Building Hand-Held Scanner Solutions on WebApp Server

Presented By: Michael Macliver
                 Managing Director
                 Triumph Business Systems

- Pet product wholesaler
- More accurate order processing/picking
- More efficient order processing/picking
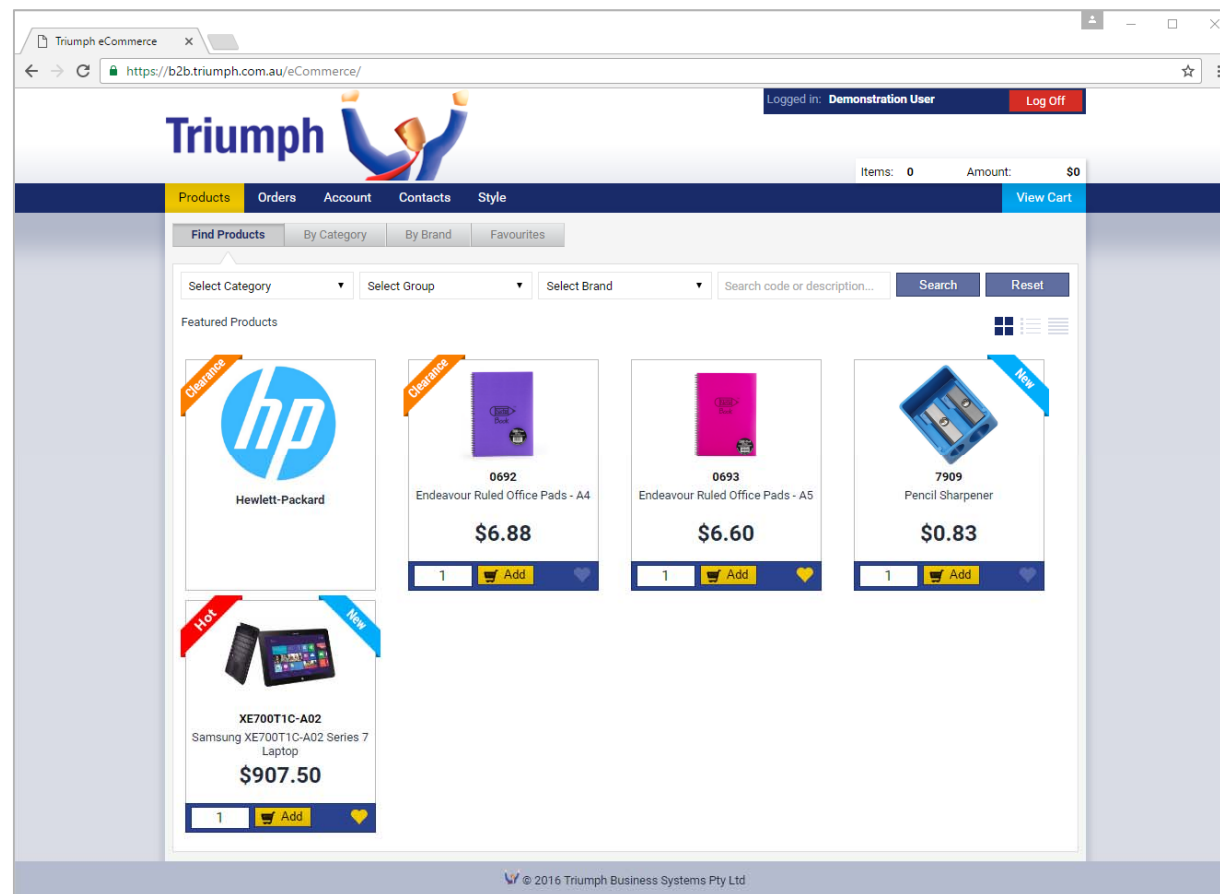
The Solution

- Paperless Picking Warehouse

  - Wireless Mobile Scanner

    - Android

    - HTML5 Browser

    - Touch Screen (min 480 x 800)

