1. Introduction

IPRO 303 discussed the following ethical issues:

1. Ethics and Business Integrity issues regarding SmartSignal's desire that we not disclose that SmartSignal is our sponsor.
2. How we feel about potential unequal contribution of effort among individual IPRO team members.
3. How communication among IPRO team members may be impacted by our cultural diversity.

The class broke into three teams. Each team focused on a specific ethics perspective:

1. The Seven Layers of Integrity by Dr. June Ferrill
2. It's Good Business by Kristine R. Hanson, Robert C. Solomon
3. Professional Engineering Code of Ethics by the American Society of Mechanical Engineers

Each team was to prepare a memo based on their ethics perspective and relate it to each of the three ethical issues. The memos were then presented in class to discuss the issues as a whole.

2. Summaries

A. The Seven Layers of Integrity Perspective Summary:

The Seven Layers of Integrity is a perspective on ethics composed of several “layers” of ethical reasoning. The layers are the following: the law, contracts and agreements, professional code of ethics, industry standards, the community, personal relationships, and moral values. The upper layers provide the strictest definitions of ethical behavior, while the lowest layers tend to be vaguer and depend on personal preferences. The breakdown of the Seven Layers relies heavily on the National Society of Professional Engineer’s (NSPE) Code of Ethics for Engineers. This code is used as a basis to illuminate and explain the individual layers.

Ethics and Business Integrity issues regarding SmartSignal's desire that we not disclose that SmartSignal is our sponsor.

The law layer, the professional code of ethics layer, and the moral values layers are the three most relevant layers for this issue. The law layer discusses the concept of principle and agent. In our case, SmartSignal is the principle, and we are the agents acting on behalf of SmartSignal. Therefore we must act in a way that benefits SmartSignal. However, we also do not want to mislead our contacts that we are working independently. We also want to make sure we avoid conflicts of interests as mentioned in the professional code of ethics layer. For the moral layer, we must act on this situation with honesty and integrity.

How we feel about potential unequal contribution of effort among individual IPRO team members.

Unequal contribution is caused by several things, such as poor communication, missing meetings, incomplete work, and unequal distribution of work. The layers that unequal contribution applies to are personal relationships, professional code of ethics, and industry standards. Positive personal relationships are necessary for the success of the team. Poor interactions between team members will reduce the team's ability to work together. Active communication outside of meetings and during meetings shows respect and helps out everyone achieve the end goals. Following professional code of ethics means we must work to the best of our abilities and provide our sponsor with quality work. This cannot be done with unequal contribution of effort. Also, industry standards need to be upheld to ensure success.
How communication among IPRO team members may be impacted by our cultural diversity.

Our team members come from a variety of different cultures, and this can impact the way we communicate and how we work together as a team. The layers considered for this situation are community, personal relationships, and moral and spiritual values. Our IPRO team is a community with different methods of working and communication. One situation is having some team members expecting prompt email replies, while others do not expect this. This could lead to several problems if the different methods are not compatible. Another potential problem is that team members may not be used to working in such a diverse team, leading to poor communication. The personal relationships layer is also relevant, because we want our team members to have good relations with each other. With different cultural backgrounds, come different views and ways to express them. The team must also accommodate moral and spiritual values when working together. For example, the team should not expect a team member to neglect religious obligations to meet with the team. As long as we are aware of our cultural differences, we can work with them and function well as a team.

B. It's Good Business Perspective Summary

It's Good Business provides a set of rules and steps as a means to deal with business situations that may have an ethical dilemma. The rules encourage moral, objective, and respectful thinking, and the steps are a series of questions that can be followed to solve ethical problems.

Ethics and Business Integrity issues regarding SmartSignal's desire that we not disclose that SmartSignal is our sponsor.

This situation is both a business and an ethical issue. Without our sponsor's name disclosure, information from our interviewees may be limited. To SmartSignal this is a business issue, but the team feels it could be misleading or unfair if we do not disclose SmartSignal's name. To work through this issue, our team consulted a psychology professor and our sponsor contact. Should problems arise from this issue, we feel that it is our responsibility because we are the bridge between SmartSignal and the interviewees. There are several solutions to this problem; however, the one that honors our agreement with our sponsor and is fair to our contacts is a complete non-disclosure policy for both our sponsor's names and our contacts' names.

How we feel about potential unequal contribution of effort among individual IPRO team members.

It is a problem when team members do not contribute equally or put in equal effort individually. They may not be sharing an equal workload or taking responsibility for their tasks. It is unfair because they would take credit for the team's overall effort. This is a problem for the whole team, since they have to do extra work, and it could affect the sponsor if the end result is not as good as it could have been. However, this problem can be solved with the help of our IPRO professor and team leaders. Also, we can enforce harsher penalties for when work is not done and use micromanagement skills. However, some of these solutions may be effective, but they can also reduce morale. As a team, we need to hold ourselves accountable to our work, so we can all function as a team.

How communication among IPRO team members may be impacted by our cultural diversity.

Communications issues may arise as a result of our different backgrounds. It could lead to misunderstandings and affect our team's productivity. If it does affect our productivity, it will affect our sponsor as well, since we would not be delivering a quality product. To help with this, we need to be aware of the communications boundaries that may occur, and work through to ensure team productivity does not suffer.

C. ASME Perspective Summary

The American Society of Mechanical Engineers (ASME) has a code of ethics that its members should adhere to. They are a set of guidelines to act ethically and professionally in their engineering careers. Some of these guidelines are: members should always put people's safety and health above all else, they must honor their contracts, obey the law, and any work produced has to give proper credit.

Ethics and Business Integrity issues regarding SmartSignal's desire that we not disclose that SmartSignal is our sponsor.

We will respect what SmartSignal wants with regard to proprietary information, and avoid any conflicts of
interests. If a contact does not wish to provide information without more background on our sponsor, we will not pursue that contact for more information if an agreement cannot be reached.

**How we feel about potential unequal contribution of effort among individual IPRO team members.**

Our team members should only perform tasks that they are competent. The team member should let the team know they cannot perform a task and be assigned tasks more suited to their abilities.

**How communication among IPRO team members may be impacted by our cultural diversity**

Our teams must act professionally at all times and avoid any conflicts relating to cultural differences. Cultural differences need to be put aside in order to complete our goals.

3. **Conclusion:**

Although we all studied different perspectives, we were able to discuss the issues to come up with common solutions. In regards to not disclosing SmartSignal's name, will not disclose their name to our contacts, and we will also not disclose our contacts' names to SmartSignal. We feel this is a fair solution. When we have a team member who is contributing unequally, they should be contacted to improve the situation. Fortunately, we did not encounter this problem over the course of the semester. For the last situation, cultural differences may affect our communication, and we need to be aware of this, as well any other things that could affect our communication so we can work through it. Our team critically examined these issues, and will strive to hold ourselves to the ethical standards expected of us as part of the IPRO program and the Illinois Institute of Technology community.

4. **References:**

Jones, George P., and June Ferrill. *The Seven Layers of Integrity.*