

# CAUSALITY OF SATISFACTION DRIVERS

Causal models made their first appearance in the GRIT survey this year, and debuted with 33% usage among Buyers and 57% interest overall

In 2018, we reported satisfaction drivers based on simple regression analysis. For this wave, we apply causal modeling to the satisfaction data to analyze drivers. For the past few months, we have been testing out different causal models on data from prior waves, and now we share our findings based on the current data. Causal models made their first appearance in the GRIT survey this year, and debuted with 33% usage among Buyers and 57% interest overall, so it seems appropriate to apply it in this report.

We tested different causal models of satisfaction across buyers, and obtained the best result when we excluded aspects which did not apply universally to across supplier types. More than 10% of Buyers said they did not expect the following from their suppliers:

- Interacting with senior management (24%)
- Recommending business actions from research (12%)
- Visualizing data (12%)
- Implementing the research plan (11%)
- Analyzing data (10%)

These have been excluded because the missing responses muddy the results, and working out ways to accommodate them is beyond the scope of our immediate objectives. Chart 7 graphically represents the relationships between Buyers'

overall satisfaction with suppliers and the different strategic and tactical aspects measured. In this representation, graphic elements have the following meanings:

- Solid blue circles represent the different service aspects
- Arrows represent causal relationships, and:
  - Direction of an arrowhead indicates direction of causality
  - Thickness of an arrow represents relative magnitude of strength of the relationship
  - Absence of an arrow indicates lack of a significant direct relationship
- Target symbol represents the object of key factor identification
- Large solid orange circles represent key factors driving the target

The first two visuals that should stand out from this representation are 1) the absence of large orange circles and 2) all arrows point away from overall satisfaction. These two points imply that the level of overall satisfaction is driving satisfaction with the individual aspects. Considering that most buyers have "go to" suppliers that they use regularly, it may be that their overall experience with the Supplier over time drives their expectation of how each specific aspect will be delivered.

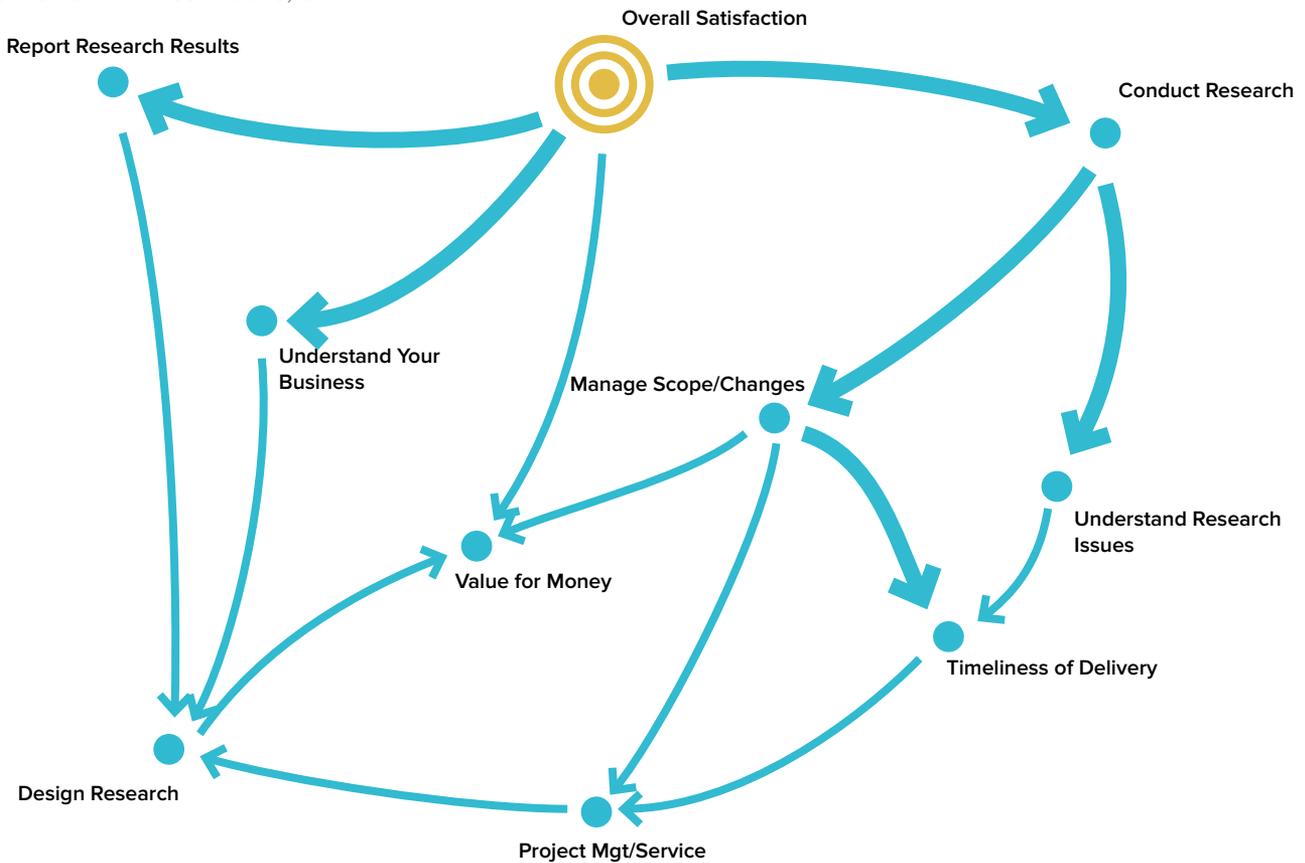
Because supplier satisfaction is asked regarding the Buyers' aggregate supplier experience, we cannot test this hypothesis by looking at specific relationships, and parsing the Buyer data further creates sample size issues and poor model fits. However, we can report that when we split the data by types of suppliers used more or less frequently, some models show the service aspects driving overall satisfaction.

