

# How United Airlines' Analytics and Algorithms Can Help to Save American Democracy

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## Abstract

This essay and analysis brings to light how analytics and algorithms, such as those used by United Airlines in the decision to forcibly remove a passenger, highlights the interdependence between American business and American Democracy. The focus is on the injustices to a diverse group of stakeholders. Considering the United States Supreme Court ruling in 2010 that corporations have rights like people do, the critical question is in the relationships of rights of the non-corporate people; stakeholders including passengers, company personnel, management, stockholders, and the general public. All of this is in the context of corporate culture and the evolving culture of American Democracy. The concentration on bottom line analytics and disregard for ethical treatment of various stakeholders, especially fare-paying passengers, weakens the respect for the integrity of rights among the variety of stakeholders. The consequence is an endangerment of the future of American Democracy, especially from internal self-destructive forces of unbridled capitalism.

**Keywords:** United Airlines, algorithms, analytics, democracy

## 1. Introduction

America is currently at a juncture where a more authoritative style of presidential leadership is challenging our democracy and impacting views on the power of its citizens (Collier & Lakoff, 2017). So within this unique climate, Americans have begun an awakening due to the disturbing trends of abuse of power and even violence toward innocent citizens and consumers. For example, United Airlines oversold seats on a flight from Chicago on April 10, 2017 and then unexpectedly added a four crew members as passengers, for what airline personnel considered an "urgent need" (Connerly, 2017). When United Airlines personnel could not negotiate, bully, or bribe enough passengers to forfeit their seats, they evicted a few without excessive use of force (The Guardian, 2017). Note for most businesses, like the movies, theatres, trains, and buses, when you buy a seat there is not the threat of being evicted or being forcibly removed. However, one passenger refused to give up his seat on the oversold United Airlines flight #3311. In response, United Airlines called in the Chicago Aviation Security Officers. The officer responded to the incident by forcibly removing a 69-year-old passenger, Dr. David Dao.

As it turns out, the United Airlines incident may be able to help bring attention to the need to save American Democracy. First to consider is the video of the event went viral on social media globally and has been broadcast and rebroadcast millions of times (YouTube, 2017; Zambach, 2017). The 'Just Kill Me' video posted to Twitter by Kaylyn Davis depicts a customer horror story devoid of humanity and customer sensitivity. The accompanying video narrative reveals a violation of clear unethical behavior, which ignores the right and needs of others, causes emotional discomfort, causes pain and suffering (Paul & Elder, 2010). This is evidenced by the security officers who bodily removed Dr. Dao. He was severely injured in the process. By severely, we mean Dr. Dao suffered multiple injuries that include a concussion and reconstructive surgery (The Guardian, 2017). It turns out that United Airlines actions were further supported by the position of the industry's trade group, Airlines for America, which "...suggested

that the carriers don't want the rules changed in light of United's mishap (Carey & McGroarty, 2017). It remains to be seen how the federal regulatory authorities will act to averting further ethical debacles, or whether they too will assist United Airlines in bringing to light some severe problems in the functioning of American Democracy. Bringing those problems to light may turn out to help in efforts to save American Democracy.

## 2. The Role of Analytics and Algorithms

The role of analytics in the United Airlines ethical debacle played a critical role in the process, as did wisdom-challenged decisions, and a corporate culture that has bred organizational strategies that fail to appropriately balance the interests that make their existence possible. The analytics, that come to mind first, are those that facilitated making calculations of no-show customers. A vacant seat produces no revenue, so overbooking is common.

Next to consider is the wisdom-challenged decisions of how much United Airlines chose to overbook. This is a cost/benefit decision, but with the costs being incurred by passengers and the benefits accrued by the airlines. Sometimes passengers, in bearing the cost of having to deplane, receive enough benefits to be satisfied, or just be appeased. Though, with a corporate ethic to maximize profits, the airline's service to customers just seems to be a necessary cost to income statements. According to The Wall Street Journal reporters Carey & McGroarty (2017), "No one took their [United Airlines] top offer of \$800 plus a hotel voucher." The reporters commented, "Instead of offering more, agents use a computer program, as dictated by the rules, to pick fliers of the least value to the airlines based on factors like ticket price paid and frequency-flier status, according to people familiar with the matter." There are still some questions if the computer program also took into account racial profiles, given Dr. Dao is Asian.

Critical to consider is where are the analytics that take into account the impact on customers as individual humans, not as pieces of baggage to be picked up and deposited elsewhere. For example, can the algorithm take into account the infirmed or disability? Is there no consideration for the individual traveling with another person? Is there no consideration for other consequences such as the passenger being forced to deplane, or others being impacted? Note that federal law, based on the Citizen's United Supreme Court ruling on 2010, does permit corporations to be people for the purpose of political contributions freedom of speech; but the concept of considerations for non-corporate people do not seem to be fully dignified in the algorithms and analytics, as in the case of United Airlines. Without the full disclosure of the algorithm, the bottom line, at-any-cost to customers includes ignoring the rights and needs of others, causing emotional discomfort, and causing pain and suffering (Paul & Elder, 2010) and can continue to be the driving force for United Airlines and other corporations as well.

Given this scenario, citizens of American Democracy should reconsider the *basis* for automatically granting corporations a renewable franchise to do business in *our* collective democracy. Further, if corporate America were really wise in choosing its analytics, it would take a broader view of its *place* in democratically-based capitalism and work toward more ethical treatment of customers, instead of bottom line-driven analytics, that can lead to unwarranted force and victimization, as the means to improve one's bottom line.

