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# A Problem with the Ethics of Non-Disclosure Agreements

## Author(s)

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## Description

This example student case study from [Undergraduate Team Assignment: Ethical Dilemmas In Engineering Student Co-Op Experiences](#) describes a dilemma an engineer faces when working on a problem for a new employer and bound by a non-disclosure agreement from a previous employer.

## Body

## Background on the Case

Jeremy Wright is an entry-level engineer working for a large High-Performance Computing (HPC) company called Dynamic Computing. Upon hire, Wright signed a non-disclosure statement that excluded him from sharing trade secrets or proprietary information. This agreement did not include a non-compete clause, which would limit Wright from being employed by other HPC companies in the future. He participated in a study gauging performance on various network topologies at Dynamic Computing. A network topology is the study of the

arrangement or mapping of elements of a network, especially the physical and logical connection between nodes. A better network topology essentially means a more efficient computer. In this study, a team of a dozen computer engineers worked for several months writing software models of various network topologies. These software models were used to generate performance benchmarks for each network topology. Based on these performance benchmarks and the cost of each network topology, Dynamic Computing chose a specific network topology for the next generation of their computers. Wright left Dynamic Computing after the project's completion when he received an offer for a lead engineering position with Panther Systems Inc.

When Wright discovered the job posting with Panther Systems, it took significant soul searching to determine if he should pursue this new position. It carried risks because the company was a small startup, rather than sticking with an established leader in the field, like Dynamic Computing. After careful consideration, he decided that the possibility to obtain a project management position with a small but successful company like Panther would be a career opportunity that he should not pass up. Panther simply presented opportunities for advancement to management positions for Wright that were more significant than those that Dynamic could offer. The interviewers at Panther were impressed with the knowledge that Wright possessed about creating network topologies, and they discussed how he might lead a team to help create a topology for Panther's next line of high performance computers. Wright felt that this was the opportunity that he had been looking for to advance his career.

When Wright joins Panther Systems Inc, he is assigned as lead engineer on a study quite similar to his previous work on network topologies. His first week, his supervisors meet with him to explain that they are behind on the study and are in a time crunch to finish the project. They tell him that many parts of their development of their next generation of computers depend on this decision, but they warn him that this decision is irreversible: once they pick a topology, all their chips will be designed with that topology, and any change would be very expensive to fix. Wright is told to take any measures possible to get the project done as quickly as possible. In his interview, Wright's supervisors did not make clear how pressing their need was for a quick decision on the topology. Wright assumed that he and his team would have time to develop their own topology; instead, he is now placed in a tough ethical situation.

Wright is aware of the results of the study that Dynamic Computing used during his employment. It would be easy for him share the results of the study, and Panther Systems Inc. could choose their network topology based on these results, because the topologies in the HPC industry are transferrable. However, since he signed a non-disclosure agreement with Dynamic Computing, he has reservations about sharing the results of the study he and his team performed while there. Wright feels that this is his first opportunity to prove himself with this new company, and he also knows that Panther Systems Inc will lose competitive advantage if they do not make a quick decision. Wright fears, however, that he could face legal ramifications from Dynamic Computing if he decides to rely heavily on knowledge and insight he gained while working on the topologies at their company.

## Options

1. The first option Wright considers is simply to flat out share the results of Dynamic Computing's study with Panther Systems. Wright could recommend that Panther discontinue their study and choose a network topology based on the results of Dynamic Computing's study. The positive ramification of choosing this option is that Wright would save time and money for his company; the negative consequence would be that Panther Systems does not have the opportunity to individually decide on a better network topology than Dynamic's choice; it is possible that Dynamic's network topology will not be

optimal for Panther. Importantly, if Wright chooses this option, he would also be sharing Dynamic's trade secrets with Panther, thus breaking his non-disclosure agreement. This option would violate the fourth clause of the NSPE's Professional Obligations code of ethics section, which does not allow engineers to disclose confidential information about a former employer without consent. Sharing the results of Dynamic Computing would also not pass the Publicity test, the Universality test, or the Respect for persons test. Wright would not be comfortable if others found out that he took advantage of Dynamic's resources to benefit Panther Systems Inc; the engineering profession would suffer if all engineers chose to ignore their nondisclosure agreements, and using the work he did at Dynamic would not be respectful of Dynamic's rights as a company - in a sense, even the other team members still working at Dynamic have rights that Wright might be violating if he breaks his non-disclosure agreement.

2. Wright could also ask for a reassignment to a project that has less conflict of interest. This would remove Wright from the ethical dilemma, but he may be of the most use to his company if he remains working in his area of expertise, which is network topology development. Since Panther Systems Inc. hired Wright specifically to work as the lead for this project, they will likely be unwilling to reassign him. It is of course possible that they hired him precisely because they expected him to violate his non-disclosure agreement. If he insists on a reassignment, he may even lose his job if it appears that he is unwilling to perform the duties required of him.
3. Wright could decide to manage his project team as if he has no prior knowledge of Dynamic Computing's topology. If this is the path that Wright chooses, he may not get the project done as quickly as his supervisors would like. Management is aware that Wright has experience in creating topologies based on his previous work experience, and as a result, they will expect Wright to be able finish the project quickly. Wright may be seen as a poor project manager if he is not able to meet these expectations. Wright must decide if he should (and can) set aside the knowledge that he possesses to pretend that he does not know topology development methodologies used at Dynamic Computing.
4. Another available option is to ask Dynamic Computing for permission to use the results from their study on network topology. The company may refuse, or they may require him to pay for the use of the network topology research results. A consequence of this option is that Dynamic would now be aware of

Panther Systems' interest in their topology, and they are now more alert to the potential for Panther to be infringing on their products in the future. Dynamic Computing would also be aware that Panther Systems is preparing to compete with them in the market with a similar product. Regarding ethical considerations, however, this option fits under the third tier of the Professional Obligation section in the NSPE guidelines, which require consent for confidential information disclosure.