    - Numeric Hardware Keyboard

    - Rugged

  - DataFlex Web Application

Why a Web Application

- Leverage existing classes and BPO's
- Works on the live data, so no batch import
- Support multiple devices moving forward – just need a browser and connectivity
- WebApp Experience

WebApp Experience

- B2B e-Commerce, VDF 17.1 and DF 18.0

WebApp Experience

- Web Requisitions, DF 18.2 – using mobile/drill down style
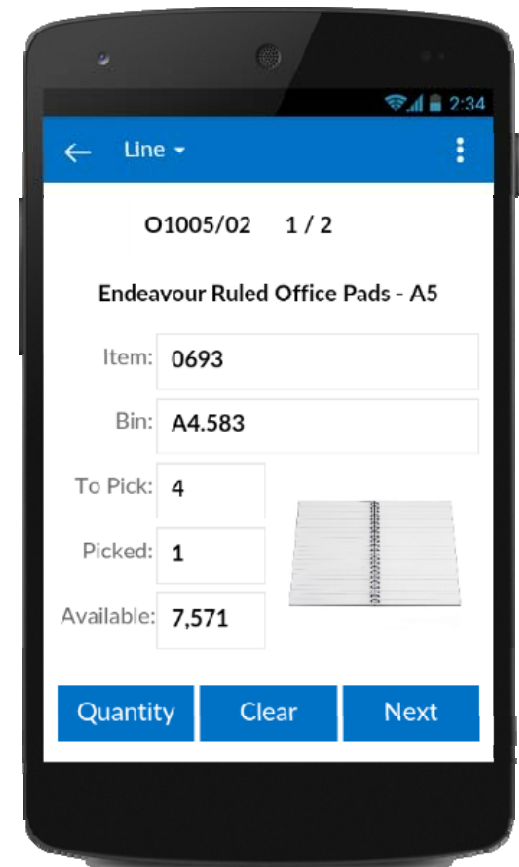
Triumph
Business Systems

Intermec CN51

- Pros
  - Strong and robust
  - Good quality scanner
  - Can handle key input at view level

    so no onscreen keyboard required on scan page

- Cons
  - US$2250 - US$3000 per unit

Paperless Picking Rev 1

Replace a manual order picking system with a real time scanning web application. The new web application improves speed and accuracy by reducing double handling, and displaying the required items on screen.

Triumph Business Systems

Chainway 4050 Scanner

- Pros
  - Cheaper
  - Fully Featured

- Cons
  - Less robust
  - ~US$1100 per unit
  - Key handler doesn't work as expected, you need a focusable form to capture the input *which means the onscreen keyboard is visible*
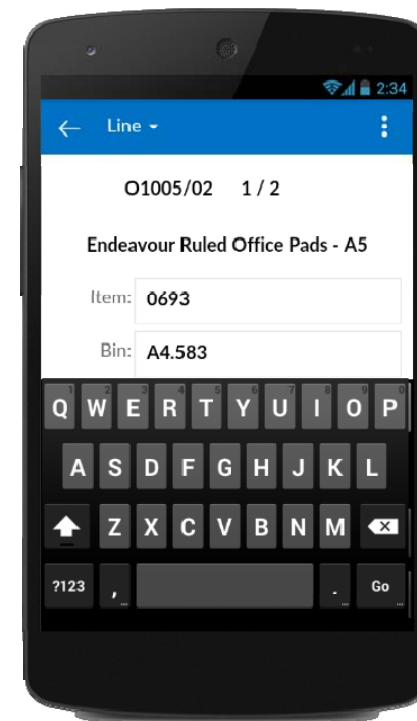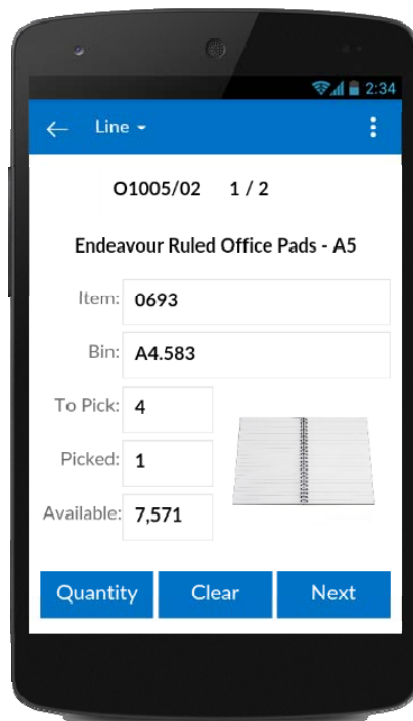
New Challenge

