A qualitative analysis of success factors when adopting new software systems in the retail sector in New Zealand

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Introduction

The retail sector is the largest employer in New Zealand within the services sector.

Conventional Retail business

- Decision making
- Trust - delegation
- Tangibility
- Tacit knowledge

Literature review

Trends in Supply Chain

- Advanced Analytics
- Increased Visibility (Internally and Externally)(Kache and Seuring, 2017)
- Use of SaaS (Software as a Service) (A & A Customs Brokers, 2017)
- Collaborative Planning, Forecasting and Replenishment (CPFR) (Eksoz et al., 2014; Hollmann et al., 2015; Panahifar et al., 2015; Shen and Chan, 2017)

A key element: **Information sharing** enabled by automation and technologies that results in:

Better tracing and tracking leading to Inventory and cost reduction, and optimized capacity utilization (Lotfi et al., 2013)

Literature review

Retail research focused on developing optimization models (Caro et al. 2019):

Customer movement management in the store (Caro and Sadr 2019)
Near-optimal pricing (Chen et al. , 2015; Ferreira et al. 2015; 2017)
Demand forecasting (Huang & Mieghem, 2014 and Mart. et al. , 2017)

Focused on optimisation and calculations and availability of data is considered as a constraint.

Gap: Implementation; how and where you get the data

Adopting new software systems

All software roll-outs bring challenges to the staff who will have to. . .

- Learn new software (screens, processes, troubleshooting)
- Keep working on BAU at usual productivity levels.

Challenges are

- Learning the new system
- Changing old behaviours and unlearning
- Personal and organisational capacity for change / learning.

This case: Adopting SAP in grocery stores

Four retail grocery stores belonging to a large cooperative organisation were implementing SAP to improve procurement and inventory efficiency – driven by their HQ.

Methodology

Qualitative research

Investigating the impact of the SAP roll out on themselves, and on the business.

Data sources: Semi-structured interviews with;

- Store managers,
- Employees using SAP at store,
- Trainers and support staff from the cooperative HQ

Additional sources of information, such as documentation.

We used Nvivo for thematic analysis; Themes were emerged from the text using grounded theory approach

Findings

Three areas emerged from the data.

1. User experience (36%)*

   end users thoughts and feelings about the impact of change on them.

2. Migration Implications (32%)

   technical aspects of the software roll out such as training & customisation.

3. Productivity Impacts (32%)

   how the change impacted on productivity.

(* percentage of each category in responses)

Findings

User Experience (115 imprints)

Key concern was how the large software package could be used by staff in smaller stores as many processes appeared overly complex.

This concern also led to requests for customisation of the screens and processes for ease of use by staff.

Attitude to change also important as those “who had no choice” had a more negative experience than other staff, not expressing that view.

Findings

Migration Implications (104 imprints)

Strongly positive attitude to SAP overall (61%) with concerns expressed in the requests for customisation (4%) and more training (9%).

SAP reputation was the basis for positive expectations of staff.

Findings

Productivity Impacts (105 imprints)

12% responses were positive regarding productivity

ease-of-use / possible manpower reduction

25% unknown /neutral regarding productivity.

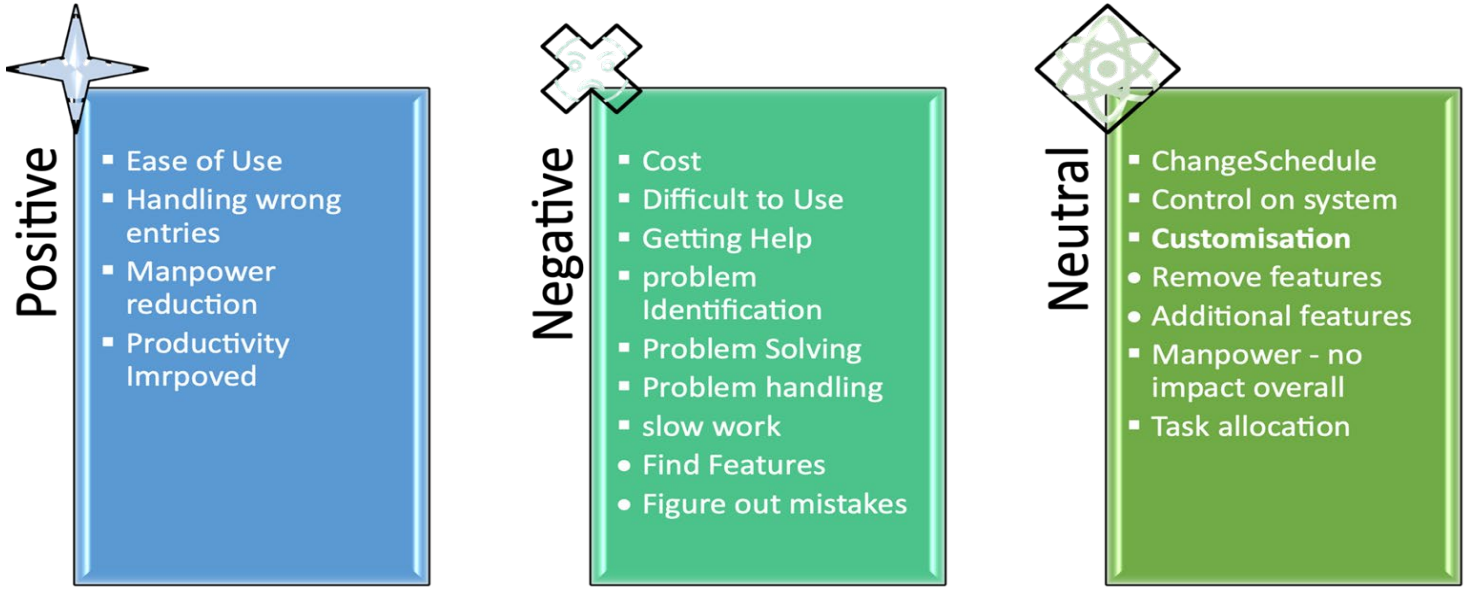
customisation of features / no manpower impact

63% responses were negative regarding productivity.

slow / difficult-to-use / problem definition & solving

Findings

Productivity Impacts (105 imprints)



Findings

Overall impressions

The staff were still working through the practical problems of the roll out and responses indicate this.

The motivation for SAP was from HQ, not from individual stores and this presents a change management conflict.

The user experience, reflected in the requests for training and customisation of the software is central to the success of the rollout.

Discussion

The successful rollout of software, as indicated in by the users:

1. Providing sufficient training to the users – handling problems and temporary fixing

1. A good manual and help to understanding the software features and processes.

1. Importantly, immediate help and customer service.

Future direction

More cases, and further research on the following areas

- Data Analytics for small layman businesses.
- Change management

Questions?