

CUSTOMER SUCCESS STORY

Neptune Software SAPUI5 Mobile Solution

Introduction

In 2014 Soltius was engaged by one of New Zealand's leading retailers to work with them to deliver business improvements to their SAP ERP Retail logistics processes. These improvements included the delivery of a mobility solution.

Our client's requirements were not limited to mobility. They also included process automation and reporting. This discussion focuses on the mobility aspects of the overall solution and on our clients and our experience with Neptune Software.

Requirements and Neptune

During the initial design workshops we reviewed several SAP options for mobility. The brief from the client about their mobile needs was clear and resolute. This included:

- An HTML5 based solution that could work across application operating systems
- No desire to invest in SAP's Mobile Platform at this time, and
- Did not want to use any hosted options.



Soltius is an SAP Gold partner with a firm long term commitment to SAP Mobility.

However, looking beyond SAP's own standard mobile options was something we were investigating in response to other customers' demands and the strong direction from our client accelerated this process.

Evaluation Process

We evaluated several vendor options and in our opinion Neptune Software solution was the strongest match for our client's requirements. It was also the most supportive of SAP's own mobile

direction so we elected to partner with Neptune Software.

The decision to partner with Neptune and advocate its use was based on the following:

Fantastic UX – With Mobility it's all about the user experience!

SAP Certified – Neptune is SAP Certified. This was a vital consideration to help safe guard our client's investment.

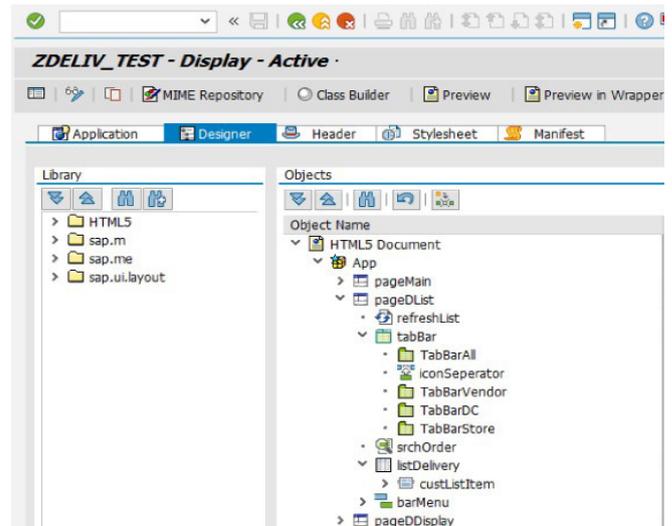
Affordable – The licencing and ongoing maintenance costs are affordable and scales well across the small-medium-large company range.

SAPUI5 – Neptune leverages SAP's own SAPUI5 HTML standards. This was important in terms of providing a great user experience that aligned with SAP's own offerings - like Fiori.

Online and Offline – Neptune provides the option to develop both online and offline mobile solutions that integrate simply with PhoneGap and Cordova application build options.

Mobile and Desktop - Neptune supports both mobile and desktop use.

Rapid Development - The speed and ease of development is fantastic.



Simple Landscape – The Neptune solution is a simple to install add-on to the existing SAP landscape requiring only web dispatcher like capabilities.

Development and Deployment – All the core development and deployment is contained within the SAP system and makes use of SAP's great Transport Management System.

First Steps

With our client we gained a detailed understanding of the solution requirements through a series of workshops covering the mobile and SAP backend processes.

Specific to the mobile solution the initial requirements included:

- Registration of Inbound Deliveries from Vendors, Distribution Centre and other Stores
- Goods Receipt for Purchase Order
- Articles query for balances and price check with

label printing option

- Use of ruggedized Android devices
- Online processing – based on the assumption that connectivity via WiFi would always be available.

The engagement process with Neptune was very smooth. They provided an evaluation copy of their software which we installed, learnt and produced a working prototype back to our client within in a 5 day period. The prototype included:

- Deliveries registration from SAP sourced data
- Scanning and search functions
- The use of sound functions.

The speed and success of this initial process provided our client with great UX results.

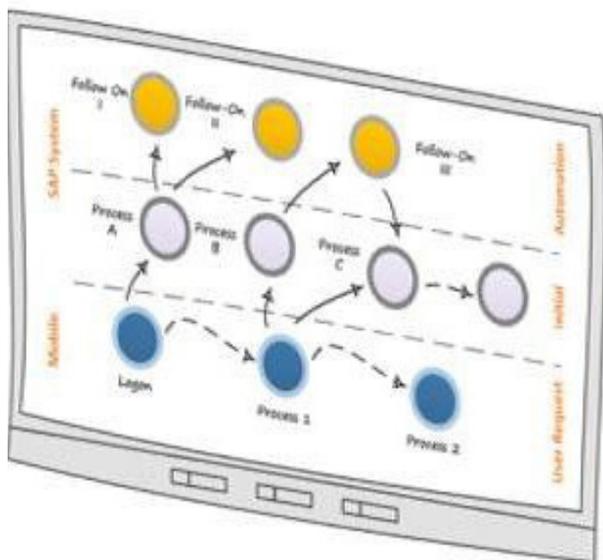
User Centric Design Process

Having satisfied the initial prototype brief we moved into design phase. We used a user and visual centric process and included a number of business roles including end users, subject manager experts and managers.