- Onscreen Keyboard Problem

Intermec CN51   vs   Chainway 4050

New Design
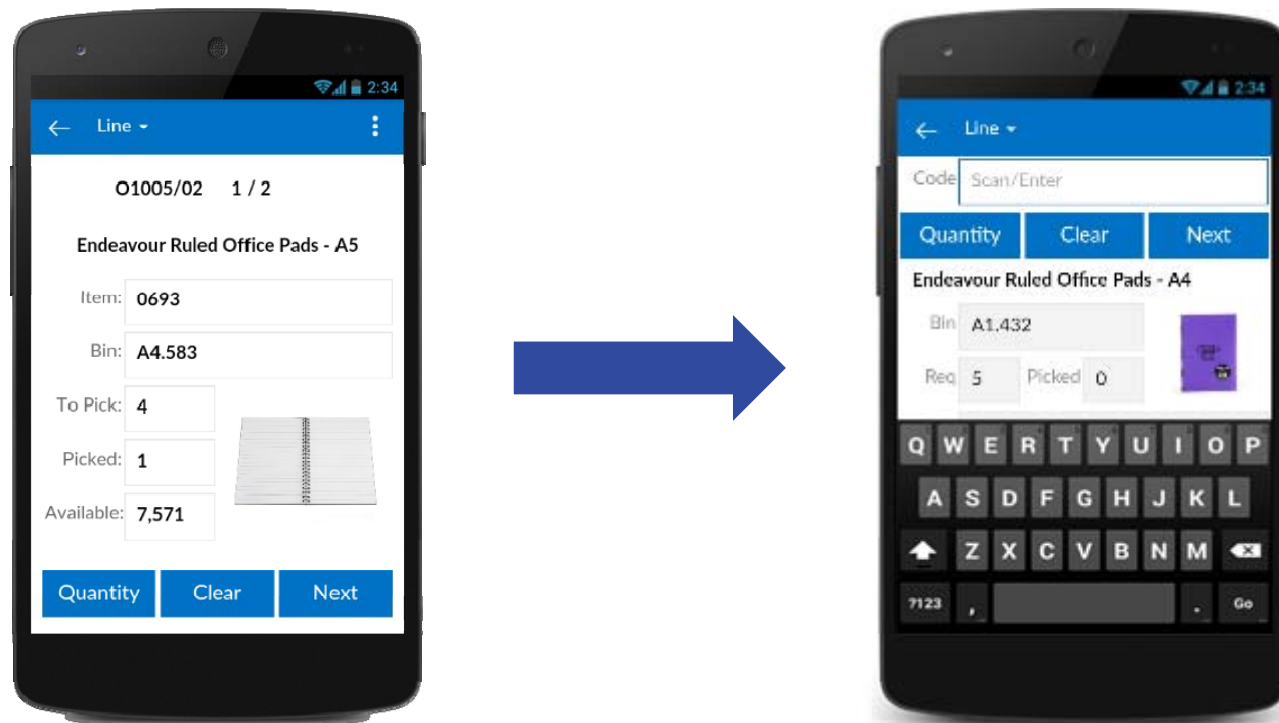
- Take 2

Redesign to take into account the onscreen keyboard
