



# Engineering Ethics A

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# 1 Part I Scenario 2

## 1.1 Dilemma

You are presented with what looks like an excellent opportunity to setup a prosperous mining operation and also to provide some benefit to a local population. However, in order to get this operation off the ground, it looks like you may have to bypass certain legal channels, and to perform a quid pro quo service for the Mayor which could be interpreted as a bribe [1, 2].

## 1.2 Analysis

Confronted with scenario 2, Corsey Mining has 3 possible solutions to this dilemma and will bring different consequences for four stakeholders, namely the mining company, mayor and the local community.

1. **The company acts against ethic codes and acquiesce to mayor's proposal**, funding the construction of a new hospital in exchange for the license to, which is taking great legal risks since it is bribery.

### **Justifications and analysis of stakeholders' interest:**

Corsey Mining has attempted to negotiate with government several times, all ending up in failures, knowing the enormous economic potentials of the the area and the Mayor's suggestions, the fund for local hospital seems reasonable in order to get the license and form an intimate connection to Mayor. However, what the company choose is bribery and the amount of money for the hospital is not clear so the whole practice may not be worthwhile.

The mayor find the money to construct the hospital as well as getting extra taxation from such a profitable gold-mining company, which is a great political achievement and will gain him popularity and contribute to his political career. But he is taking great risks, if the scheme is exposed, his tenure may end ahead of schedule. The local community not only has a new hospital but also more job opportunities since the mining operation needs staff. The location of the mine is in wilderness so pollution won't be a problem and it may boost industrial development nearby.

2. **Corsey Mining obeys engineer ethics and rejects mayor's offer**, without a license the mining can't take place, so the company has to continue seeking to apply for the license, which is highly unlikely to succeed and the business opportunity will elapse.

### **Justifications and analysis of stakeholders' interest:**

Although the economic potential of the mine is large enough, may be enough to cover the fund for the hospital, it's obviously against the law, so Corsey Mining may lose the opportunity for now but can ensure legal operation and seek legal channels later, perhaps in the next mayor's term.

The Mayor doesn't solve the problem of the hospital fund and loses a potential chance to advance local industry. Increase employment rate and taxation, which has the same function of gaining support among citizens as the construction of hospital. The community experiences no change, hospital construction is delayed and the gold deposit brings no benefits.

3. **Corsey Mining obeys the ethic codes and rejects Mayor's offer, instead of giving up its plan**, the company further assesses the benefits of the mining operation, both to the community and the mayor in an effort to get the license. The alternative offer is that the government issues license to Corsey Mining, in return the company provides job opportunities for local residents as well as use profits from the mining operation to establish a fund to finance public affairs including the construction of a hospital.

**Justifications and analysis of stakeholders' interest:**

Corsey Mining doesn't take legal risks but can't abandon the gold deposit, so it needs to find solutions to mayor's concern legally and ensure the company's profits.

The mayor practice its executive power legally and promote local industry and public welfare, which probably will lead to a prosperous future career. The community also benefit from the mining company and subsequent funds for public welfare.

### 1.3 Recommendations

In this scenario, I will recommend the solution 3. Both the mining company and mayor can practice within the law and obey the ethic codes. The company can exploit the gold deposit and make great profits. The community can get more job opportunities and benefit from the public facilities financed by the fund , such as a new hospital. What the mayor wants is his political achievement, which can be better served by the combination of the mining operation, the construction of a hospital and facilities alike using profits from the company.

## 2 Part II Scenario 1

### 2.1 The Dilemma

You have undertaken some consultancy work with a foreign company, under a scheme whereby half of your fee comes from the central government. However, the client company informs you after the work has been done that they are in financial difficulties, and that the only way you will be paid in full is if you falsify the invoice document so that the government pays 100% of your fee. You are also told that this is standard practice, and happens with the cooperation of the administrators of the government fund [1, 2].

### 2.2 Analysis

Confronted with scenario 1, Sudobuild has three possible solutions to this dilemma and will bring different consequences for four stakeholders, namely Sudobuild, administrators of the fund, the government fund and the client company.

1. **Sudobuild takes the risk of being accused of fraud**, follow the so-called 'standard practice' and double the invoice, and probably will soon get the full payment and form regular cooperation with the client company.

**Justifications and analysis of stakeholders' interest:**

For Sudobuild, it has completed the consultancy work so it should get the payment as soon as possible to ensure profits, falsifying the invoice is the fastest way to get paid and can probably get more contracts in the future. However, it takes great risk of being charged in

the future since the government fund may discover their deals and the unilateral change of their procedure shows no respect for Sudobuild and may cause long-term detrimental effects. The client company gets consultancy service without paying and it probably bribes administrators who get personal profits at the expense of the government fund.

2. **Sudobuild obeys engineering ethics and turn down the client company's proposal of falsifying a £740,000 invoice.** Sudobuild won't get involved in any fraud or corruption but 37.5% of payment will be compromised. What's worse, since the client company claims to be in a financial difficulty and has a close relationship with government fund, the payment will probably be postponed. Although Sudobuild won't have another chance to work with the client company, it doesn't want a direct conflict and can only accept the loss.

**Justifications and analysis of stakeholders' interest:**

The consultancy work has finished so Sudobuild want to get as many payments as possible without any illegal practice. It also doesn't bother the trouble fighting against the client company and the government in the hope of maybe in the future they can still cooperate. In this case, the client company only has to pay one fourth of the agreed money and the government fund suffers no loss, the administrators can still get profits from the client company.

3. **Sudobuild rejects the client company's offer, issuing the £370,000 invoice as the initial terms, and take a stand against the fraud behavior.** Based on the scenario, the administrators of the fund and the client company manager have corrupted many times so they call it standard practice. Sudobuild can expose the procedures conducted by the administrators to their senior governmental officials and meanwhile take the company to court to get its fee. Government interest shouldn't be taken advantage of and the previous contracts will be investigated and government should reclaim extra fund. The client company should fulfill its financial obligations. Hopefully, in the future I still have chance to apply for the consultancy work issued by the fund and other client companies.

**Justifications and analysis of stakeholders' interest:**

Sudobuild needs to get the payment and then reclaim money from client company through lawsuits to ensure its interest. Since Sudobuild has known their procedures, it's their duty to expose the corruption, only after investigations and regulations can government fund operate legally and are previous deals revealed. Hopefully, previous consultancy companies who suffered from loss can get compensation and in the future Sudobuild still has chance to apply for the consultancy work issued by the fund and other client companies. The client company and administrators should get punishments according to regulations.

## **2.3 Recommendation**

In this scenario, the best solution will be 3 from different views. The interest of Sudobuild and government fund should be protected and revealing the corruption between the client company and administrators has lasting benefits. First, the client company's operation can be regulated to ensure a legal and sustainable development by taking up its economic obligations. Second, administrators should be punished for their immoral behavior and the government fund can not only find a qualified people but also think about monitoring system to prevent similar things from happening again. Last, Sudobuild and companies alike can get their payments as listed in the contracts.

## References

- [1] Á.García-Fernández, “Ethics for engineers lecture a,” [https://liverpool.instructure.com/courses/46000/pages/engineering-ethics-a?module\\_item\\_id=1258997](https://liverpool.instructure.com/courses/46000/pages/engineering-ethics-a?module_item_id=1258997), 2021.
- [2] M. document, “Engineering ethics in practice:a guide for engineers,” <https://vdocuments.mx/documents/engineering-ethic.html>, 2015.