemens Energy

We are delighted to announce that Siemens Energy has joined the growing list of Plexus Planning users and will be utilising Plexus Planning's extensive supply chain mapping capabilities.

Siemens Energy supplies aero-derivative gas turbines, compressor systems and related services to customers in the Oil and Gas and Power Generation sectors.



We examine below, the challenges of complex engineering projects such as ship design, and how these challenges are overcome through collaborative engineering processes combined with world-leading software from Plexus Planning.

The result, for the US Navy, is a generic Ship Design Process Model that is now being used on an increasing number of new ship design projects.

The results can have a big impact on such large & complex projects, in that: “small process improvements and effective early-stage processes can result in cost savings and fewer mistakes”

The challenges

One of the challenges, was the enormous amount of engineering resource channelled into specific aspects of ship design such as the physical configuration, hull systems, propulsion, weapons systems, survivability, overall characteristics of the final design, performance, maintainability, etc..

with different definitions for common terms, and documentation that defines responsibilities and outcomes but frequently does not include processes.

To add to this, there was a dilution in the knowledge transfer from experienced senior engineers to new engineers as they retired or as new projects used ad-hoc teams without a history of knowledge transfer.

of complex design efforts and training.

The model was developed using Plexus Planning, which has a simple boxes and arrows presentation of a process with easy-to-use graphic capabilities to drill down and edit specific parts of a larger process model while retaining the integrity of the larger model. Underlying this, is extensive data about each activity and transaction which can support a

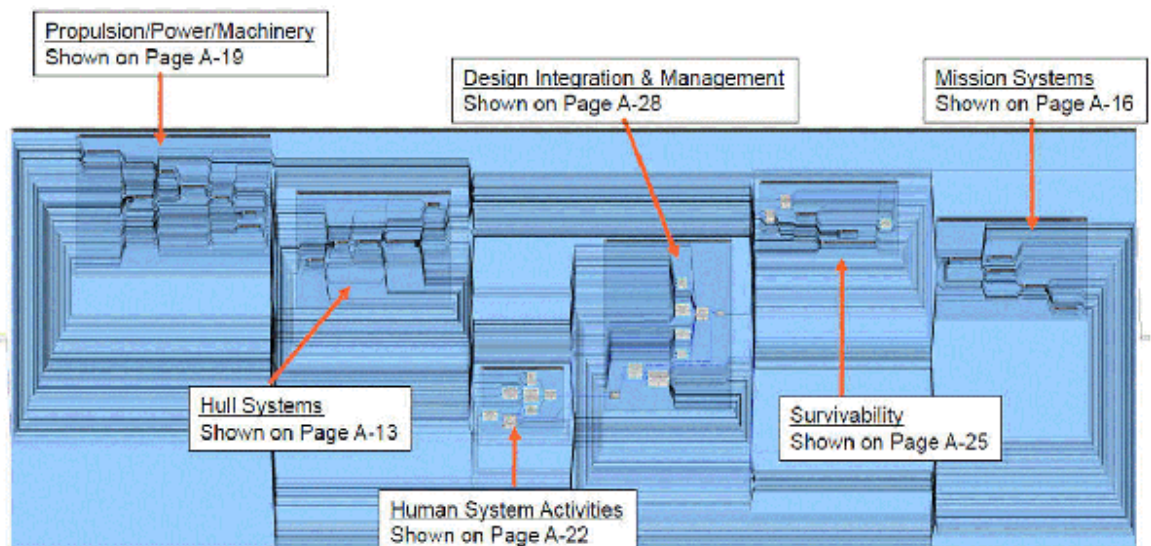
“rapid evaluation of ‘what-if’ scenarios and response to disruption in project execution ”

The Ship Design Process Model

The process of developing the formal ‘Ship Design Process’ was carried out by the US Navy Office of Naval Research in collaboration with Naval Sea Systems

variety of calculations and simulations. The data can be sorted, filtered and displayed in many ways.

This allows subject matter experts to review and edit the model from multiple perspectives such as workflow,



High level view of Preliminary Ship Design Process Model – US Navy NSWC Carderock public presentation

Command, Naval Surface Warfare Centers (NSWC) and the CREATE Ships Program through seven major Process Modelling Workshops.

It was spread over 4 years with typically

geographical distribution, contractors & sub-contractors, functional organisations, etc. The model is particularly useful for simulation of design process outcomes (cost, timescales, risk) including rapid evaluation of ‘what-if’ scenarios and response to disruption in project execution (e.g. supply or supplier failure, natural disaster affecting a supplier etc.)

“small process improvements and effective early-stage processes can result in cost savings and fewer mistakes.”

However, there was no formalised consideration of the interdependencies and impacts of one activity area on another.

Each area has its own experts, often

50 to 250 subject matter experts per workshop. The key areas of focus were to model the design process so as to support; process improvements, effective project planning, assessment of proposed software, better integration and execution

Results

The Ship Design Process Model is now starting to be applied to new projects, using Plexus Planning as the key tool.

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Plexus Planning is being used in several ship acquisition programs including the DDG51 Flight III and a new amphibious ship program as well as exploration of ship system design

“different organisations can model their own processes while keeping track of all the interdependencies between each entity”

processes at NSWC.

The use of a common framework with clear procedures for defining activities and their interactions and dependencies together with common definitions and terms (different organisations often

have different nomenclature, which can be a challenge in large projects), can enable effective integration of systems designed by different organisations, and in different locations.

This also results in improved communications relating to work products and schedules. Different organisations can model their own processes while keeping track of all the interdependencies between each entity.

There is a further significant benefit in the

area of training of new engineers, who can now see the complete context of the design model and understand individual parts of the process, and can more easily evaluate new approaches and tools to improve the ship design.

