



Customer Perceptions of Value - Presentation of Key Findings -

2018





Executive Summary

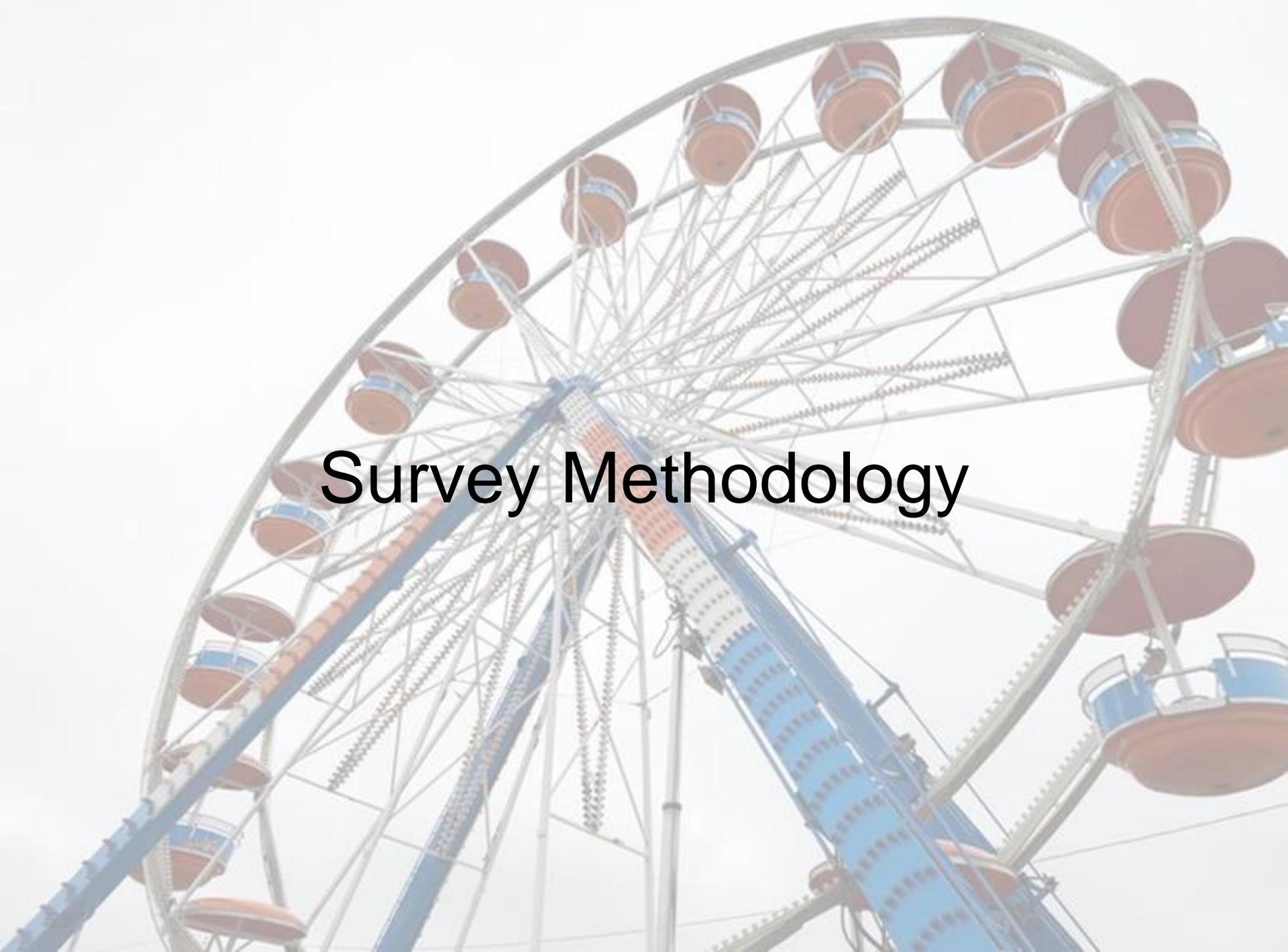
Executive Summary

- Overall PVI is 6.9 out of 10.
 - Highest for Upholstery & Stuffed articles and Operating Engineers (at 7.5)
 - Lowest for Amusement Devices (6.6) and Fuel Safety (6.7)
- Across the survey, scores generally highest for Operating Engineers and Upholstery & Stuffed Articles and lowest for Amusement Devices and Fuel Safety
- Key opportunities:
 - Compliance
 - » Fairness and flexibility
 - » Rewards
 - » Understanding pressures that influence decisions
 - » Education about regulations.
 - Inspections
 - » Consistency
 - Voicing disagreement
 - Staff Interactions
 - » Support to ensure compliance
 - Website
 - » Making it easier for customers to manage their dealings with TSSA.

