

## ASSIGNMENT 2

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### 1. Identify GE's main ethical dilemma in the context of the applicable

#### **Fundamental Canons in the NSPE Code of Ethics (Links to an external site.).**

After writing software to secure documents, the Gator Engineer (GE) learns that Anony Moose Data Corporation (AMDC) is allowing their vendors to use the software overseas. Exporting software with security implementation overseas may be illegal within the scope of governmental initiatives. Considering that another company exporting similar software overseas is now under investigation by the U.S. government, the GE may be viewed as a co-conspirator. Even if the GE was not aware of the intent, the perception is the GE was involved. Now is the time to act for the GE to resolve this situation.

It is difficult to perform a service for a company without knowing their true intentions. With that said, the GE wrote the software for the company without knowing what was going to be done with it. However, once the GE discovered AMDC vendors are using the software overseas, the GE is now bound to act. There are many ways to act on this, but only a few are going to be discussed.

The Gator Engineer was hired as a software developer and asked to write software to secure documents, which was successfully completed and within their area of competence. This satisfies one of the NSPE code of ethics canons where services should only be performed within an engineer's area of competence.

On the other hand, by discovering that the software may be used in an illegal manner, the GE is left with a few options that may involve confrontation with higher management. This also implies that the GE's knowledge of the full use of AMDC software was not known. Next, the GE is acting as a faithful agent or trustee for the employer. This faithful act is not only to make sure the software is not illegally distributed, but to also clear the GE name. By going back to the supervisor, the GE is avoiding deceptive acts and being a faithful employee to the employer. This simple action shows the GE understands it may be illegal to distribute software overseas. Lastly, the GE is conducting themselves honorably, responsibly, and lawfully to enhance the honor, reputation, and usefulness of the profession. This is an important canon to retain the character and credibility of the GE's actions and that of the company.

**2. Identify and briefly discuss all the viable options, or sub-options as applicable, that you see available to GE to address the issue.**

The first course of action once discovering the news that GE's company is using the software overseas is for the GE consults with the supervisor. Go back to the supervisor and disclose the fact that the software is being distributed to their corporate office overseas, which may be in violation of U.S. law. Next, encourage the supervisor to consult legal advice regarding this issue and to consider possible ramifications otherwise. A possible resolution to the case would be for the supervisor to reach out to upper management and pull the software from overseas.

This could be handled in different ways. One way of handling this is to develop a patch that disables use overseas. If, for some reason, the supervisor is non-compliant, there are other avenues to explore.

An alternative is to contact human resources. This could be a step in which the supervisor is bypassed or previously consulted, and a resolution has not been met.

The human resource representative should take notes and start an investigation into the matter. Those that are involved should be questioned. If there is an ethical officer at the company, then that person should be present in all the interviews.

This can be a lengthy process, but due to the circumstances, the process should have high priority. Human Resources could come to a resolution by finding the supervisor in violation of U.S. law and remove them from their responsibilities.

Further, HR could pass the case to legal for further action of not allowing more use of the software by the vendors overseas. If this investigation yields no results, there are more options.

Third possible course of action would be to consult AMDC's legal team directly. Of course, the GE can bypass the supervisor and HR to go straight to the legal team.

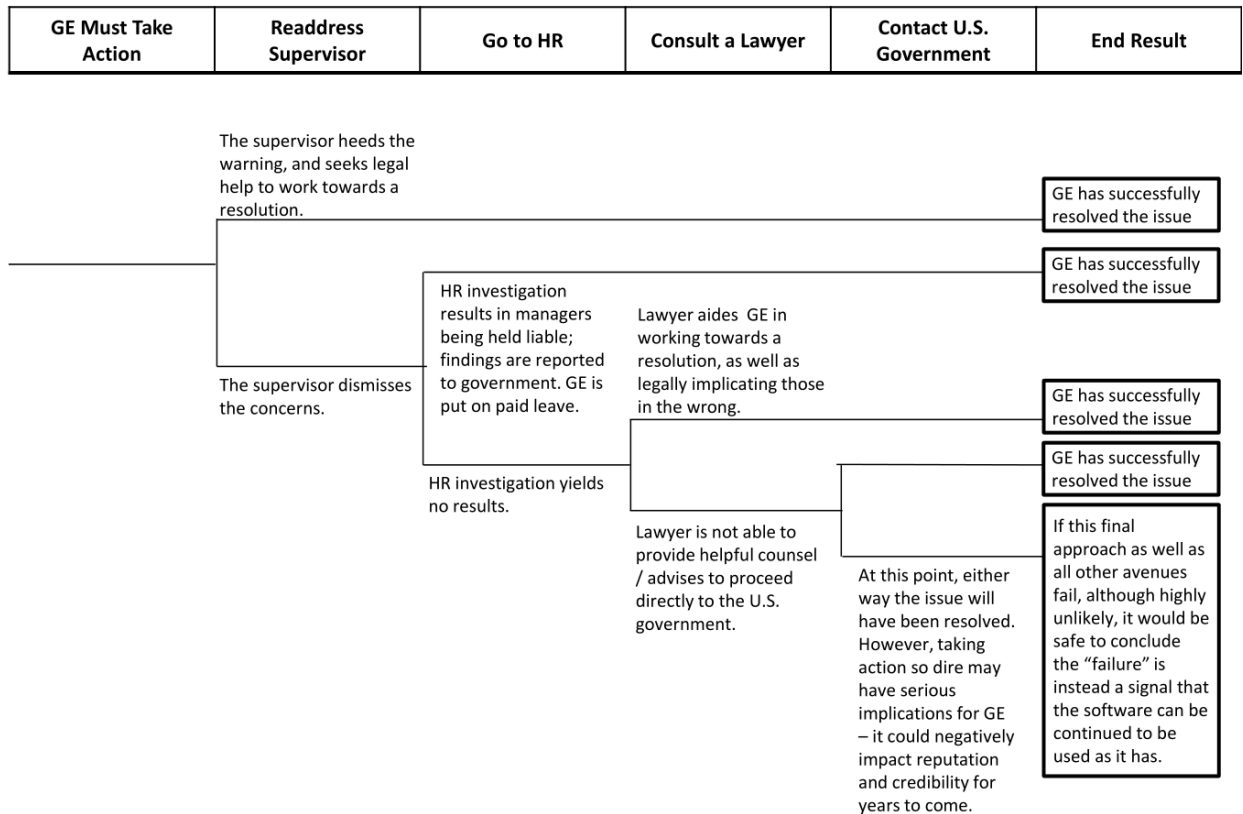
Meet with one of the lawyers and give all the facts of the case. Inform the lawyer that at the time of writing the software, the intent to disburse the software overseas was not disclosed to the GE. Possible resolution would be for legal to notify the United States Federal government and demonstrate the internal actions the company is taking to resolve the issue. This action could be favorable by the