Professor John F. Mee "was truly one of the pioneers of management education" who was an expert on the changing concepts of management in the 1960's and 1970's (New York Times, 1985). He claimed that the main function of business was in the arena of production and distribution of goods and services, and that profits were simply part of the incentive system (Mee, 1963). Over the years, the concepts of management have continued to evolve. Now, a case can be made that a prevailing concept of management is that its function is to enrich management (Parramore, 2014). Even the stockholders are relegated to lesser interests along with employees, customers, and even the community-at-large.

Furthermore, there is ample existing evidence that the American culture has changed in the more than half century since Mee's conceptualizations were popular. We, the people, can leverage off of the recent corporate debacles, as a force for using analytics to save American consumers from peril and disregard and at the same time strengthen our democracy.

The analytics for understanding the United Airlines debacle starts with an understanding the cultural evolution embedded in modernity and its potential for breeding entities with limited regard for non-corporate people. In other words, the non-corporate people are us, the consumers, customers, and passengers. The aforementioned evolution engenders values and ethics that impact the extent of the injustices in society and how corporations can and should act. Given the power and success of analytics, the purveyors should in turn use analytics to seek remedies, for the potential outcomes of the convergence of the activities that led to the United Airlines debacle. Even further, how can

we, as non-corporate people, use analytics to understand the seismic structural changes in our democracy that have led to inordinate concentration of power in the hands of the wealthy and of huge business organizations at our expense?

### 3. Conclusions

The full impact of the United Airlines ethical debacle on consumers and democracy is not known. Given complexity, what will evolve is unknown. The event is significant because of the symbolic portrayal of injustice in America. We may thank United Airlines for inadvertently helping to save American Democracy through outrageous unethical behavior, which highlights injustice in America and a critical need for rethinking the role of business in our collective democracy.

United Airlines, however, is not alone in corporate America in its algorithmic bottom-line at any cost perspective. Wells Fargo and others are on a list whose corporate cultural evolution highlights the need for American industry to analyze what it needs to do to preserve its franchise to function in a free, democratic society. Clearly the pursuit of greed can get out of hand; and we can do better as a nation. Analytics can help. Analytics can help enabling us to ask new types of questions. Analytics can help pointing out novel relationships and patterns. Though, consumer analytics, that takes into account a healthy balance integrating the pursuit of bottom line economics with ethical consumer sensitivity, can serve as the impetus for co-strengthening corporate culture and our culture of democracy. Steps to change include increasing awareness, consciousness-raising, and revolution. We certainly are not calling for revolution but calling for increased awareness in that, we as agents in American Democracy, *have real agency* and can influence the future role and co-evolution of industry and democracy. The use of the same analytic approach used in increase the bottom-line-at-any-cost, can also be used to fairly benefit consumers and our collective greater good. This article serves to highlight and reinforce Lewis' reference to Tolstoy quote as the epigraph for his subprime crisis book, *The Big Short: Inside the Doomsday Machine*. "The most difficult subjects can be explained to the most slow-witted man if he has not formed any idea of them already; but the simplest thing cannot be made clear to the most intelligent man [woman] if he is firmly persuaded that he knows already, without a shadow of a doubt, what is laid before him [her]" (Lewis, 2010, ix)

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### References

- Carey, S., & McGroarty, P. (April 14, 2014). United chairman apologizes over passenger's being dragged from flight. *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/united-chairman-says-directors-deeply-sorry-about-passenger-removal-14921984>  
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- Collier, S. J., & Lakoff, A. (February 8, 2017). *Trump's fictional crises and the real threat to American Democracy*. *New Republic*. Retrieved from <https://newrepublic.com/article/140486/trumps-fictional-crises-real-threats-american-democracy>
- Conerly, B. (April 11, 2017). United Airlines flunks economics 101. *Forbes*. Retrieved from

- <https://www.forbes.com/sites/billconerly/2017/04/11/united-airlines-flunks-economics-101/#8cb9f99370e2>
- Lewis, M. (2010). *The big short: Inside the doomsday machine*. New York: NY, W. W. Norton & Company.
- Mee, J. F. (1963). *Management thought in a dynamic economy*. New York: NY, New York University Press.
- Parramore, L.S. (2014). Stock buybacks take money from your pocketbook and put it into the hands of corporate titans. AlterNet. Retrieved from <http://www.alternet.org/economy/dirty-little-secret-how-ceos-enrich-themselves-your-expense>
- The Guardian (April 14, 2017). United passenger dragged from plane needs reconstructive surgery. Associated Press. Retrieved from <https://www.theguardian.com/business/2017/apr/14/david-dao-united-passenger-injuries-surgery-lawsuit>
- The New York Times (November 23, 1985). John F. Mee is dead at 77; Management Field Pioneer. Retrieved from <http://www.nytimes.com/1985/11/23/us/john-f-mee-is-dead-at-77-management-field-pioneer.html>
- YouTube (2017). Video show a passenger forcibly dragged off a United Airlines plane. Retrieved from <https://www.youtube.com/watch?v=VrDWY6C1178>
- Zambach, L. (April 11, 2017). *Video shows United Airlines' passenger dragged off plane*. Los Angeles Times. Retrieved from <http://www.latimes.com/business/ct-united-drag-passenger-0411-biz-20170410-story.html>