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For example, a model based on those who use full/field service providers regularly shows overall satisfaction driving the perception of satisfaction with the beginning and ending of a project: designing the research and reporting on it. Running the same model on those who use full/field service providers occasionally, on the other hand, shows

that satisfaction with conducting the research drives overall satisfaction. These models are not significant enough to present and do not focus on satisfaction with full/field service providers, but they also do not refute the hypothesis that regular use of suppliers reverses the expected causality between service aspects and overall satisfaction.

SATISFACTION WITH SUPPLIERS, CHART 7



The major drivers (thickest arrows) in the buyer model are shown in Table 5. Put differently, when Buyers reach a certain level of comfort with a supplier, they expect the Supplier to excel at understanding their business, reporting research results, and conducting the research.

CAUSALITY OF SATISFACTION DRIVERS, TABLE 5

Satisfaction with:	Drives satisfaction with:	With this strength:
Overall	Understanding your business	0.591
	Reporting research results	0.567
	Conducting research	0.521
Conducting research	Managing scope/changes	0.579
	Understanding research issues	0.543
Managing scope/changes	Timeliness of delivery	0.41

When Buyers reach a certain level of comfort with a Supplier, they expect the Supplier to excel at understanding their business, reporting research results, and conducting the research



From this graphic, we can also see key pathways where satisfaction is linked through multiple aspects. For example, once overall satisfaction influences the expectation of understanding the business, that aspect in turn influences the expectation of the research design which, in turn, impacts the expectation of value for the money. The expectation of value for the money is also directly influenced by managing scope and changes to the project, which often has cost implications, as well as by overall satisfaction, which may represent the “value” side of value for the money.

The causal analysis on the Supplier side has some interesting findings as well. As we review them, keep in mind that Suppliers were asked how well their segment meets the needs of clients and that aggregate supplier analysis includes strong representation from four distinct types: full/field service, strategic consultants, data and analytics

providers, and technology providers. We have applied the Buyer model specifications to suppliers as a group, meaning that we have excluded the same service aspects which Buyers indicated did not apply universally.

While it is beyond our scope to detail these models in this report, we did look at the models by supplier type. Our top-level finding is that the “Buyer model” fits full/field service agencies and, surprisingly, technology providers the best, strategic consultancies nearly as well, and data and analytics providers the least. (The lower fit for data and analytics providers may be driven by the exclusion of data analysis from the model based on the Buyer ratings. We suspect that if we continue to model within supplier types, we could find a set of service aspects that are more customized to each type.)

The main relationships identified in the analyses by supplier type are detailed in Table 6.

