

## **Value Analysis for a Business Review Sprint**

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### **Abstract**

Business Process Reviews can be a powerful tool in the work required to transform a business unit, particularly if the desired outcome includes some degree of outsourcing to a 3rd party. However, many business process reviews can take a considerable of time and resources. The Ontario Ministry of Transportation has successfully used Value Analysis with Functional Performance Specifications to accomplish business transformations in the past, but the process has still been lengthy with many workshop hours. Combining Value Analysis tools with the Sprint concept for a business review can shorten the study time duration and help guarantee results.

This particular application grew out of a need to quickly study the Motor Vehicle Inspection Station (MVIS) program at the Ontario Ministry of Transportation (MTO). The Business Review Sprint was comprised of 7 phases, which incorporate the Value Engineering 6-step job plan.

## **Introduction**

Business Process Reviews can be a powerful tool in the work required to transform a business unit, particularly if the desired outcome includes some degree of outsourcing to a 3rd party. However, many business process reviews can take a considerable amount of time and resources. The Ontario Ministry of Transportation has successfully used Value Analysis with Functional Performance Specifications to accomplish business transformations in the past, but the process has still been lengthy with many workshop hours.

This particular application grew out of a need to quickly study the Motor Vehicle Inspection Station (MVIS) program at the Ontario Ministry of Transportation (MTO). In August 2017, the Carrier Safety and Enforcement Branch (CSEB) received direction from the Deputy Minister to proceed with work required to transform the MVIS program to a 3rd party assisted delivery model. CSEB had a desire to complete the business review and scoping within 6 months so results could be realized within the current fiscal year.

To accomplish the first part of the overall initiative, the business review, CSEB engaged the services of MTO's LEAN and Value Analysis experts, through the newly formed MTO ONE Business Improvement HUB, to design a business review. The team formed a study plan combining various techniques to form a collaborative, seven phase approach dubbed the Business Review Sprint.

## **Background**

The Motor Vehicle Inspection Station (MVIS) program at MTO was established in 1974 and has remained relatively unchanged since its inception. Some progress has been made in improving the program over the last few years, however, weaknesses in program administration, oversight, and enforcement present significant risks for the ministry. A MVIS Modernization Project was launched in 2017 with a mandate to complete a future focused business review and to support the implementation of a modernized program through third-party engagement.

MTO licenses a network of private garages and registers licensed mechanics (licensed from Ontario College of Trade - Licensing can be for either Truck or Light Duty) to inspect motor vehicles to verify the mechanical safety and fitness of all used motor vehicles prior to vehicle registration transfer and plating to another owner. This contributes to the Ministry's core business of road user safety by ensuring vehicles, at the time of registration, meet minimum standards for safe operation on provincial roadways. All commercial vehicles are also required to undergo mandatory periodic inspections (Commercial vehicles require annual inspections; Buses require semi-annual inspections in addition to the annual inspection). MVIS licences are renewed annually: there are no checks / inspections; just a renewal payment is required. There are 12,500 renewals annually and the garages use the renewal opportunity to update information on their file such as new mechanics and re-ordering of stock.

A companion program within MVIS is vehicle branding. Branding is the process of assigning "brand" types (Salvage, Irreparable, Wrecked) that indicate whether a vehicle has been severely damaged in the past - e.g. due to a significant crash or a flood. The brand is then recorded in

the Ministry's Vehicle Registration System. The program ensures that damaged vehicles are identified and safely repaired for re-licensing. Contributes to the Ministry's core business of road user safety by reducing fraud and theft and promotes consumer protection for used vehicles by ensuring vehicles, at the time of rebuilding, meet minimum standards for safe operation on Provincial roadways. The process is mostly driven by Insurance companies or the vehicle owner trying to re-register the vehicle. Inspection stations and technicians performing these types of re-builds are specifically licensed for structural repairs through the MVIS program.

### **Business Review Sprint Overview**

Based on the needs of the project and the time allocated, the team formed a seven phase study plan combining various techniques into the Business Review Sprint.

The sprint was comprised of 7 phases:

1. Document Review
2. Guiding Principles Workshop
3. Stakeholder Interviews
4. Workshop #1
5. Logic Model Workshops
6. Workshop #2
7. Final Report and Executive Presentation



An initial and very important phase was to perform a thorough document review of previous work done on this file. Having complete and accurate information as well as a full history is key in efficiently getting sound results. The next phase was a workshop in which participants identified a set of guiding principles to move the work forward. Key stakeholders from CSEB and Regional Operations were also interviewed individually as part of the third study phase. All three of these initial phases contributed the background information and study principles necessary for the subsequent workshops.

A FAST diagram function model was developed through a series of workshops to document and understand the functions that make up the MVIS program in its entirety. The workshops will be described in more detail later. The function model was also critical in determining which elements of the program would be kept and/or outsourced. Business owners used the function model to identify functions that were good candidates to be outsourced, changed, stopped, or changed with a consideration for outsourcing. Future-state functions that needed to be added were also considered in the FAST diagram. All recommendations were validated and voted on by a large group of participants in a workshop. Finally, the function diagram gave the team insights into the key focus areas for the business review.