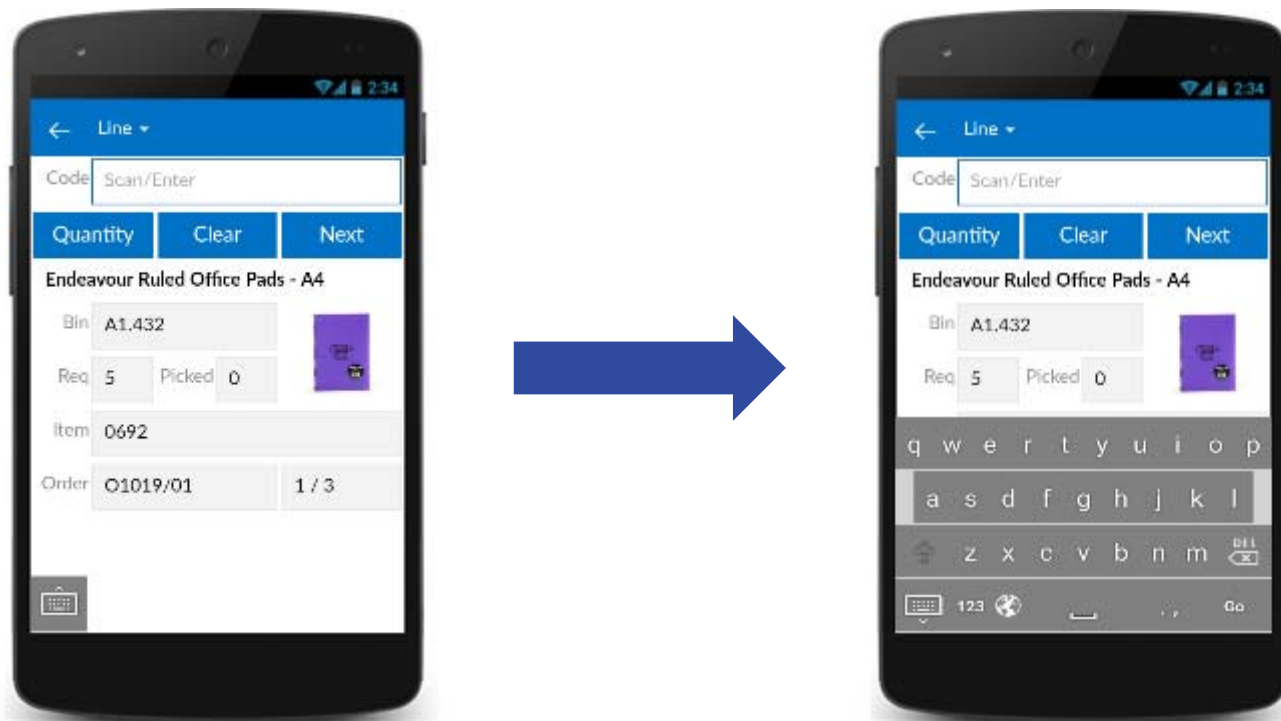
- **<u>Disadvantages</u>**
    - Force the focus back to the entry form
    - Pop-up keyboard hides screen