CAUSALITY OF SATISFACTION DRIVERS, TABLE 6

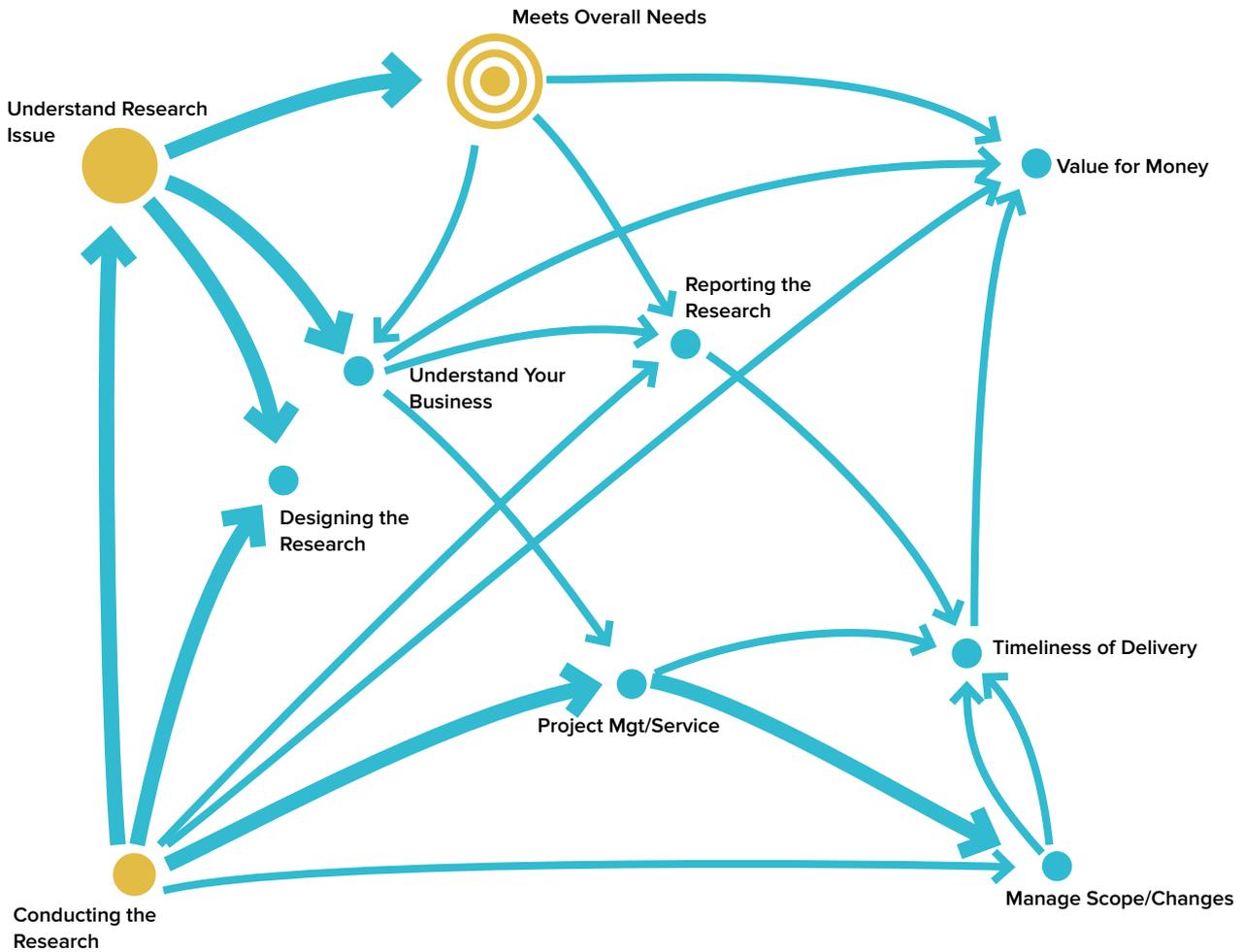
Supplier Type	Meeting needs:	Enables them to meet needs regarding:	With this strength:
Full/field service agencies	<b>Understanding research issues</b>	<b>Designing the research</b>	0.543
		Overall	0.461
		Understanding your business	0.41
	Designing the research	Conducting the research	0.408
	Project management/service	Managing scope/changes	0.446
Strategic consultancies	Designing the research	Timelines of delivery	0.41
		Reporting on the research	0.463
	Conducting the research	Value for the money	0.462
		Designing the research	0.443
	<b>Understanding research issues</b>	<b>Understanding your business</b>	0.6
Project management/service	Conducting the research	0.426	
Data & analytics providers	<b>Reporting on the research</b>	Managing scope/changes	0.417
		<b>Overall</b>	0.372
Technology providers	Conducting the research	Reporting on the research	0.667
	<b>Timeliness of delivery</b>	<b>Value for the money</b>	0.744
		Understanding research issues	0.511
	Understanding research issues	Designing the research	0.525

Strongest relationship for each supplier type in bold

Understanding that there is diversity across Supplier types, we can look at the aggregate model with some enhanced perspective (Chart 8). Despite the diversity

we know to exist, the statistics used to evaluate the models are similar to those for the individual supplier type models.