Executive Summary

Main Focus Per Program Area

Program Area	Main Focus
Amusement Devices	<ul style="list-style-type: none"> • Put more emphasis on rewarding improved compliance, make regulations easier to understand, and emphasize in communications that the cost of compliance is reasonable in light of the risk of non-compliance. • Be more consistent in dealings with individual customers and make sure that inspectors have all the information they require to take over an inspection from another TSSA employee.
Boilers & Pressure Vessels	<ul style="list-style-type: none"> • The Website is more important for these customers compared to most other program areas.
Elevating Devices	<ul style="list-style-type: none"> • Be more consistent in dealings with individual customers over time. • Help customers better understand what they need to do to be compliant.
Fuel Safety	<ul style="list-style-type: none"> • Make customers feel like TSSA puts all types of customers on an even playing field. • Emphasize in communications that the cost of compliance is reasonable in light of the risk of non-compliance • Put more emphasis on rewarding improved compliance.
Operating Engineers	<ul style="list-style-type: none"> • Continue to provide reasonable time for customers to comply
Training & Certification	<ul style="list-style-type: none"> • The Website is more important to these customers compared to most other program areas.
Upholstery & Stuffed Articles	<ul style="list-style-type: none"> • Customers in this service are more likely to agree that they can voice disagreement with TSSA. Perhaps other program areas could emulate USA in how they deal with this topic. • Many customers don't agree that regulations appropriately address safety within their industry. • Make sure that inspectors have all the information they require to take over an inspection from another TSSA employee.

A large Ferris wheel with blue and orange cars is shown against a light sky. The wheel is the central focus, with its intricate metal structure and many passenger cars visible. The cars are blue with orange accents. The text "Survey Methodology" is overlaid in the center of the image.

Survey Methodology

Methodology

FIELD DATES

Pilot	September 19 – October 16, 2017
Main	November 7 – December 18, 2017

COMPLETION RATES

	Sample	Completions	% Undeliverable /NIS	% Response Rate	% Web Completions	Margin of Error (95% Confidence)
Pilot Test	5315	281	11%	6%	100%	+/-5.7%
Full Administration	95266	5607	11%	7%	95%	+/-1.3%
Total	100581	5888	11%	7%	95%	+/-1.2%

Note: Due to fundamental differences between the methodologies employed by the current and previous service providers, the results of this and subsequent surveys are not comparable to the pre-2018 survey results.

Methodology – Data stacking

- Many TSSA customers have involvement with multiple TSSA program areas.
 - It would not be fully accurate to assign a customer to only one program area when they are involved in others as well.
- To ensure all program areas are properly represented, a technique known as “data stacking” was used.
 - When a customer self-identified as being involved in more than one program area (e.g. Fuels and BPV), that customer’s responses were counted separately for each area.
 - Instead of 1 case per respondent, data are now 1 case per program area. Using stacked results creates a larger “sample size.”
 - This treatment of the data is especially important for applying weights to the data (see next slide).

Methodology – Data weights

- To ensure that each program area was represented in its correct proportion, based on the relative number of customers in that area, respondent level data were weighted by program area.
 - Each program area required a different weight so there would be only one record per program area.
- Weights were determined by comparing the program areas from completed surveys (self-reported) to the overall database size for each program area.
 - Total results are weighted; program area results are unweighted.

CALCULATING WEIGHTS			
	% of stacked Completions	% of database	Assigned weight
Amusement Devices	1.53%	0.59%	0.389
Boilers & Pressure Vessels	23.55%	5.39%	0.229
Elevating Devices	14.61%	16.95%	1.160
Fuel Safety	36.33%	54.18%	1.491
Operating Engineers	13.69%	9.65%	0.705
Training & Certification	7.18%	9.06%	1.262
Upholstery & Stuffed Articles	3.11%	4.18%	1.344

Methodology – Perceived Value Index (PVI)

- The survey included a list of 10 questions, each of which could function as a component of the PVI.
 - All questions were asked at the beginning of the survey so ratings would not be biased by answers to other survey questions.
 - The goal was to select the 3 ‘best’ measures from among the 10 candidates:
 - Fewer than 3 measures would risk leaving a large proportion of the concept of value unexplained
 - More than 3 measures could create an index that would be difficult to move over time.
 - Care was taken in selecting the 3 measures for the PVI (see next slide) because the index would need to retain the same composition in future studies to allow tracking of results.

