Before the space shuttle challenger accident in 1986, the Thiokol engineers had discovered an issue with O-ring erosion during the early testing of the challenger program (1980-81). They came up with a temperature of safe launch with what I’m guessing was a margin of error. This temperature was 53F. The NASA solid rocket project managers said that there was not enough evidence to support the claim of cold weather issues. Larry Mulloy insisted that Thiokol was overly cautious and needed to sign the launch authorization. Thiokol, experiencing the full force of NASA and the US government, signed the authorization. Then the accident took place and the country was mourning the loss of many lives. NASA, to save face, put blame of the Thiokol engineers claiming they had downplayed the internal engineering memos about the subject. Then they had the audacity to claim that this was due to Thiokol not wanting to lose NASA contracts. Thiokol’s response was that NASA wanted to maintain schedule so badly that they ignored the warning signs. If we look at the risk assessment of both parties, we see that one party deemed this launch to be too unsafe and one didn’t. The NASA side was driven to launch probably for financial gain. Also, the government (including the president) was probably pressuring the launch. Another possible factor responsible for NASA going through with the launch was public relations. Millions and millions of Americans were tuned in to the launch and were excited to see it. NASA could have thought: Those engineers at Thiokol must account for some error in their temperature estimations and odds are the launch will succeed if we launch below the recommended temperature. On the other hand, you have the Thiokol guys who are at the launch saying please don’t launch and they will not sign off on it. NASA then bypassed the on-site team and called the execs of Thiokol. These execs were most likely pressured into signing off on the launch due to financial reasons and defamation. The two viewpoints in this case study: an engineer’s view versus a businessman’s view differ due to money. An engineer has no financial gain or loss (probably) when they present facts and hypothesis based on R&D. A businessman cares about the money and public opinion. I think that if the president at the time had been there with his power and had talked to someone like McDonald than the launch would have never gone through.