Healthy Food Basket Project
Web and iPad solutions for nutrition and dietetics

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Healthy Food Basket initiative

- Survey to monitor the cost of a healthy food basket to ensure the availability and affordability of foods required for a healthy diet
- Proposed initiative as a part of the National Food Plan
Development of a Victorian Healthy Food Basket survey instrument

• Developed in 2007 to measure and monitor the cost and affordability of a healthy basket of food for typical Victorian families

• Contains 44 items from five core food groups and non-core foods, and meets the nutritional requirements of four different family types for a fortnight

Research Practice - Main Stages

1. Create shopping List
2. Allocate researchers
3. Researchers go shopping
4. Analysis
5. Reporting
Purpose of the HFB Project

Improve data capture for the Healthy Food Basket Project through the use of mobile devices and custom software, in order to enhance research practice.
Benefits

• Faster and more efficient data capture
• Better quality research data
• Scalable
• Shorter training period
Create HFB shopping list

Shopping list (Word)

Share with RAs

Shopping lists (Paper)

Complete HFB shopping list at each identified store

Community Data (Excel)

Data entry for each identified community & submit

Consolidate spreadsheets, Analyse & produce report

Report (Word)
Proposed Workflow

Fieldworkers complete HFB shopping list at each identified store

Researchers
- Create HFB shopping list
- Create Data Collection Rules
- Analyse data
- Produce reports

Export data for analysis (Excel, SPSS etc)
Produce reports

Mobile Shopping list

Healthy Food Basket

Report (Word)
Manual Data Flow

Create HFB shopping list → Share with RAs → Complete HFB shopping list at each identified store → Data entry for each identified community & submit

Shopping list (Word) → Shopping lists (Paper) → Community Data (Excel) → Report (Word) → Consolidate spreadsheets, Analyse & produce report
Phase 1 Data Flow

Create HFB shopping list

Share with RAs

Complete HFB shopping list at each identified store

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Researcher enters pricing data online

Export data to Excel

Analyse & produce report

Researchers
• Create HFB shopping list
• Create Data Collection Rules

• Create HFB shopping list
• Create Data Collection Rules

Shopping list (Word)

Shopping lists (Paper)

Report (Word)
### HFB Web Application

![HFB Web Application Image]

#### Export to Excel

<table>
<thead>
<tr>
<th>Store Name</th>
<th>Store Status</th>
<th>City</th>
<th>Exported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woolworths</td>
<td>Complete</td>
<td>Berwick</td>
<td>✓</td>
</tr>
<tr>
<td>IGA Express</td>
<td>Complete</td>
<td>Berwick</td>
<td>✓</td>
</tr>
<tr>
<td>Groves</td>
<td>Complete</td>
<td>Berwick</td>
<td>✓</td>
</tr>
<tr>
<td>IGA</td>
<td>Incomplete</td>
<td>Ballarat</td>
<td>✓</td>
</tr>
<tr>
<td>IGA</td>
<td>Incomplete</td>
<td>Ballarat</td>
<td>✓</td>
</tr>
<tr>
<td>IGA</td>
<td>Complete</td>
<td>Balnarring</td>
<td>X</td>
</tr>
<tr>
<td>Bakery</td>
<td>Complete</td>
<td>Bacar</td>
<td>✓</td>
</tr>
<tr>
<td>IGA</td>
<td>Complete</td>
<td>Beechworth</td>
<td>✓</td>
</tr>
<tr>
<td>IGA - Blackburn</td>
<td>Complete</td>
<td>Blackburn</td>
<td>✓</td>
</tr>
<tr>
<td>Woolworths</td>
<td>Complete</td>
<td>Bundores</td>
<td>X</td>
</tr>
<tr>
<td>Groves</td>
<td>Complete</td>
<td>Cambool Downs</td>
<td>✓</td>
</tr>
<tr>
<td>Groves</td>
<td>Complete</td>
<td>Coburg</td>
<td>✓</td>
</tr>
<tr>
<td>Woolworths</td>
<td>Incomplete</td>
<td>Creswick</td>
<td>✓</td>
</tr>
<tr>
<td>IGA</td>
<td>Complete</td>
<td>Creswick</td>
<td>✓</td>
</tr>
<tr>
<td>IGA</td>
<td>Complete</td>
<td>Creswick</td>
<td>✓</td>
</tr>
</tbody>
</table>
Phase 2 Data Flow

Create HFB shopping list

Fieldworkers complete HFB shopping list at each identified store

Researchers
- Create HFB shopping list
- Create Data Collection Rules

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Export data to Excel

Analyse & produce report

Report (Word)

Mobile Shopping list

Shopping list (Word)
HFB iPad Application
Architecture

- Mobile Client
- Web Client
- Application Server
- Database
- Monash Network
## Future directions

### Planning and setup

<table>
<thead>
<tr>
<th>User group 1 (researcher/research assistant)</th>
<th>User group 2 (Field workers)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tasks:</strong></td>
<td><strong>Tasks:</strong></td>
</tr>
<tr>
<td>• Manage HFB shopping list</td>
<td>• Register to become a field worker</td>
</tr>
<tr>
<td>• Manage benchmarking store prices</td>
<td>• Indicate store survey areas</td>
</tr>
<tr>
<td>• Manage data collection rules</td>
<td></td>
</tr>
<tr>
<td>• Select field workers</td>
<td></td>
</tr>
<tr>
<td>• Manage field worker details</td>
<td></td>
</tr>
<tr>
<td>• Allocate field workers to data collection rounds</td>
<td></td>
</tr>
<tr>
<td>• Allocate stores to the field workers</td>
<td></td>
</tr>
</tbody>
</table>

**Proposed solution:** web application

### Analysis and reporting

<table>
<thead>
<tr>
<th>User group 1 (researcher/research assistant)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tasks:</strong></td>
</tr>
<tr>
<td>• Export data to Excel for further analysis</td>
</tr>
<tr>
<td>• Produce reports:</td>
</tr>
<tr>
<td>• Cost per store</td>
</tr>
<tr>
<td>• Cost per all stores per all family groups</td>
</tr>
<tr>
<td>• Produce a map showing the mean cost relationships among areas.</td>
</tr>
</tbody>
</table>

**Proposed solution:** web application
Acknowledgements

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