Methodology – Perceived Value Index (PVI)

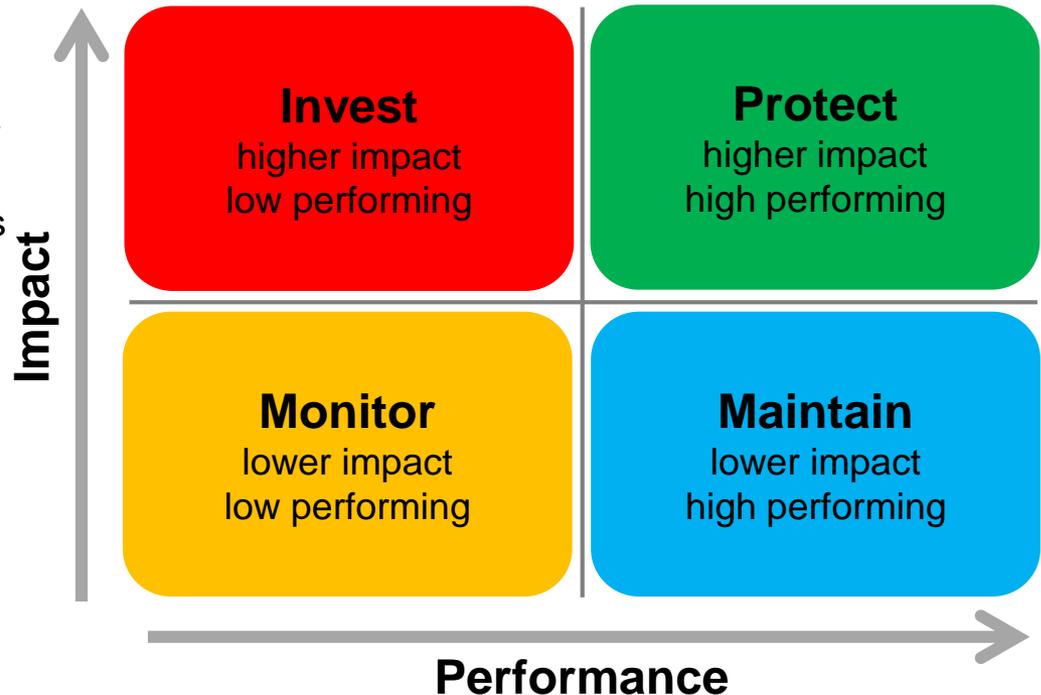
- Each candidate question was evaluated based on the following criteria:
 - Relatively few people answered “Don’t Know” or “Not Applicable”
 - A high proportion of DK/NA suggests that the question does not resonate with all respondents.
 - Measures a unique aspect of the concept of value
 - While all measures are correlated to some degree, a high correlation between two measures suggests multi-collinearity (i.e., the two measures are measuring the same thing).
 - Each measure was also assessed for “face validity;” a more subjective assessment to ensure each measure assessed a unique aspect of value
 - Contributes to a strong PVI model
 - When combined and used in regression analysis, the candidates produce a model that explains a higher percentage of variance than any other combination of candidates
 - Has the potential to show change/improvement over time
 - A very high score in the baseline survey would be difficult to increase in future waves.
- With all criteria in mind, both mathematical testing and professional judgement were used to select the best overall composition for the PVI.
- Model testing resulted in the following 3-measure composite:
 - TSSA has the respect of people in my industry.
 - TSSA provides good value for the fees we pay.
 - Overall, I am satisfied with the service I receive from TSSA.
- The composite is calculated as an average of the scores given for each of the 3 composite PVI questions

