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EMEN 4030

15 April 2021

One of the biggest quality problems I have ever read about was the problem with select Samsung Galaxy Note 7 batteries exploding. In 2016 Samsung released one of their most anticipated phones to date, the Galaxy Note 7. Soon after release, men users began experiencing problems with their phones, which would usually look like the phone catching on fire or completely exploding from within. This was due to the batteries that Samsung had elected to use in their new phone. Samsung had put a large 3500 milliamp hour lithium-ion battery into the thin chassis of the Galaxy Note 7. Half the Note 7 batteries were made by its subsidiary Samsung SDI and didn't fit correctly within the Note 7 design. This caused overheating and eventually caused the batteries to explode and cause fires within the phone. This became mainstream in the news when many airlines began forcing passengers to put their Galaxy Note sevens within specific boxes or bags to stop them from exploding and causing damage during flight. Samsung tried rectifying this by reissuing all Galaxy Note 7 phones created by the Samsung SDI subsidiary a month after release, assuming that the other half of the phones with batteries made by Amperex Technology would work correctly. This unfortunately was not the case as this other half of Galaxy Note 7s began exploding as well. Samsung then stated that this was most likely caused by a failure in the design process , including but not limited to missing insulation tape and sharp edge protrusions near the battery. This would then eventually cause Samsung to recall all Galaxy Note 7s worldwide.

Both recalls of the Samsung Galaxy Note 7 would cost Samsung around $5 billion in losses between creating the phones and recalling them worldwide. Considering 3 million Galaxy Note 7s were sold and returned worldwide, many people including the company and customers were affected by this problem in quality and quality control. Not to mention there has been an infamous problem with recycling lithium-ion batteries. Lithium-ion batteries are recycled at a rate believed to be below 5%. Although they are not easily recyclable, it is important to note it does not use a heavy metal like lead, thus the need to recycle them is much lower than lead-acid batteries. By the end of the issue Samsung would lose around $5 billion in losses coupled with the inability to recycle the batteries from the recalled phones from over 3 million people.

Like stated earlier, this problem was resolved by Samsung having to recall all Galaxy Note 7s worldwide. Samsung was never able to fix the Galaxy Note 7, instead they decided to launch a formal investigation into the problems with the phone which lasted around four months and discontinued the phone entirely. Not to mention the competitiveness Samsung lost within the flagship market of smartphones due to their highest end smartphone being recalled.

Some users who experienced their phones exploding on them have stated that they planned to sue Samsung, but it seemed fruitless due to the user agreement they are in once they receive and use the phone. the largest legal action came from the government regulators and international organizations looking into the explosions. This is also followed through by the Department of Transportation on whether the phones will be allowed on planes as well as the Consumer Product

Safety Commission overseeing the recall of the Galaxy Note 7 and other lithium-ion battery products.

Obviously, I would recommend the Samsung do more quality testing on their phones, which I believe has been done since this incident. If you look at a company like One Plus and the measures they go through to ensure the quality of their phones, it becomes apparent that you can in fact take steps to make sure your products meet a very high-quality standard. I would also recommend Samsung finding a way to recycle their unusable lithium-ion batteries. This would make such an incident at least controllable as the materials wouldn't go completely to waste. Finally, Samsung could have created ways for users to ensure that their phones would be functional for a long time. This could include an easy way for the users to replace the batteries themselves. Overall, Samsung needed to perform more quality testing and quality assurance on their phones prior to release. It is however good to see that they have not had any similar problems in their phones since the Galaxy Note 7.

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