- **<u>Advantages</u>**
    - Manually enter a stock code/barcode

New Keyboard

- New Android Pop-up Keyboard

Minimised onscreen keyboard gives best of both worlds

Lets Have a Look

- https://b2b.triumph.com.au
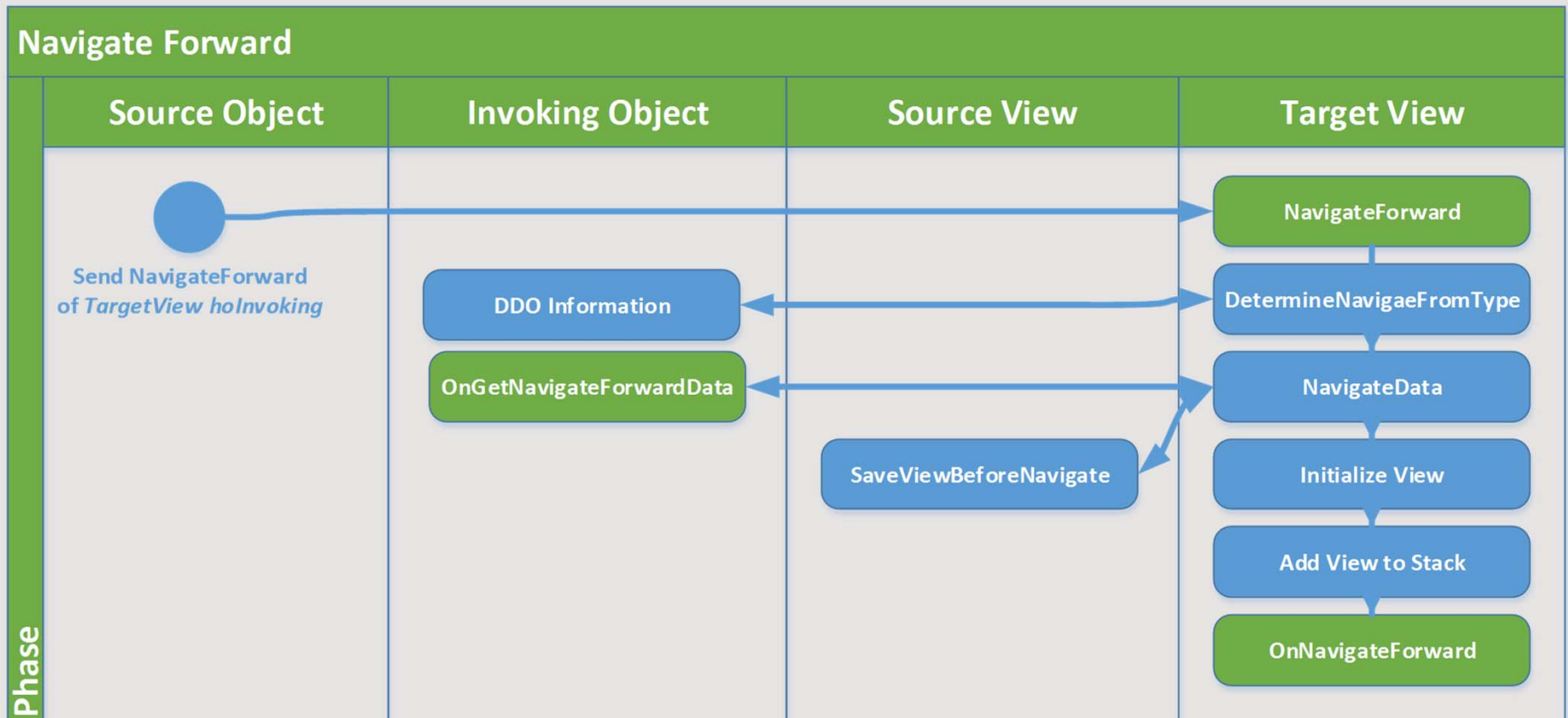
Other Applications