Methodology – Opportunity Analysis

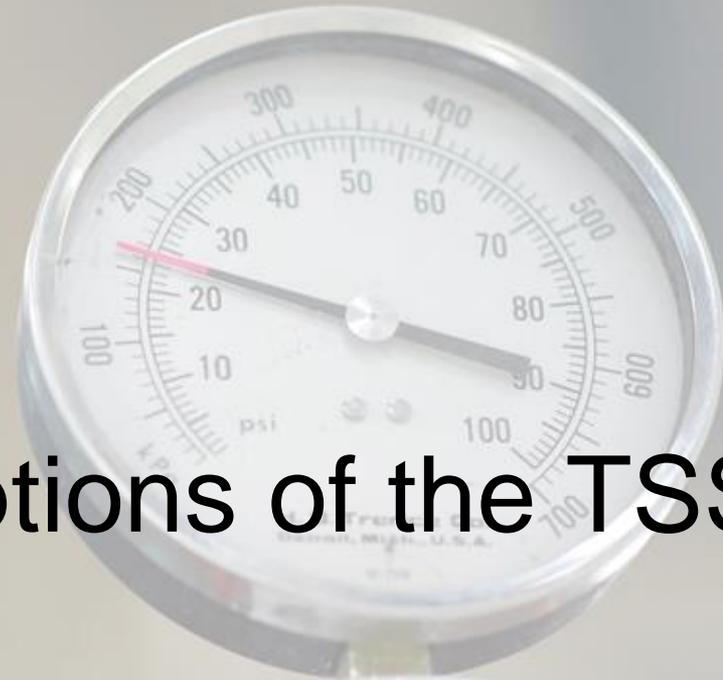
“Key Driver Analysis” was conducted for all service areas explored in the survey. This analysis identifies the relative impact of each service area on the PVI overall (Pearson’s correlation coefficient). By plotting the correlation of each aspect of service against the performance rating for that aspect in a quadrant chart, we can identify the specific actions the TSSA should take in order to improve clients’ perceptions of the value the TSSA provides. The position of a variable (or a composite consisting of multiple variables) on the Y axis indicates its level of impact on the PVI, relative to other variables in the chart (i.e., whether it is considered a “key driver” of the PVI and a priority to target). The position of that variable on the X axis indicates its performance rating relative to other variables in the chart.

A variable located high on the Y axis and low on the X axis has a relatively high impact on the PVI and a relatively low performance rating (top left, red quadrant). *Increased investment* in this area is recommended to increase the PVI over time.

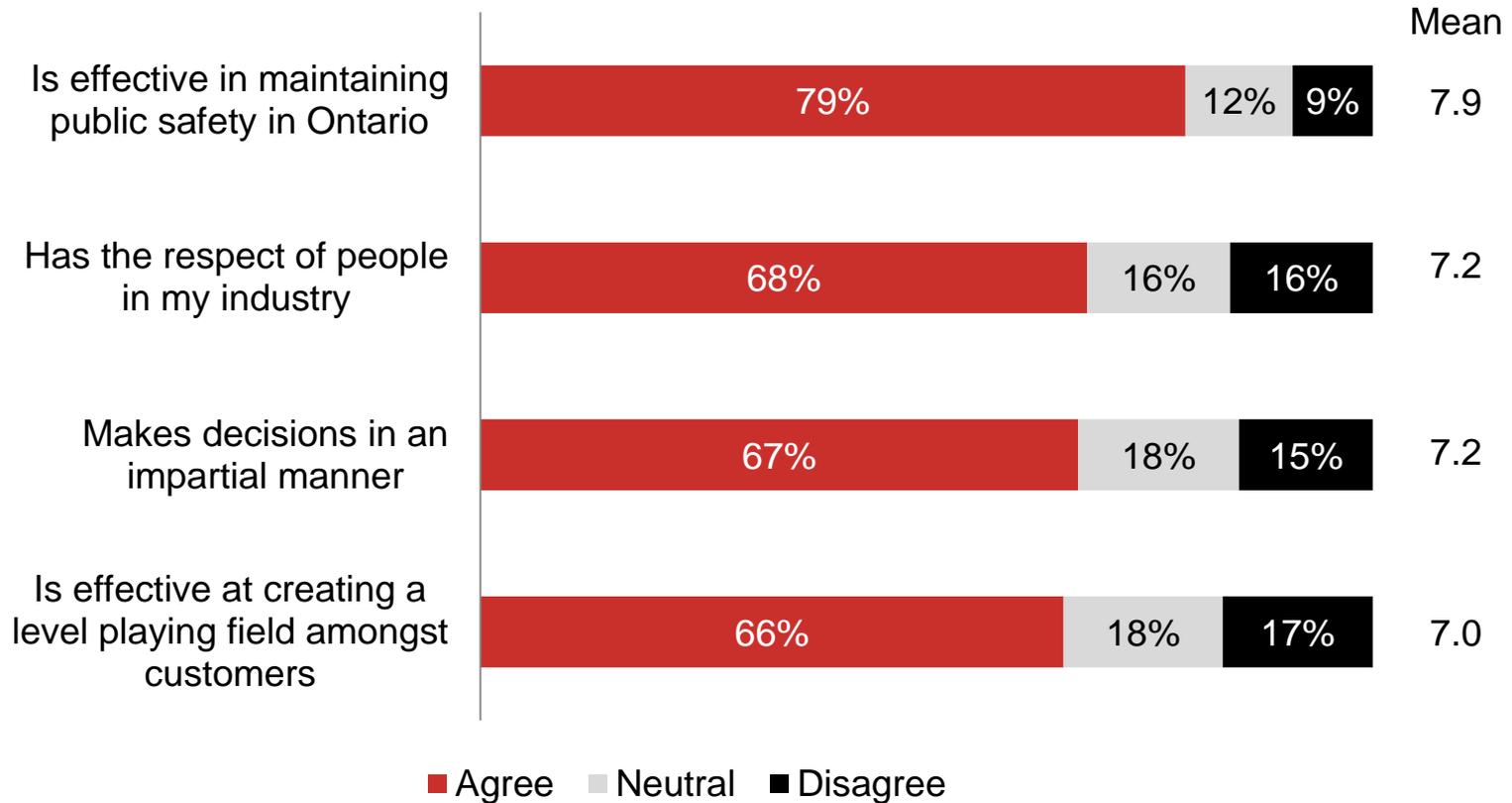
If a variable is located high on both axes, it has a relatively high impact on the PVI and a relatively high performance rating compared to other variables in the chart. *Protecting* existing strengths in this area is recommended.