The design process was centric to the end users as well as to meeting overall business objectives. Iterative, visual design workshops involving several end users helped ensure that the solution used their 'language' and behaved in such a way that it provided an intuitive experience.

Design Process

The design process and outputs commenced with wire-frame diagrams and progressed into the use of process swim lane flows charts and visual screen mock-ups.



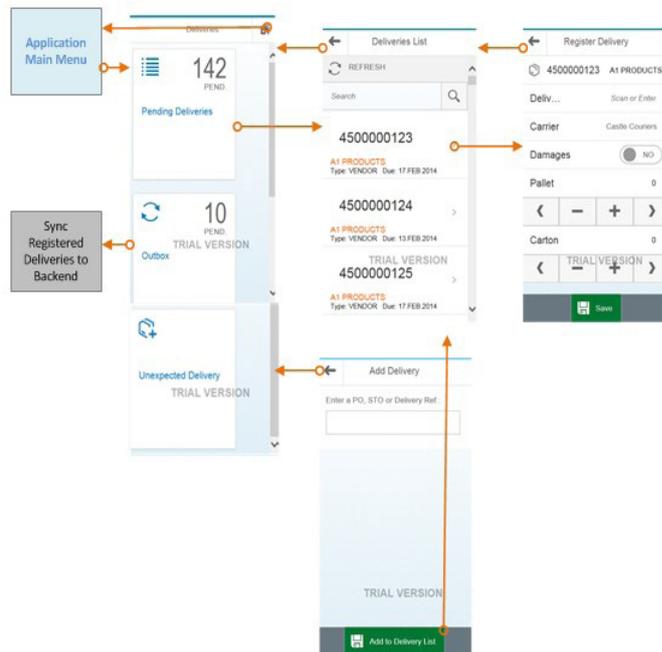
The mock-ups in PowerPoint provided an effective, fast and easily adjustable visual reference.

The design was supported by the interactive use of the prototype we initially developed. This was crucial in provided a

sense of realism and possibilities to the client.

During the design phase the initial requirements evolved. Key changes coming from this process were:

- A change from Android to iOS iPod devices and the requirement to interface with LineaPro scanner guns
- Offline processing – the realisation that WiFi connectivity could not universally be guaranteed.



The sound conditions were also refined to include the use of three distinct tones on scanning to indicate:

- A successful article match for the Purchase Order
- A success article match for the Purchase Order but Unit of Measure discrepancy
- No article found for Purchase Order.

Build Process

From a strong design process the delivery of the mobile solution was relatively easily met.

Early Challenge

One area that did provide an early challenge was the incorporation of a third party developed LineaPro plug-in into the mobile application build.

The technical nature of the LineaPro plug-in meant that rather than use the very simple PhoneGap build service, we instead had to make use of a Cordova build followed by adjustments and publishing through iOS xCode developer.

On success the iPod/ LineaPro scanner combination provided exceptional scanning and processing speeds.

The drive to use the scanner to support the receipt processing meant that not only was the accuracy and speed of this process improved but it also highlighted any barcode master data errors.



Neptune Preview and Publish

The Neptune Application Designers mobile preview functionality with simulated device form factors allowed our client to keep up with the build progress in a very simply and effective manner. As a consequence this allowed for more immediately addressable design refinements and improvements to occur.

Another very positive aspect of the Neptune solution was the ability to immediately publish design updates to the device. Using Neptune's App Cache solution, any development changes become instantly active on the device after ABAP activation. In a test and production sense this occurs on SAP Transport between systems.

Successful Outcome

Following successful acceptance testing, a selective go-live rollout to pilot locations and users occurred. This approach allowed feedback from early users to drive minor refinements to the mobile and SAP backend solutions.

Post pilot and over a period of several months the solution was successively rolled out to locations across the length of New Zealand.

The mobile solution results and the response from the end users has been very favourable. Since production deployment some 87,000 Deliveries and 660,000 Purchase Order line item receipts have been processed in SAP via the Neptune mobile solution.

Business Benefit Realisation

Some of the targeted benefits from this solution and the wider SAP backend improvements were:

- Improved data accuracy at capture and flow on to master data
- Improved processing speed
- Processing automation and optimisation.

These improvements are being realised. What is also evident is that a range of softer benefits have also been gained. These include the organisational learnings from the mobilisation journey and the positive impact on personnel from bringing mobility into their work role.

About the Authors

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Craig has 17 years' experience with SAP across a broad range of clients.

Craig is passionate about delivering business value to our clients through the delivery of great user experiences, mobile processes and technology. He is the Technologies Manager for Soltius leading a team of SAP and mobile developers.

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Rikardt is a skilled SAP Technical Architect with extensive experience across a wide variety of technologies and platforms. In addition to his core SAP ABAP and Neptune Software development skills Rikardt also has experience with web development, SAP Agency and Work Manager, SAP

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Disclaimer

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