SATISFACTION WITH SUPPLIERS, CHART 8



Our top-level finding is that the "Buyer model" fit full/field service agencies and, surprisingly, technology providers the best, strategic consultancies nearly as well, and data and analytics providers the least



Across Supplier types, understanding research issues seems to be the key to meeting the overall needs



The main relationships between aspects are detailed in Table 7. Across Supplier types, understanding research issues seems to be the key to meeting the overall needs. This relationship was strongest among full/field service agencies, and they are the largest group in the sample; the other two aspects driven by understanding research issues also show up in aggregate.

Conducting the research drives expectations of other aspects, and this most reflects the findings from strategic consultancies, although imperfectly. The strong relationship between project management/service and managing scope/changes shows up here as well as among full/field service agencies and strategic consultancies.

SATISFACTION WITH SUPPLIERS, TABLE 7

Meeting needs:	Enables them to meet needs regarding:	With this strength:
Understanding research issues	Overall needs	0.464
	Understanding your business	0.46
	Designing the research	0.353
Conducting research	Understanding research issues	0.451
	Designing the research	0.394
	Project management/service	0.341
Project management/service	Managing scope/changes	0.384

## THE BIG PICTURE

The Buyer causal model suggests that the pre-existing relationships drive expectations of performance on service aspects, the most important of which are understanding the client's business, conducting the research, and reporting the research. The key takeaway may be that the ideal client relationship is one in which the Buyer doesn't have to micromanage projects because they know the Supplier understands their business needs, and they trust the Supplier to competently execute the work and report meaningful results. It may also be that clients differ regarding how much they want to design the research versus having the supplier do it, and so that does not show up as a driver.

Suppliers seem to agree that they need to understand the research issue, execute the work well, and provide great service. Beyond that, the types of service are diverse, and several aspects do not emerge as strong drivers in aggregate. For example, reporting on the research shows up among strategic consultancies, data and analytics providers, and technology providers, but not among full/field service providers. The first three types have distinct specialty areas that a client likely lacks, so the client may be more dependent on them for a clear accounting of the project and its findings. Regarding full/field service agencies, some Buyers may value their reporting while others may prefer to report on the results themselves. What these agencies have in common is Buyers' strong expectation that they can design and execute the work independently enough that the Buyer does not have to think about it until the data comes back.

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# THE CAUSALITY OF SATISFACTION

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Until recently, the method of automated causal discovery, rather than traditional regression modeling has been met with wide skepticism due to the combinatorial explosion of potential patterns and the inherent computational challenges to get optimal models.

The recent Buyer Satisfaction study completed as part of this edition of the GRIT Report is a prime example. They identified the best-fit model from an overwhelming number of potential patterns. With this new breakthrough algorithm, researchers and analysts can now test various sets of factors through automation, rather than spending time validating models until finding the correct combinations of factors. From this, the data fit metrics will provide researchers confidence that the output is correct.

If we look at the study, we can see how mapping the key factors between suppliers and buyers can tell the truth and inspire Suppliers for a better understanding of their Buyers, and result in an improvement in factors that drive Buyers satisfaction.

Additionally, this study highlights the speed and accuracy that automated causal modeling will provide. Given the multiple graphs that this study produced in minutes, researchers and analysts have the ability to visualize multiple graphs with multiple sets of samples and factors. This is evidenced when looking at both Buyer and Supplier characteristics and their causal relationships.

Beyond the study, discovered graphs allow analysts to compare key factors towards different target factors. The following chart shows a comparison of total causal effect to “Value for Money” in Buyer satisfaction between recognition of Buyer and Supplier.

With this new technique, researchers will drastically improve efficiency and accuracy for the purposes of market research in a fraction of the time as other methods. Most importantly, this breakthrough is far less complicated and can give researchers more time to compare brands, products and customer segments, or to assess the best decision forward and with an eye toward ROI.

THE COMPARISON OF TOTAL CAUSAL EFFECT TO “VALUE FOR MONEY” IN BUYER SATISFACTION BETWEEN RECOGNITION OF BUYERS AND SUPPLIERS