Overall Perceptions of the TSSA

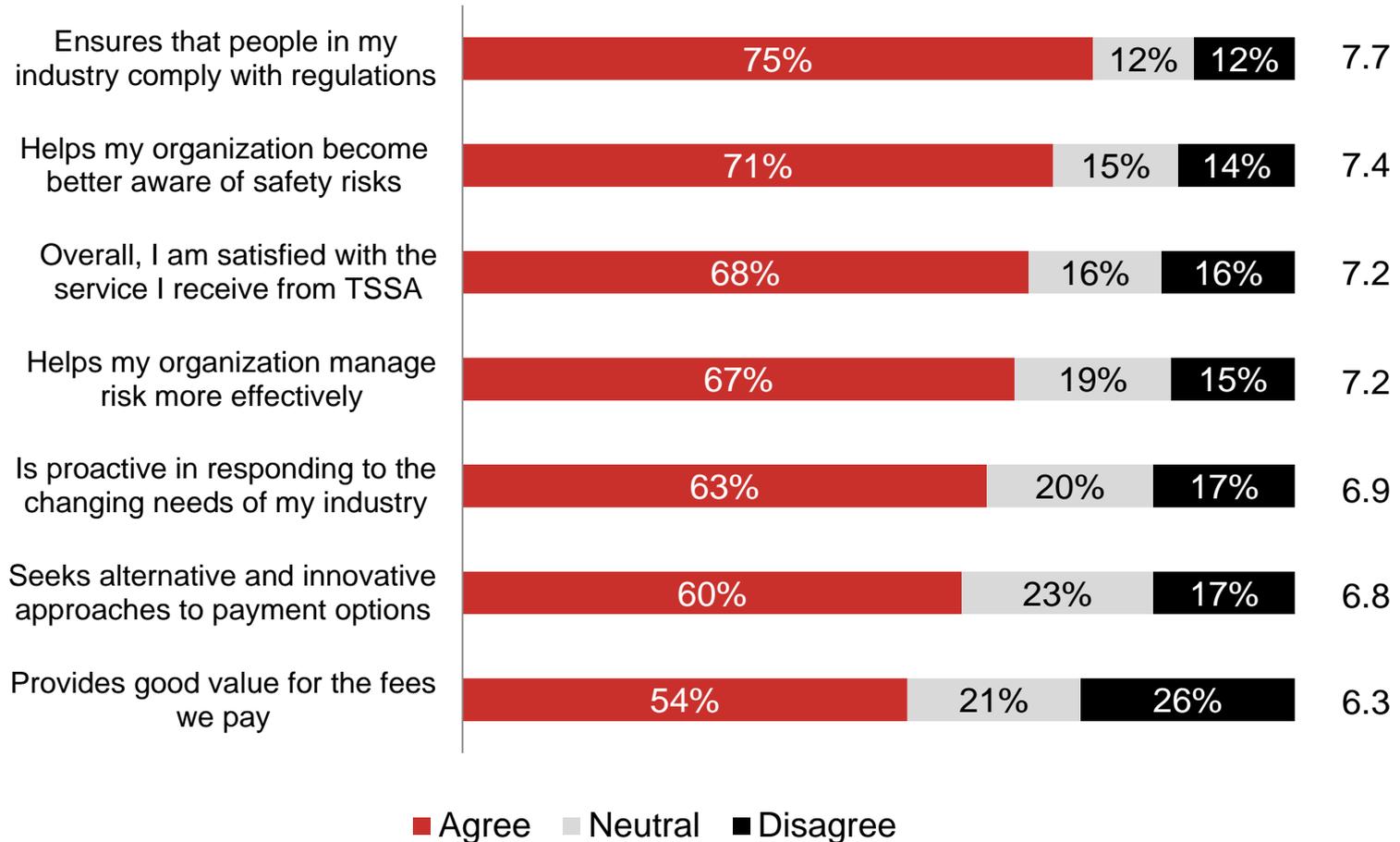


Impressions of TSSA as an Organization



Impressions of Interactions with TSSA

