

IMA Educational Case Journal (IECJ®) Call for Data Sets

The <u>IMA Educational Case Journal</u>® (*IECJ*) publishes cases covering a wide range of topics reflecting the diverse skill set required of management accountants. These cases take learning beyond mere "number-crunching" exercises to require interpretation of data in a decision-making context—making them ideal learning tools for graduate and undergraduate students. These cases are authored by academics as well as practitioners and are used extensively in undergraduate and graduate accounting programs in the U.S. and internationally to supplement textbook knowledge with real or realistic cases about important management accounting concepts. With more than 160 cases available, *IECJ* is a well-regarded teaching resource among academics who use the case-based method to train students with current, practical application of management accounting concepts and skills.

Why a call for data sets? To keep *IECJ* current, we have issued a first-time call for cases relating to data analytics/data visualization (DA/DV) including data sets to analyze. The call for cases is intended to address the very limited number of DA/DV teaching cases that have been published in *IECJ* or elsewhere, however, the primary challenge to develop DA/DV teaching cases is finding good data. Having a database library would remove a huge hurdle for faculty and could result in the development of many excellent cases for use in teaching management accounting topics, including DA/DV. Researchers may also benefit from having source data for research studies that could also potentially benefit the companies providing the data. Therefore, we are asking our volunteer members to consider providing data that, if properly organized, delivered, and disguised, would significantly help instructors better prepare the management accountants of tomorrow.

Example. A good example is the *IECJ* case, "Huskie Motor Corporation: Visualizing the Present and Predicting the Future" (HMC). HMC was by far the most downloaded case in 2020 (144 vs. 89 for the second-most). The HMC case has a large data set with different versions (clean and dirty), and the focus is on DA/DV using Tableau to help make product-related decisions and communicate results. This case is the product of a partnership between the case authors and professionals from a Big Four advisory practice. They worked together to develop a realistic background, data set, task, and deliverables that accounting professionals typically encounter on client engagements. Although the case is not from an actual client, it offers a realistic task and set of data for a global corporation.

Request: We are asking for "raw" data for use in developing teaching cases. This data can be structured or unstructured, newer or older data, and, if desired, cleaned and disguised so there are no privacy or confidentiality issues. Ideally, it would help to include some real business questions, challenges, and/or risk management issues that can potentially be supported by analysis of the data. The data set would be securely housed by IMA® (Institute of Management Accountants) and will only be available to IMA academic members and other IMA members with permission.

Deadline: None. We welcome new data sets anytime.

What type of data? The data could be from any kind of company or organization with the potential to be analyzed and used for real-world decision-making involving management accounting in some way.



Ideally, the organization/individual providing the data would describe business decisions they face (or faced) and that can be supported by analysis of the data set. (See example data fields from the Huskie Motor Corporation case on the next page.) The more realistic the data, the better; it may include errors and inconsistent data that would need to be identified and cleaned. **Those providing data will be able to review and approve any cases developed from that data.**

Connecting case authors with data: The call for DA/DV cases mentions that faculty wishing to write a DA/DV case but do not have data available may request an IMA data set from us. We will then work with the case authors to determine if any donated data set fits their learning objectives. The data set may have to be modified to fit those objectives.

How to provide data: If you think you can potentially provide a data set, or if you have any questions, please contact Susie Duong at IECI@imanet.org



Example questions and data fields from "Huskie Motor Corporation" case

Huskie Motor Company (HMC) is an automobile manufacturing company with production and sales throughout the world. Students are asked to consider four important dimensions of HMC performance: overall performance indicators, financial metrics, operational efficiency, and forecasting. Overall performance assignment questions include: (1) How is HMC performing globally? (2) How are various HMC brands performing? (3) How are the various sales channels performing? (4) what are the most and least profitable models? The case data sets include both "dirty" data with errors seeded in the data and "clean" data with errors removed.

Huskie Motor Case Data Fields

Data field	Description
VIN#	Unique ID
Brand	Brand name
Model	Model name
Model Year	2012 to 2016
Series	Series ID
Segment	Compact, full-size, etc.
Body Style	Sedan, SUV, etc.
Sold Date	Jan. 2015–Dec. 2016
Sales Volume	Cars sold
Drive Configuration	AWD, RWD, etc.
Engine type	Gas, diesel, turbo, etc.
Transmission	5/6 speed, auto/manual
Trim	Base, deluxe, etc.
Color	Color of vehicle
Seats	Leather, cloth, vinyl
Package	Various available
Moon Roof	0 = NO, 1 = YES
Parking Assist	0 = NO, 1 = YES
Remote Start	0 = NO, 1 = YES
Keyless Entry Keypad	0 = NO, 1 = YES
Premium Radio	0 = NO, 1 = YES
Power Mirror	0 = NO, 1 = YES
Region	Europe, N./S. America
Country of Sale	15 countries
Days on Lot	Days on lot until sale
Sales Channel L1	Dealer/fleet/retail
Sales Channel L2	E.g., commercial, rental
Sales Channel L3	Cash, financing, lease

Data field	Description
Marketing Campaign	Cash rebates, dealer
	incentives, etc.
Gross Sales	Sales price (full)
Variable Marketing	Incentives by dealers
	(e.g., 0% financing)
Net Sales	Gross revenue -
	Var. marketing
Labor	Direct labor costs
Tooling	Provided to suppliers to
	make parts
Materials	Raw materials costs
Freight	Outbound freight cost
Overhead	Production overhead
	costs
Warranty	Repairs for defect parts
	during warranty period
Engineering	Allocated cost
Depreciation	Depreciation on
	manufacturing assets
Total Variable Cost	Labor + Materials +
	Overhead + Freight +
	Warranty
Total Fixed Cost	Depreciation +
	Engineering + Tooling
Tariff	Gross sales * Tariff
	percentage
Net Revenue	Contribution margin -
	Total fixed cost
After-tax	Net revenue - Tariff

(cont.)