government when deciding what form of prosecution to take. This step could impact the GE's character and or retaliation. However, there is still the case that legal does not bring a resolution or puts the case off too long for other high-profile cases.

Finally, the last course of action carries a lot of consequences, being a whistleblower by informing the U.S. government anonymously. This action could be done by either taking all the steps above and not coming to a resolution, or by bypassing all of them and going straight to the government. This decision could potentially destroy the GE character and credibility. This is a decision that should not be taken lightly and if there are no other choices to be made. Being a whistleblower, even if the GE does this anonymously, the company will eventually figure out and could cost the GE's job. This course of action usually has a resolution in a public manner. The media can get involved and release the whistleblower's name and personal information. Employment could be terminated, and the GE could even be charged with a crime. By doing this, the GE should understand that this could impact the company's and GE's future.

- 3. Prepare an event tree that clearly identifies the consequences related to each of the options/sub-options for addressing the ethical dilemma. An attachment**

to the assignment document showing the event tree is fine, if that works best.



4. Fully evaluate each of the options using the NGA approach discussed in the lecture video. Prepare a data table summarizing your NGA evaluation. A second attachment to the assignment document showing the data table is fine, if that works best. This is a non-numerical application process. Clearly show all steps of the evaluation process used.

Options	Consequences	Virtue	NGA		
			Goodness	Importance	Likelihood
Readdress Supervisor	Heeds warning and	Justice	Good	Medium - High	Low

	seeks legal advice				
Considering the supervisor dismissed GE's concerns earlier, it's unlikely that the concerns expressed by GE will be appropriately addressed this time. It's anywhere from medium to high importance that the issue is resolved here so that GE isn't forced to consider potentially escalating the confrontation by appealing to other departments or counsel. Seeking legal counsel would resolve GE's concern.					
Readdress Supervisor	Concerns continue to be dismissed	Justice	Bad	Medium - High	High
As mentioned above, it is likely that the supervisor will again dismiss GE's concern. If this is to be the case, GE will need to consider taking the issue to human resources where the issue will hopefully be resolved.					
Go to Human Resources	Issue resolved with management	Justice	Good	Medium - High	Medium
The likelihood of HR helping GE is resolving the issue could go either way since the function of most HR departments are to work in benefit of the company (even if that's officially not the case). If HR moves to encourage the supervisor to seek legal counsel, GE's concern will be resolved.					
Go to Human Resources	Issue not resolved	Justice	Bad	Medium - High	Medium
Depending on the dynamics of the workplace, the best-case scenario is HR has the foresight to encourage the supervisor to seek legal counsel when taking the current situations of the other company into account. The worst-case scenario is that HR sees GE as a threat (for whatever reason), possibly resulting in termination.					
Consult a Lawyer	Yields satisfactory results	Prudence	Good	High	Medium
The importance for a resolution with a lawyer would be high as to avoid a possible escalation beyond conventional legal counsel (appealing to the U.S. government). Management could be discouraged from transferring the software in question overseas, or it could result in the lawyer concluding there is no issue with management transferring files. Either way results in a satisfactory result for GE.					
Consult a Lawyer	Yields satisfactory results	Prudence	Bad	High	Medium