Mean



Perceived Value Index (PVI)



Overall Perceptions of Value

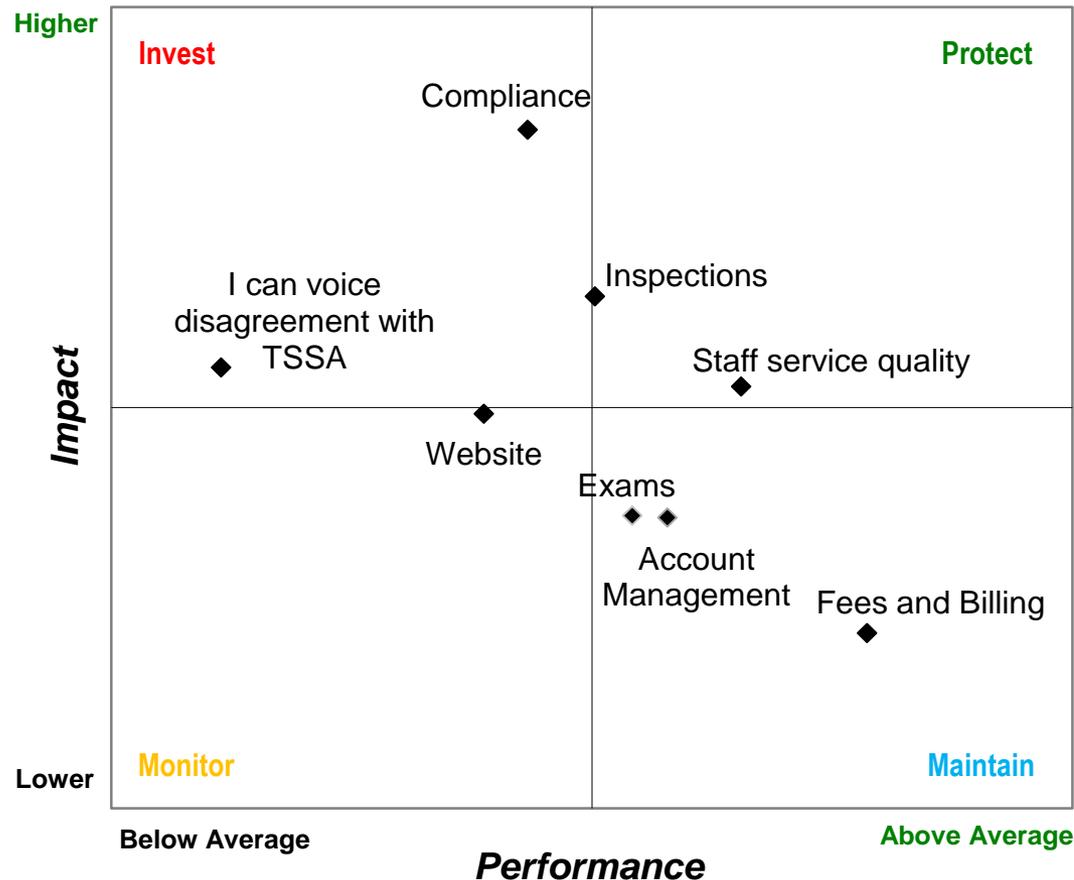
(Composite Index out of 10)