More information

Please contact us if you would like a more detailed version of this Case Study.

The complete Ship Design Process Model is in the public domain, including a number of presentations which show many different parts of the model. Go to:

http://www.navsea.navy.mil/nswc/carderock/pub/who/departments/ship_design.aspx (You may need to copy this into your browser)

STRATEGY for substantial growth

Plexus Planning has BIG plans to capitalise on the resounding successes of 2014 and to further advance our leadership position in providing the only truly functional, practical and easy to use solution to manage the emerging business challenge of increasingly complex networks of interdependency in the aerospace and defence industry.

With our focussed knowledge of this market sector, and our deep understanding of the expanding range

of reaching 100 people by mid-2018.

The initial growth will come through the foundations that we put in place during 2014, with expansion of our global sales reach and significant enhancement of our development team.

“growth of our distribution strategy”

This will be augmented by the further growth of our distribution strategy; building on the distributors we are already in the advanced process of signing-up in China, India and Brazil.

In addition we will continue the exciting on-going enhancement of our Plexus Planning solutions for aerospace and defence, driven fundamentally by our customers' needs.



of solutions that we can bring to the market, we have embarked upon a clearly defined and aggressive growth plan.

This strategy will see Plexus Planning emerge as a truly international corporation, with a key milestone target

“expansion of global sales reach”

If you have not had the opportunity to witness our formal Plexus Planning Product Roadmap presentation yet, and if you are an existing customer of Plexus Planning Limited, then please contact your representative to arrange for this to be presented.

As the exciting and rapid development of our solution progresses, with further unique and value driven capabilities, we

“evolve solution into a set of Product Editions”

understand our customers' need to focus our solution on specific business domains, whilst still being able to realise the value of cross-domain analysis.

We therefore plan to evolve Plexus Planning into product “Editions”. So, for example we will see a Supply Chain Edition, a Systems Engineering Edition, and a Process Planning & Improvement Edition, amongst others.

FRANCE increased promotion to French aerospace industries

Plexus Planning has been accepted as an Affiliate member of the ADS Toulouse Office and looks forward to the value that this membership will deliver in supporting its French Business Development.



ADS Toulouse SARL, established in 1999, effectively assists UK companies wishing to raise their profile

and access business opportunities in the French aeronautics, space, defence, and embedded systems markets.

Alasdair joined Plexus Planning in 2012, as Global Business Development Director.

Now, as Chief Executive, he has full

“ deliver superior products - on time and to budget”

responsibility for the exciting development roadmap, implementing the



substantial worldwide growth plans and leading the execution of the company's overall strategy.

With 24 years experience of the

superior products - on time and to budget.....a real challenge in aerospace and defence!

Alasdair graduated as a mechanical

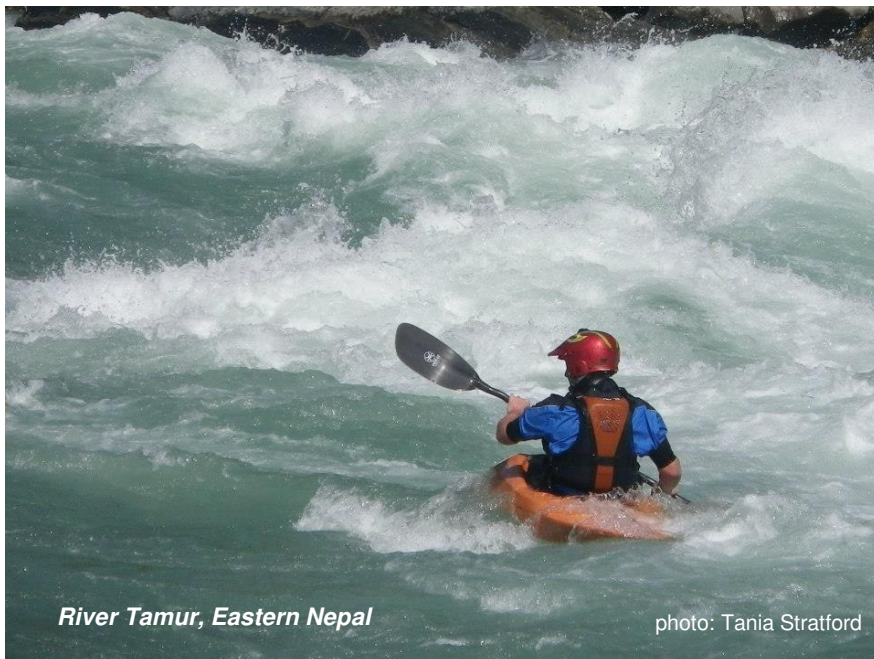
engineer and started work on Harrier Jump-Jets with BAE Systems, where he gained an international diploma in advanced aerospace studies (ECATA).

Later with IBM, Alasdair spent 11 years consulting on product development in the aerospace, automotive and motor-racing (Formula1) industries, before 4 more years in IBM's Rational Software division as the UK lead for sales to systems customers.

Alasdair has a wife who is an antiquarian book consultant with Christies and two lovely kids. Kieran (12) has just had his first rugby game for Berkshire County, while Katie has taken up fencing.

White-water kayaking provides great inspiration!

Alasdair has paddled all over the world



River Tamur, Eastern Nepal

photo: Tania Stratford

challenges of delivering complex systems in aerospace, defence, electronics and automotive industries, Alasdair leads the team that helps our clients to use the latest IT solutions to improve the manufacturing-to-delivery process, enabling them to deliver

including Nepal, Zimbabwe, US, Canada, UK and the Alps and is a BCU Level 3 Coach.

He also loves skiing, and is a rugby & Formula 1 fan. He is inspired by excellence in engineering, advances in technology and great product design.

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COMMENTS

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