If, for whatever reason, the lawyer GE consults with (personal or company) is unable to resolve GE's concern (perhaps bound by confidentiality, vagaries of the law in question, etc.) GE may need to seek help beyond conventional legal counsel.					
Contact U.S. Government	Contacting the U.S. government results in supervisor compliance.	Prudence	Good	Medium	Low
Referring to the U.S. government should be considered if GE's other avenues for consultation failed to yield satisfactory results and there is some certainty that the legal issues of the company GE read about overlap with the one in question. With that said, the U.S. government is unlikely to respond unless there are several complaints coming from the same company or if the company is considered a critical infrastructure.					
Contact U.S. Government	Management can legally send their software overseas	Prudence	Good	Medium	Low
Regardless of the stance the U.S. government takes regarding the issue presented, the issue for GE should be resolved as the highest authority the company resides in					
NGA Total	Issue Resolved	(good, Medium, Medium)		Issue Unresolved	(Bad, Medium, Medium)
Consequences cancel each other out. NGA slightly points to resolving the concern.					

**5. Discuss the results and identify the best course of action based on the NGA evaluation results.**

GE's main ethical dilemma here, is the fact they are faced with a national security threat. Based on the NGA data table GE could approach the situation resulting in several different ways. Considering the Net-goodness analysis and Utilitarianism, a well-known teleologic ethical theory. Rather than individual goodness, this principle speaks for the group or society as a whole. Based on this principle, GE has a moral

obligation to speak with legal counsel regarding the liabilities of the software. Based on the legal input, GE may respond that GE was hired by AMDC to create the software therefore they entered in a binding agreement under the NSPE Code of Ethics. This could be considered a breach of trust, considering GE was told the software was for internal purposes only. Furthermore, GE may have inadvertently broken the law, depending on legal counsel's perspective. Regardless based on Utilitarian ethic, we should make decisions that will benefit the most people. Therefore, by creating a national security risk they may not be doing the greatest good for the greatest number of people. Even if not legally responsible as determined by counsel, GE still has an ethical responsibility to address the issue. Based on this information the likely outcome is contacting the legal department and complete transparency with the federal government.

Each course of action presented in the event tree and the NGA data table could impact the way in which the GE approaches this situation by considering their internal value structure. Given the results above, the GE is slightly better off to confront and consult the various channels to resolve the issue than to ignore the issue with the potential of falling into legal issues. Furthermore, there are various consequences that could follow from readdressing the supervisor. For instance, the two main consequences that we discussed with GE readdressing the supervisor was that legal counsel would be sought or not be sought. As mentioned above, it may be unlikely that the supervisor would agree to seek legal counsel when considering the



idea was dismissed earlier. On the other hand, GE is encouraged to refer to an appropriate department to enquire about the concerns of overseas distribution of security implemented software under governmental initiatives. The next step for the GE would be to seek counsel with the human resources department. The goal for the GE here would be to encourage the appropriate management member to seek legal counsel regarding the software in question. The outcome from this could depend heavily on the dynamics of the company. Thus, consequences from GE's interaction with HR could either be the issue is resolved with HR encouraging the appropriate individual to consult a company lawyer on the legality of their operations, or the response could be unsatisfactory according to GE's standards. If the latter option is to be the case, GE would be encouraged to personally seek legal counsel (either through the company or a personal lawyer, whichever is more appropriate).

The case of seeking legal counsel under a corporate lawyer may again differ widely, depending on the dynamics of the company. Although, this may be less likely to be the case depending on how clear the law is regarding security implemented software being distributed. If the law is clear in this regard, and the company is clearly in violation of said law, then the appropriate response may be obvious in the mind of the lawyer. Otherwise, a response from a corporate lawyer may be vague and therefore unsatisfactory according to GE. This is a medium likelihood is indicated in this step, since the outcome may depend somewhat heavily on the

wording of the law as it applies to the operations of the company. If an unsatisfactory answer is received by GE, then the most likely response from GE would be to let it go since the resources available to GE would, for all intents and purposes, be exhausted. Depending on how critical the software is for national security (as determined by GE), the last avenue for GE to pursue would be to inform the U.S. government of such operations if GE feels that the consequence of ignoring such operations could be dire. We concluded that the likelihood of the U.S. government responding to be low due to an assumption that the software is not critical (since that wasn't indicated in the prompt). This would then imply that the likelihood of a response would change depending on how critical the software is or if the company is considered a critical infrastructure. In either case, the result is good as GE has been completely transparent regarding the concerns regarding company operations. Consequently, the result would be to pursue the issue as the outcome is slightly better than ignoring the issue.

### TEAM 3 PEER AND SELF EVALUATION MATRIX

ASSIGNMENT 2	Joshua Main-Smith	Stephen McDonald	Jordan Roysdon	Troy Crawford	TASK MGR.(Y/N)
Joshua Main-Smith	100	100	100	100	Y
Stephen McDonald	100	100	100	100	N
Jordan Roysdon	100	100	100	100	N
Troy Crawford	100	100	100	100	N
<b>AVERAGE</b>	100	100	100	100	