Perceived Value Index (PVI) 6.9

COMPONENTS OF PVI	
	Mean
TSSA has the respect of people in my industry	7.2
TSSA provides good value for the fees we pay	6.3
Overall, I am satisfied with the service I receive from TSSA	7.2

PVI BY program AREA	
	PVI
Upholstery & Stuffed Articles	7.5
Operating Engineers	7.5
Elevating Devices	7.1
Training & Certification	7.1
Boilers & Pressure Vessels	7.0
Fuel Safety	6.7
Amusement Devices	6.6

Opportunity Analysis: Overall Perceptions of Value



Opportunity Analysis: Overall Perceptions of Value By Program Area

⊙ Area to invest ✓ Area to protect
MO Area to monitor MA Area to maintain

OPPORTUNITIES FOR OVERALL VALUE PERCEPTIONS BY PROGRAM AREA							
	Amusement Devices	Boilers & Pressure Vessels	Elevating Devices	Fuel Safety	Operating Engineers	Training & Certification	Upholstery & Stuffed Articles
I can voice disagreement with TSSA	MO	⊙	⊙	⊙	MO	⊙	⊙
Staff service quality	✓	✓	✓	✓	MA	✓	✓
Compliance*	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Inspections*	✓	✓	✓	✓	✓	⊙	MO
Website*	MO	⊙	MO	MO	MO	⊙	MO
Fees and Billing*	MA	MA	MA	MA	MA	MA	MA
Exams*	MA	MA	MA	MA	MO	MA	MO
Account Management*	MO	MA	MA	MA	MA	MA	⊙

A discrepancy between the colour of the attribute and the symbol for a program type suggests that the program type differs from the overall trend (e.g. Inspections and Training & Certification; Inspections pertaining to Training and Certification is an area to narrow in on because it deviates from the overall trend of high relative performance).

A close-up photograph of a white plastic component, possibly a part of a mechanical assembly. The component has a textured surface and a small circular hole. The lighting is soft, creating subtle shadows and highlights on the plastic's surface. The background is a plain, light-colored surface.

Detailed Findings

Detailed Findings

Overall Ratings

- Before asking about more specific service areas, the survey began with questions designed to assess overall impressions of the TSSA. Following analysis of the survey results, three of these questions were selected as the components of the PVI. These questions were: TSSA has the respect of people in my industry , TSSA provides good value for the fees we pay and Overall, I am satisfied with the service I receive from TSSA.
- The PVI, which represents the mean score for these three questions, is 6.9 out of 10.
- PVI was also calculated by specific program area. Upholstery & Stuffed articles (henceforth referred to as USA) and Operating Engineers generated the highest PVI scores (7.5), while Amusement Devices and Fuel Safety had the lowest PVI (6.6 and 6.7, respectively). In other words, Amusement Devices and Fuel Safety clients have lower perceptions of the value the TSSA provides compared to other program areas.

All non-percentage scores reported are out of 10

Detailed Findings

Summary of Key Drivers

Overall key drivers of the TSSA's Perceived Value:

- 1) Compliance **(invest)**
- 2) Inspections **(protect)**
- 3) Voicing disagreement with TSSA **(invest)**
- 4) Staff service quality **(protect)**

Summarized on the following slides are the action items within each of these priority areas.

Detailed Findings

Main Area in which to Invest: Compliance

- The area of **Compliance** has the most impact on the PVI and is an area to **invest** in. When analyzing Compliance by individual TSSA program area, all seven require investment in this area.
- To increase satisfaction with Compliance, the key action item is the *fairness and flexibility in the way that TSSA enforces compliance*. This is an area in which to **invest**, as its overall impact is relatively high compared to other areas of Compliance while its performance ratings are relatively low.
 - Fuel Safety scored the lowest in this area (7.0) while Upholstery & Stuffed Articles scored the highest (7.7).
- The attribute *TSSA rewards continued and improved compliance* is, by far, the lowest scored attribute pertaining to Compliance (6.6). This is consistent across all seven program areas, especially Amusement Devices (6.0). This is another area in which to **invest** as its relative impact on the PVI also scored high.
- *The cost of compliance is reasonable in the light of the risk of non-compliance* is an area to **protect**; however its impact and relative performance varies by program area.
 - Area to **protect** for BPV and Elevating Devices.
 - Area to **invest** in for Fuel Safety and USA.