The analysis pointed to six areas that would most benefit the most from a deeper dive in the creative portion of the second collaborative workshop: stock, admin/back office, evidence based enforcement, public complaints, sign/signal to public, and technicians. The six areas of focus were assigned to groups in the workshop for the participants to have a focused conversation around how they might look like in the future. Subsequently the results were documented for executive presentation.

## **Business Review Sprint Phase descriptions**

### **1. Document Review:**

To start to process the team reviewed documents prepared by previous project teams to understand and leverage the work done to date, including decisions, and validated this with the business owners in order to avoid duplication of work and ensure study efficiency.

### **2. Guiding Principles Workshop:**

In this first small workshop, business owners and key stakeholders came together to identify guiding principles for the business review process and team and the overall objectives of the program being studied. This step is critical to establish the study focus and avoid wasted effort outside the project scope.

For the MVIS project the following Guiding Principles were agreed to:

- Multiple perspectives.
- End users critical.
- Openness
- Transparency
- Sustainable, flexible and adaptable to changes in the future.
- Risk aware and demonstrates value for money.
- Digital ready.
- Minimally disruptive and improves client experience.
- Able to solve issues identified in the past that are still relevant today.

### **3. Interviews:**

During this phase individual interviews were held with business owners to understand different perspectives on the current state issues, future state visions and expectations for the business review.

#### **MVIS Interview Findings**

- The outcomes of this program cannot be quantified or measured in terms of consumer protection and road safety, despite the fact that that is the mandate. In fact, there are no true outcome measures – only output measures exist and there is no data link between inspections, enforcement and issued safety certificates for passenger vehicles.

- The investigation function is driven exclusively by user complaints. The complaints are often unreliable and rarely lead to charges – when they do lead to charges, there is very little evidence that the result is an improvement in MVIS compliance.
- Data if available is underused, out of date, and generally unreliable.
- Variation in delivery of MVIS functions is the norm across the province. For example, enforcement actions vary in the assessment of complaints, the handling of complaints and the approach/focus of the investigations. They are often driven by personality and not process.
- User perceptions of the MVIS services vary, with many interpreting safety inspections as a vehicle warranty that certifies the *WHOLE* vehicle as safe, including vehicle components not included in MVIS inspections such as transmissions.

#### **4. Workshop #1:**

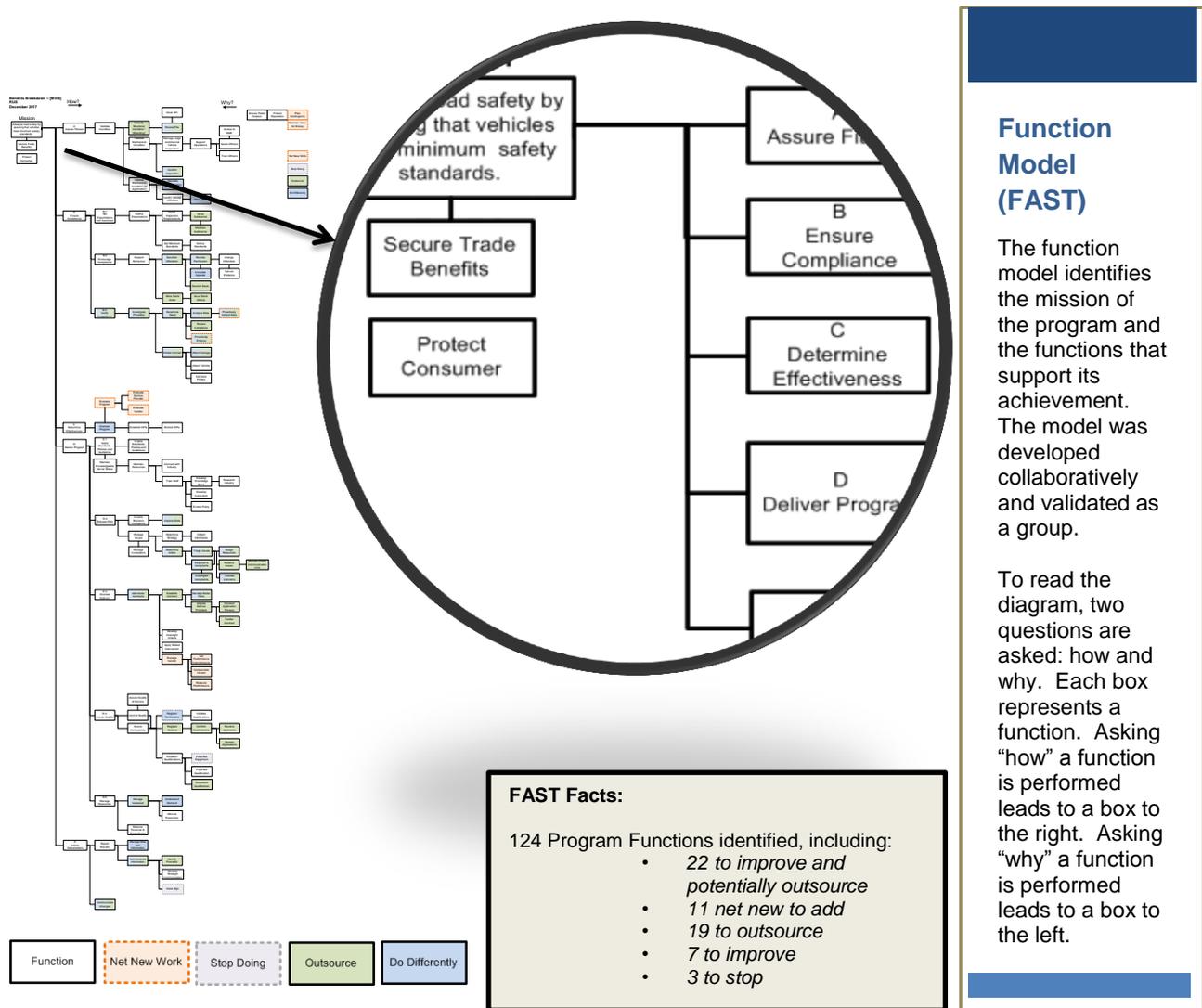
The first cross-functional group workshop was to collaboratively identify and document Motor Vehicle Inspection Station (MVIS) program objectives and current and future functions required in order to meet those objectives. The workshop started with a re-cap of the information learned to date in the first three phases, then moved to function identification and analysis. At the conclusion of the workshop a mission statement was established, most functions elicited and the skeletal structure of the FAST diagram was established.