5. Wright's final option is to go back to the team that hired him at Panther and explain the dilemma that he is in, and make clear that he is concerned about the non-disclosure agreement that he signed. But rather than just stop there, he could offer a way forward. He could ask if they feel it would be acceptable for him to introduce his team to testing methods that worked in Dynamic Computing's decision, but not actually use the results of Dynamic's study. He could demonstrate his experience in this area by guiding his team through making an educated decision on topologies; for example, he could explain the importance of comparing the factors of cost and efficiency. Wright would reference his experience from his previous employment, but never reveal Dynamic's decision. In other words, he could help guide his team without giving them answers. Wright could remind his team that not all topologies work the best for every company, and he and his team would proceed with research on their top three choices. His team would thus make a decision slower than if he were to reveal Dynamic's topology choice, but his team also would have had the advantage of efficiently narrowing down to three options earlier than they would have without Wright's help.

## **Analysis of the Options**

Wright chooses option number five. He decides that leaving his job because of an assignment in his area of specialty would be a risky career choice; he has already relocated, and he believes that there is a better option than leaving his new job. Since Wright did not sign a non-competing clause with Dynamic Computing, he uses his experience with Dynamic as a guide to lead his new team and employer to the best decision. He can demonstrate knowledge gained through his previous employer while also learning the best ways to lead a team and study through his current employment. Choosing option number five does not break any NSPE ethics codes, and this option passes both personal and professional tests (such as the

Harms test, Publicity test, Respect for Persons, Universality, etc).

Wright justifies why each of his other four options is not the best choice in his situation. His first option proved to be the worst: sharing the results of Dynamic's study would be Wright's acceptance of the "do nothing" decision. Wright would give in and accept the challenging and unethical pressure of his supervisors at Panther Systems Inc. If legal charges were pursued by Dynamic computing, Wright and his new company could face serious problems. By sharing the results of his previous employers' study, Wright would be breaking his non-disclosure agreement. Wright decides that explicitly using the trade secrets of Dynamic would not pass the NSPE Code of Ethics, the Publicity test, or the Respect for persons test.

Wright also decides against option number two to ask for a reassignment within Panther Systems Inc. Since Panther Systems Inc. hired Wright specifically to work as the lead for this project, they will likely be unwilling to reassign him. If he insists on a reassignment, he may even lose his job.

Option number three would have required Wright to disregard any previous knowledge of topologies in approaching his new assignment at Panther Systems Inc. This option does not take into account the reason why he was hired by his current employer. One even wonders if it is possible for Wright to completely disregard his previous knowledge; it certainly isn't efficient - but is it the only way he can ethically do this work? Wright knows he would not benefit his company by taking the slowest approach to their study and oppose using all past employment experiences to help his company do well.

Wright almost chooses option number four, which would require him to ask Dynamic Computing for permission to use the results of their study. He decides against this choice because it may result in more miscommunications than expected: Wright could alienate his previous employer just by asking to use their private information for another company. Even if Dynamic Computing allowed him to use the results of their study, though this is unlikely, Panther Systems Inc would most likely face a huge cost for this information. Panther also exposes their intent to compete in the market and alerts Dynamic Computing to their intention to use a similar topology on their computers.

In the end he decides to tell management at Panther that he is aware of a potential ethical problem with the work they have assigned him to do, but he is also

considering an approach that would not be a breach of his non-disclosure agreement. It would be up to them to decide if the approach he has in mind would be acceptable, and he may even find an opportunity here to build their trust if he manages the communication well.

Several points in this case exhibit poor communication choices, both on the part of Panther Systems Inc supervisors and interviewers and on Wright himself. During the interview process, Wright did not thoroughly explain the expectations that he held regarding the responsibilities and duties of his new job with Panther Systems. This ambiguity on Wright's part allowed the hiring staff to put him in a position that created conflict of interest between Wright and the project's goals. He should have specified in the interview how much time he would need to successfully complete an independent study of topologies; this could signal to his employers that he is not willing to take the risk of sharing information from his previous employer.

### **Question for the Other Students in the Class:**

1. Is Option 5 indeed the most ethical option, or is it possibly a way of rationalizing behavior that others might see as breaching his non-disclosure agreement?
2. Is it rational to believe Wright can lead his team to better answers without giving away information he gained at his previous employer?

### **Questions from Other Students in the Class:**

1. Why didn't Wright clarify his job responsibilities and project timeline in his interview? Wouldn't that have avoided this whole mess?
2. Did Wright's supervisors at Panther Systems avoid talking about specific properties of the topology selection study in order to suggest that Wright should use the decision from Dynamic Computing?

### **Notes**

Credit for this case should go to the student team from EPD 397 who delivered this case on November 17, 2008. The team agreed to allow this case to be reprinted but requested that it be distributed with their names removed.

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