All scores reported are out of 10

Detailed Findings

Main Area in which to Invest: Compliance

- Two additional areas in which to **invest** within Compliance are:
 - TSSA understanding that economic and other market pressures might influence the decisions made by you or others in your industry (6.7)*
 - This attribute scored lowest for Amusement Devices and Fuel Safety, and highest for Operating Engineers.
 - TSSA provides sufficient education about regulations to people in my industry (6.9).*
 - This attribute scored lowest for Amusement Devices and highest for Operating Engineers and USA.
- *Regulations appropriately address safety within their industry* is an aspect Compliance in which the TSSA performing well. This is an area to **protect** for all program areas with the exception of USA where it has been identified as an area in which to **invest**.
- *Providing the support customers need in understanding the regulations and how to comply* represents an area to **protect** for the TSSA.
- It is clear that people understand how to *comply with regulations* (score of 8.3). This aspect of Compliance scores higher than others; however, it also has the lowest overall impact, making it an area to maintain moving forward. In other words, the TSSA should maintain current levels of investment but no additional investment is recommended.

All scores reported are out of 10

Detailed Findings

Area to Protect: Inspections

- **Inspections** is the second strongest driver of the PVI and is an area to **protect** for all program areas except Training & Certification where it is an area in which to **invest** and USA where it is an area to monitor. However, it should be noted that very few clients within the USA program area deal with Inspectors.
- For Inspections, the key area to **protect** is the *consistency of TSSA dealings with clients*. It is the only key driver of the perceived value of Inspections and is performing relatively well.
- TSSA also performs well *explaining violations*; this is not a key driver but is an area to maintain.
- Whether inspectors *have all the required information they need if they are taking over a case from a different inspector* received a lower performance rating compared to other aspects of Inspections, and is an area to monitor. However, for two program areas, it is an area in which to **invest**: Amusement Devices and USA.

All scores reported are out of 10

Detailed Findings

Area to Invest: Voicing Disagreement

- Approximately half of the survey respondents agreed that they could voice disagreement with the TSSA without worrying about negative consequences. This represents the third strongest driver of perceived value and is an area in which to **invest**.
- Performance ratings for this attribute varied by program area, ranging from 5.7 for Amusement Devices to 7.6 for USA.

All scores reported are out of 10

Detailed Findings

Area to Protect: Quality of Staff Services

- The fourth driver of value is **Staff Service Quality**, which generally scored well and is an area to **protect**.
- The strongest driver of satisfaction with Staff interactions is *consistency of dealings*. This is an area to **protect** overall but for Inspectors, it is an area in which to **invest**. The TSSA should also strive to improve *consistency* when dealing with clients in the Amusement and Elevating Devices program areas.
- Results show that TSSA staff are performing exceptionally well at being *courteous and professional* (mean score of 8.5). This is an important driver to **protect** moving forward.
- The TSSA will need to *provide better support to ensure compliance*. This is the area in which to **invest** in order to improve overall satisfaction with staff interactions.
- When it comes to *helping customers understand what they need to do to be compliant*, overall performance is relatively strong and is an area to **protect**. Clients who have experience with Inspectors (the majority of the sample) gave relatively high scores, making this an area to **protect**. However, there is room for improvement for other staff types, including Call Centre staff, Operating Engineers and LRC personnel. For these staff types, this is an area in which to **invest**.

All scores reported are out of 10

Detailed Findings

Areas to Monitor and Maintain

- Perceptions about the **TSSA Website** are not as impactful on the PVI compared to other areas, but results indicate that there is room for improvement (area to monitor).
- To improve Website ratings, TSSA could better optimize the Website to make it *easier for customers to manage their dealings with TSSA*. This is the main driver of the Website's contribution to the PVI and an area in which to **invest**. *Navigation* could also be made easier (7.0). The Website performs well at *providing customers with the information that they need and making it easy for them to access applications and forms*.
- The following TSSA service areas received relatively strong performance ratings but are not key drivers of the PVI. These are areas to maintain:
 - **Exams** → Focus on *scheduling* and making it *easier for customers to check their status*.
 - **Account Management** → Continue to *provide account info in a timely manner and make it easier for customers to access account info and to manage their accounts*.
 - **Fees and Billing** → Focus on *processing fees more quickly* and provide *clearer bill statements*, particularly for Amusement Devices and Fuel Safety.

All scores reported are out of 10