#### **5. Logic Model Workshops:**

Due to time constraints on large group workshops the FAST diagram could not be completed in the initial workshop. This constraint actually worked to the advantage of the study as it allowed careful refinement of the FAST diagram function model through a series of focused mini-workshops. These mini-workshops were held with a small team of knowledgeable representatives from Carrier Safety and Enforcement Branch and Regional Operations Branch, to develop a full MVIS program function model. The resulting FAST diagram included both present and future states and identified functions that were good candidates to be outsourced, changed or stopped.

#### **6. Workshop #2:**

After the FAST diagram was completed a second cross-functional group workshop was held to collaboratively validate the MVIS program function model, reach consensus on functions that would be good candidates for outsourcing and brainstorm creative ideas on the future state of six key areas of the program.



## 7. Final Report and Executive Presentation:

The team prepared a final report detailing the business review process, findings and recommendations for the next stage of the overall MVIS modernization project. The report and results were then presented to Senior Executive for approval.

### Value Analysis Approach

Value Analysis can be a powerful tool in business process studies, however the value in Value Analysis is “right-sizing” the application. In a Business Review Sprint there is a limited amount of large group time available and that time needs to be optimized.

The FAST diagram function model is critical in this process as it not only captures the present and future- state functions of the program or business unit, but it also can be used to lead the discussion on transformation. In this process the FAST diagram is drafted in a large group workshop then expanded and refined through a series of focused mini-workshops with a small

team of knowledgeable representatives. The refined FAST diagram is then taken back to the large group and verified with any minor changes made and the group in agreement before moving to the next study phase.

During the focused mini-workshops the small team of knowledgeable experts also identified functions that were good candidates to be outsourced, changed or stopped. After the FAST diagram was validated by the large group, the group was asked to come to a consensus on the functions to outsource, change or stop. This process was aided by the use of large group voting through a smart-phone based tool. Allowance was also made for a combination activity of changing and outsourcing the function.

Once the large group reached consensus on actions for each functions efforts could be focused to only fully characterise the functions that would be outsourced and focus creativity on the functions that would be changed. This activity was assigned to the responsible program area for completion outside the workshop setting by subject matter experts.

#### **Large Group Voting**

Participants ranked the recommended action on a scale from 1 to 5, where 1 meant “don’t do it” and 5 meant “must do it”.

The actions they could choose were:

- Change - team recommends changes to the function while keeping it in-house.
- Outsource - team recommends 3rd party delivery of the function.
- Change and potentially outsource - team recommends changes to the function with consideration for 3rd party delivery.
- Stop - team recommends no longer performing this function.

In the case of the MVIS study, analysis pointed to six areas that would most benefit the most from creativity in the collaborative workshops: stock, admin/back office, evidence based enforcement, public complaints, sign/signal to public, and technicians. The six areas of focus were assigned to groups in the workshop for the participants to have a focused conversation around how they might look like in the future.

#### **Conclusion**

By using Value Analysis with the Sprint concept to form a Business Review Sprint a business unit transformation can be accelerated with a reduced use of resources focused on the areas of the most value.

Splitting the FAST diagram work between large group and focused mini-workshops is advantageous in allowing careful refinement of the function model. However, it is critical though that the mini-workshops use carefully selected knowledgeable representatives.

Use of the FAST diagram to reach consensus on the functions to outsource, change or stop can be effectively aided by large group voting through a smart-phone based tool. Further use of the large group consensus on actions allows efforts to be focused to only fully characterise the functions that would be outsourced and focus creativity on the functions that would be changed.