- Stocktake Scanning
- Stock Enquiry
- Stock Update
- Manufacturing Floor Stock Control
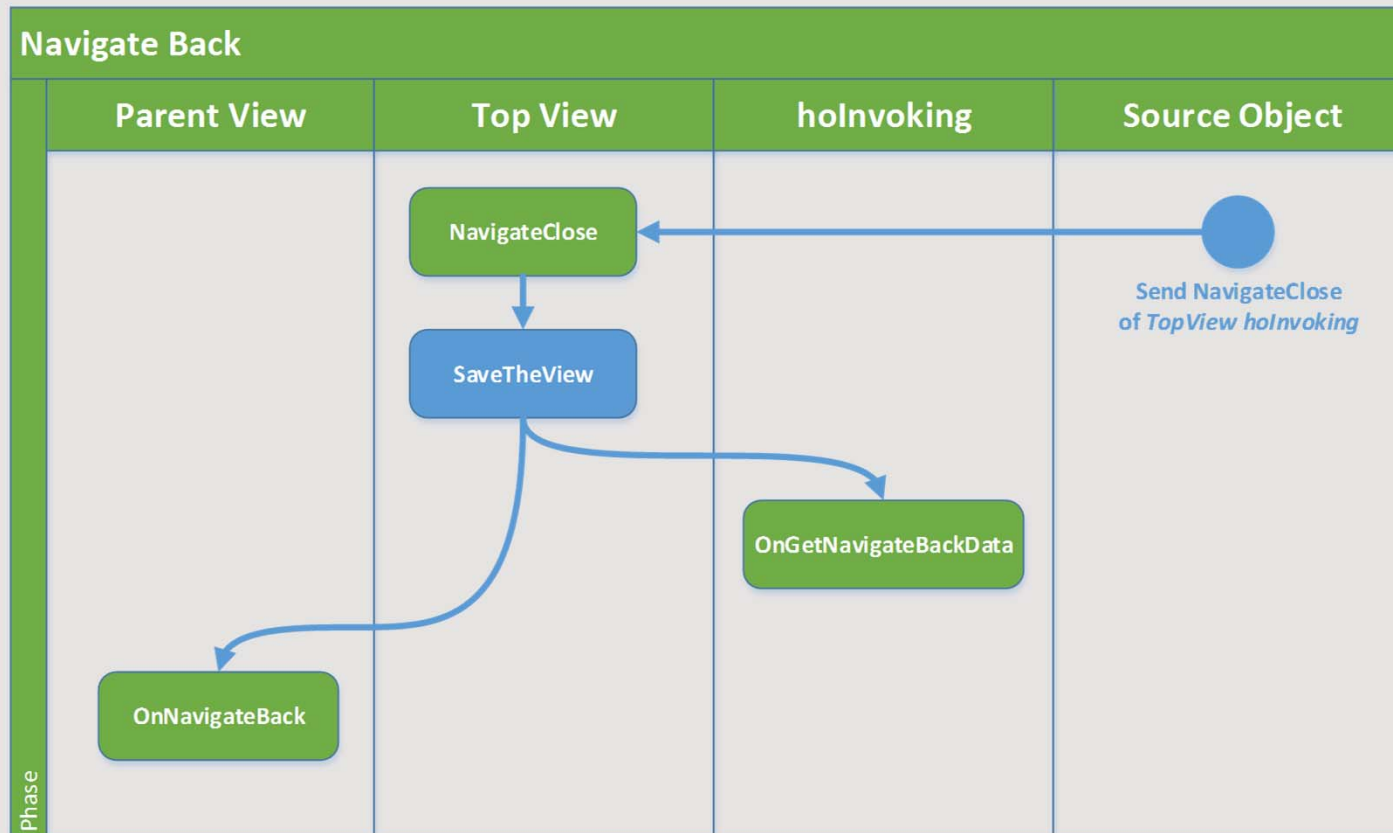- Mobile POS & Signature Capture

Need To Know

Have a good understanding of the drill down model's navigation pathways and the methods and events that are used…

Navigate Forward

Navigate Close

Custom JavaScript classes used

Vibrate
HTML5 is now providing us to play with the vibration on devices. Note the HTML5 Vibrate API supports only the recent versions of Firefox & Chrome.

Audio
Is done by the audio HTML tag, also available in HTML5. The sound is stored on the server and passed to the client as a base64 encoded string, we do it this way so the it's cached and thus plays faster. We play the sound via a JavaScript call. Note you may need to change a flag(s) to allow sounds to play on the mobile, browsers generally disable it by default to save bandwidth.

Product Links

- Honeywell CN51 Scanner

  http://www.honeywellaidc.com/products/computer-devices/handheld/cn51

- Chainway 4050 Scanner

  http://www.chainway.net/Products/Info/20

- Android Pop-up Keyboard

- Sound & Vibrate JavaScript Classes

  https://www.dropbox.com/s/w5lej21zkltpajw/taMobile.zip?dl=0