

Blockchain Survey

The trucking industry is the driving force behind the U.S. economy, delivering 70 percent of all freight worth \$11.7 trillion¹ while also collecting \$726.4 billion in gross revenue.² However, as you know all too well, there are several inefficiencies located throughout the supply chain, from the shippers, to the carriers, to the brokers, which potentially takes revenue away from owner-operators and professional drivers.

In response to this wastefulness, many in the freight industry have begun to look to what is termed "blockchain technology" with the intent of reducing trucking's dependence on middlemen, such as brokers, and creating a transparent network based on efficiency and trust. Blockchain works as a digital or electronic distributed ledger that automatically provides carriers, suppliers, and even brokers, with complete capacity and pricing information, such as the rate confirmation sheet. Such a technology has the potential to reduce empty miles and prices while simultaneously increasing profits for truckers.

The OOIDA Foundation is desiring to stay ahead of the curve, thus we need information from OOIDA members concerning their needs and wants. Please fill out this short survey (7) question survey about blockchain.

Analysis

There are 97 total respondents currently for any one question as of April 3, 2018. 2,996 surveys were emailed to members on March 28, 2018 who allow for such correspondence. This equates to a 95% confidence level with a 10% margin of error.

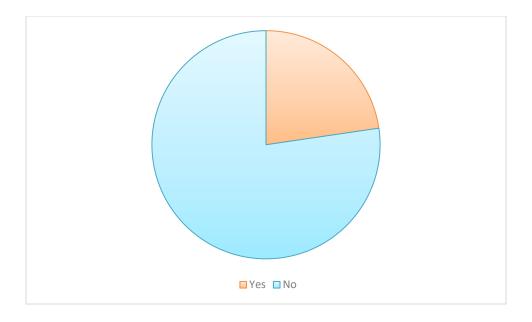
The number of respondents per question is in (). Percentage of each answer is given based on the number of respondents marking any one answer; all percentages have been rounded to the nearest whole number. Where multiple answers are allowed the total number of respondents are listed, along with the numbers of responses checked. The percentages however are measured from the total number of respondents for each answer.

- 1. Which **best** describes your type of operation? (97)
 - a. Owner-operator (own authority) 28%
 - b. Owner-operator (leased to motor carrier) 43%
 - c. Company driver 19%
 - d. Fleet owner 8%
 - e. Other 2%

¹ Bureau of Transportation Statistics, *Transportation Statistics Annual Report 2016*, Department of Transportation (2016) pg. 58

² American Trucking Trends 2016, American Trucking Association, http://www.trucking.org/article/ATA-American-Trucking-Trends-2016

- 2. What is the *primary* equipment you pull? (97)
 - a. Flatbed (all configurations) 28%
 - b. Reefer 13%
 - c. Van 32%
 - d. Grain 2%
 - e. Dump 1%
 - f. Tanker 7%
 - g. Auto transporter 3%
 - h. Livestock 0%
 - i. Containers 6%
 - j. Expedited 0%
 - k. Other 7%
- 3. Which best describes the *primary* freight you typically haul? (97)
 - a. General freight 44%
 - b. Refrigerated 12%
 - c. Agriculture non-refrigerated 1%
 - d. Building materials 6%
 - e. Livestock 0%
 - f. Automotive 4%
 - g. Hopper 3%
 - h. Intermodal containers 3%
 - i. Hazmat/liquid/chemicals/fuel 3%
 - j. Oversize/overweight 7%
 - k. Other 12%
- 4. Have you heard of blockchain technology? (97)
 - a. Yes 23%
 - b. No 77%



If yes, how familiar are you with blockchain? (22)

- c. Very familiar (have heard about it and understand what it is) 14%
- d. Familiar (have heard about it and have an idea of what it is) 36%
- e. Somewhat familiar (have only heard about it) 50%
- 5. How interested are you in learning more about blockchain? (97)
 - a. Very Interested 33%
 - b. Interested 36%
 - c. Unsure 27%
 - d. Not Interested at all 4%

If you are interested in learning more, how would you like to learn? (select all that apply) (65 respondents checked 112 answers)

- e. Land Line Magazine articles 78%
- f. Land Line Now radio segments 18%
- g. Online Webinar 35%
- h. OOIDA Foundation White Paper 20%
- i. OOIDA Foundation One Pager 18%
- j. Other 2%
- 6. In your professional opinion, what are the biggest inefficiencies that you see in the supply chain? (81)

Members identified freight brokers, detention time, and a general lack of trust as perhaps the biggest issues today regarding supply chain inefficiency. In particular, many stated that there was a lack of communication between them and the broker, as brokers have a tendency to omit a lot of important

information and occasionally do not have adequate knowledge of the freight itself and the permits required. Moreover, there appears to be a lack of respect and trust between brokers, carriers, and shippers, with many members feeling blind to the rates being paid. With so many different hands in the proverbial cookie jar, the opportunity for inefficiency is rampant resulting in less pay and more empty miles.

In its simplest form, blockchain technology works as a smart contract between parties so that order details, shipment status, bill of lading, accessorial charges such as detention time, etc., are updated automatically so that all can see. Such a system could send notifications to shippers and brokers once a load has been delivered to automate the payment process. And because all parties share an identical, updated version of the contract or ledger, blockchain has the potential to not only reduce operating costs, but it could also eliminate fraud and errors such as double brokering and double charging.

No longer would owner-operators struggle to gain access to the rate confirmation sheet in order to set their rates. Nor would they need to worry if they are dealing with a reputable broker or shipper as everyone on the blockchain can view the historical transaction data, thus creating a quantifiable reputation for all parties.

- 7. After reading more about blockchain above, are you: (91)
 - a. More interested 55%
 - b. Less interested 7%
 - c. About the same 38%