# Delta Air Lines Computer Outage Case Study

Posted on September 19, 2018

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## Introduction

The following paper highlights a problematic issue of Delta Airlines that impacted their services to a great extent. The issue is regarding the computer outage and the peril of hacking that, in turn, causes delays in flight schedules. The role of the Federal Aviation Administration (FAA) in this scenario is also elucidated. Delta Air Lines, Inc. is the eminent airline of America. The airline operates about five thousand and four hundred flights daily with the association of its subs and other territorial affiliates. Moreover, it carries a broad network of international and domestic flights with a considerable number of 319 destinations in fifty-four countries on six continents. It is the founding associate of SkyTeam Airlines and its regional subsidiaries operating under the name of Delta Connection.

Delta Air Lines faces a major programming problem on a frequent basis that affects the schedules of its flights. This issue is a systematic computer outage that delays Delta's flights across the planet. This issue is not an accidental one, as it occurs in an episodic manner and takes place on a frequent basis. Take the recent instances of the power outage in 2016 during the season of summer travel and the recent incident that happened in January 2017. The reasons for such outages are still a subject of investigation, and it is believed that it is a human error rather than a technological one. A few assert the possibility of hacking, but whatever the reason is, it turns out to be a critical factor affecting Delta's profit margins and making the service standards dubious. Whatever the reason for such calamities, it is necessary to identify the sources and to develop and implement prevention practices to sustain the smooth operations of airlines.

The havoc delaying flights makes passengers irritated, and they feel suspicious regarding their arrival and departure possibilities. A few critics insist that it is better to choose to travel on a bicycle than to board Delta, as its flights can be delayed at any time, at any place. The power outage that occurred in 2016 led the organization to call off hundreds of international scheduled flights. The problem, however, seemed to be resolved by the day, yet the effect of the outage persisted in impacting the other global transportation system and became the reason for other subsequent delays across the world. After this entire chaotic scenario, the problem still does not show any signs of improvement, as the recent technological glitch cancelled hundreds of scheduled flights. Nevertheless, this episodic outage of 2017 was shorter than other such accidental power faults that cost Delta millions of dollars.

This frequent fragility of computers depicts a serious prospect of imminent operational risks that can also affect Delta's reputation and business ranking and may cost it a fortune. An adequate

comprehension of this matter is required to resolve the foundation of this problem and to avoid such devastating delays and subsequent outcomes. To retain customers and market reputation, it is indispensable for Delta to maintain its service quality and develop a strategic framework for this. The role of the FAA is also significant in implementing prevention measures in this regard. The following content evaluates the different aspects of Delta in the context of this major problem.

# An Analysis Of Problematic Issues

Delta Airlines encountered a major problem regarding the system-wide outage that caused delays in scheduled flights and affected operations on an international level. This malfunctioning of computer systems led Delta toward a disastrous situation and disappointed its customers. The higher authorities in the United States asserted that a glitch occurred due to an unexpected outage of power. This error implied a substantial effect on Delta's computer systems and its operational efficacy across the planet. The organization and relevant department made efforts to fix the problem promptly, but Delta experienced large-scale cancellations due to all that hullaballoo. The management apologized for the disturbance and dissatisfaction, but the problems do not seem to end with a single incident. A similar outage of power and computer systems persists and is still causing disruption, as recently, a system-wide power outage was observed again.

Delta Airlines operates in a highly competitive industry and has established a significant position in the marketplace by offering competitive fares, routes, a range of destinations, and customer services, as well as scheduled frequency and timings. The organization is implementing various strategies to develop a strong network of international and domestic flights and transforming its horizons by seeking enhanced alliances. These new associations will help Delta sail in new waters and have a solid financing structure as well as an extended competitive network globally. However, the current chaotic situation of computer outages and the hazard of hacking possibly cast a noteworthy threat to Delta's claim of competitive scheduling timing and frequency. This single factor can be disastrous for the overall reputation and market position of the organization, and therefore, there is an immediate need to analyze the circumstances and their reasons carefully lest it ruin the public image of Delta Airlines and dissatisfied customers shift to any other substitutive service.

There are many available ways to deliver a satisfactory solution to this problem. Throughout the incident coverage, the spokesperson of Georgia Power affirms that the problem occurred due to Delta's equipment failure. Evidently, an airline system comprises massive, interconnected, and complicated information technology systems that are installed to tackle each and every aspect, from ticketing to boarding and all other relevant activities. These overlapping operational commands and interrelation of technological systems sometimes deny working accordingly. It is explained whenever a new system element is implemented with the integration of other aging equipment, then such complex systematic failure happens. The limitations of IT systems for a large airline organization imply that a hundred percent reliability cannot be expected. Experts say that such systems fail when a considerable change takes place in their integration and overall framework. For example, an update

in the computer system may cause a situation of havoc. But, here is a question that arises: Why are other airlines working with similar massive computer systems? Then why does it occur so frequently with Delta only?

To cover up the bad experience of 2016's power outage, Delta Airlines adopted a proactive and preemptive strategy to offer their apologies to their customers, but unfortunately, that plan did not turn out well. Proactive and preemptive tactics are used to attend to clients' matters even before their actual occurrence. Such strategies are common in Amazon and Southeast organizations. By adopting this approach, a business promises to preemptively resolve the problems of an individual customer before or throughout the business-related interaction and, in turn, promptly improve and sustain the service quality and customer experience to retain them and evade the risk of adverse publicity. However, Delta did not apply it in its true essence, and customers took it as a mockery because the implemented measures did not have any particular parameters to improve the perceived value of their services.

The above-given questionnaire-based interface highlights a fragment of Delta's strategic efforts in this regard. However, the inefficacy of following services and the inability to fix the power and computer support outage created an environment for dubiousness among customers. It is highly recommended that Delta invests a considerable amount in the restructuring of its computer-based systems to augment their reliability. Transportation Attorney Mary Schiavo states that such incidents have taken place approximately four times before and are not acceptable because they are tarnishing the image of American transportation on a global scale. She further stresses the need for a precisely regulated agenda from the Federal Aviation Administration (FAA) and emphasizes the indispensability of remedies in this regard. She says that "the FAA they are allegedly the oversight regulatory body of the airline. But their role has become so limited." (Schiavo, 2016).

# Swot Analysis

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| STRENGTHS<br>• Despite the downturns and computer outages, Delta's major strength is its product, air travel.<br>• The fastest and safest way to travel around the world.<br>• A room for enhancement and to improve the system-wide computer technologies. | WEAKNESSES<br>• The low response toward the chaotic power outages.<br>• The inefficacy of implementing ad hoc strategies.<br>• The discrepancy in the profit margins can affect the investment patterns and the gains on them. |

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| OPPORTUNITIES<br>• Expansion opportunities and the prospect of beneficial alliances.<br>• Investment in technological improvements results in saving costs and can offer augmented and efficient automated procedures for ground operation. | THREATS<br>• Customer dissatisfaction and losing customers because of computer outages and delays caused by that.<br>• Deficiency of appropriate measures to address the episodic flight-delaying problems. |

# Managerial Insight

Regarding all this, Ed Bastian, the CEO of Delta, gives a statement that “Delta has invested hundreds of millions of dollars in technology infrastructure upgrades and systems, including backup systems to prevent what happened yesterday from occurring.” (Bastian, 2016). It elucidates that investment in this department is not the solution to this problem, and the organization has to conduct an evaluation of the subject more cautiously. Phenomenally, the shutting down of power in the data center boosts the calamity of recovery or backup plan. Therefore, it is suggested that we go for two options in such a disastrous situation. One is shifting the backup system somewhere else so it would work properly. The second is to repair the shutting down to recover the primary system-wide computers.

Schedule timings and frequencies are among Delta’s fundamental strengths, and they offer it a competitive advantage over its rivals. Therefore, to maintain this power, Delta needs a well-planned set of strategies to address customer dissatisfaction and resolve frequent outages, as well as to establish a secure and workable backup plan to sustain such shutting-down events. Management is also seeking the feasibility of the power suppliers and estimating the improved measures to enhance the capability of IT support teams to attend to such problems in a prompt manner. After the recent computer outage incident, Delta has doubled its endeavors to sort out this issue as a priority. Experts also suggest involving the governmental authorities to develop a few regulatory frameworks to tackle this issue on the national level.

Another major blunder that was observed during the power crisis in 2016 was the management’s focus on the brand instead of the customers. The managerial authorities of Delta were trying to save the face of their business reputation, and in this endeavor, they almost forgot to console the clients who were directly affected by the incident. Delta Airlines has excellence in the field of marketing, and that was the reason it made continuous efforts to save its public image throughout the power shutdown. They spent an impressive amount on communication channels to apologize to their customers; however, the efforts that were made on the customer level were inadequate. The frontline staff of Delta perfectly accommodated the devastated customers at that time, but the higher-level pronouncements were a bit disappointing. Delta only issued a waiver that covered only one day, which was not a feasible action to take at that catastrophic time. In the future, Delta is devising plans to avoid such discrepancies and win the favor of its valuable asset: its customers.

# Conclusion

The above-analyzed problem of Delta Airlines and the side effects that occur because of that issue depict that Delta is facing the hazard of losing customers because of its constant power and subsequent computer outages. The recent incidents of shutting down systems caused delayed flights not only in the state but all across the planet, costing Delta hundreds of millions of dollars just in a day. However, there is an immediate need to address this issue and to resolve the underlying reasons that might cause such calamity. The Federal Aviation Administration (FAA) is expected to play its role in this regard by formulating and implementing rules for all airlines. Moreover, any possibility of system hacking should also be evaluated and mitigated.

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