

¹Amirix Systems Ltd 1 – Teaching Note

This teaching note was developed to guide the use of the multimedia case entitled Amirix Systems 1 for instructional purposes. It is not the purpose of this material to serve as an illustration of how to effectively or ineffectively address a managerial situation.

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SUMMARY

Prior to her retirement Sandra Greer ran a small but successful Halifax, Nova Scotia based company, Amirix Systems Ltd. that is a world leader in the niche market of underwater acoustic telemetry equipment. Her company's products sold under the Vemco produce line enable researchers to track fish around the world. One Fall, she discovered that a company in Australia had copied some of the Vemco products and was selling counterfeit copies. Her challenge was what to do about the situation. Advice is being sought as to how to proceed in resolving this real life issue. Students are offered access to a set of transcribed video clips that outline the issue and its cause along with providing context for the issue. In order to arrive at alternative solutions and justify their choice of a solution, students are expected to use sources of information not found in the case.

KEYWORDS Marketing, Ethics, Counterfeiting, Underwater Acoustic Telemetry, Fish, Transmitters, Receivers

CASENET VIDEOS

Each video in this multimedia case features a segment of an interview with one of the organization's key decision makers. The videos describe:

1. the *Issue* facing the individual or organization
2. the *Cause* of the issue
3. *Background* information for the individual, organization and industry
4. *Alternatives* for addressing the issue
5. A suggested *Solution* and justification

Transcriptions for each video are also available. Students may not access the *Alternatives* and *Solution* videos or transcripts.

OBJECTIVES FOR TEACHING

There are a number of instructional uses for this case.

1. It may be used to improve student knowledge of underwater acoustic telemetry

¹ The Author wishes to thank Sandra Greer for her support of this project.

2. It may be used to improve student knowledge of a relatively small company developing and selling unique technologies
3. It can serve as an excellent teaching vehicle to help students understand the decisions faced by managers seeking to grow their companies.
4. It can be used to stimulate discussion about challenges faced by managers seeking to sell products to non-traditional markets
5. It serves as an example of unethical behavior in the marketplace
6. It can be used as a vehicle for teaching students about the challenges of addressing counterfeiting in the international market place.

POSSIBLE TEACHING STRATEGY

This case is ideal for in-class case analysis or as an assignment. Assuming an 80 minute class, here is an approximate class schedule:

Time (minutes)	Task
5	Introduce case and divide students into groups.
15	Students view <i>Background</i> case videos and make notes.
5	Instructor plays the <i>Issue</i> and <i>Cause</i> clip(s).
25	Students identify alternatives, a solution and rationale.
20	Instructor guides a discussion around alternatives, solution and rationale.
10	Instructor plays the <i>Alternatives</i> and <i>Solution</i> clips.

If the case is used as an assignment, the instructor may want to focus assessment on:

- 1) **Decision-making process.** The instructor would evaluate writing style, appropriateness of information sources, alternatives, solution and rationale. This approach recognizes that the alternatives and solutions offered in the case are not necessarily optimal, and other choices may be equally effective. Students can be rewarded for their selection of decision making approaches, analytical frameworks and cited reference material.
- 2) **Outcomes.** The instructor would evaluate how closely student responses match those offered in the *Alternatives* and *Solution* video clips. Or, the instructor could use the insight of an existing research paper or analytical framework as the basis for judging outcomes.
- 3) **A combination of process and outcome.** The instructor may apportion the grade between process and outcomes.

POSSIBLE QUESTIONS FOR ASSIGNMENTS AND IN CLASS ANALYSIS

For the issue outlined in the case, students can be asked to identify a set of alternatives available to organization or interviewee, suggest a solution and then explain why they chose that solution and not others. Other questions that will help students prepare for their case analysis include:

1. What are the key points highlight in the case?
2. What should VEMCO do about this counterfeiting incident?
3. What stakeholders should be informed of this counterfeiting activity?
4. How might the behavior of the counterfeiting organization be characterized from an ethical perspective

CASE ANALYSIS

Issue: The *Issue* and *Cause* video clips outline the problem or challenge of the case.

- My name is Sandra Greer president and CEO of Amirix systems and its operating division of M-Co. The issue that we are dealing with here is an Australian manufacturer who has reverse engineered our coding system which is proprietary to our equipment and are attempting to sell that product into the Australian market at a reduced price. It is an important issue because our system is one that is fully integrated. Our transmitters work directly with our receivers and in buying our equipment, a marine biologist is confident that they are buying a system that is of high quality. When they tag a fish with one of our tags they need to know well that the fish that they are tracking is in fact the one that they tagged So in a situation where someone might try and reverse engineer or clone our product, they may in fact be putting duplicated IDs in the water, which jeopardizes the science and the research that is being conducted.'

Analysis

To start their analysis of the case, students should view the *Background* video clips. These clips should help students grasp the following points or case facts.

- Amirix sells scientific instruments in the form of fish tags (receivers) and transmitters
- The market for these products is global but limited primarily to researchers
- Over 20,000 receivers are in the oceans around the world
- Amirix exports 75% of its products to customers in 60 countries around the world.
- The business is a research intensive one

Researching information sources other than the content of the cases should enable students to garner the following insights: (Source: <http://oceantrackingnetwork.org/>)

- The Ocean Tracking Network has been created to monitor fish species around the world
- It has placed receivers in five oceans
- Increasing technology usage is widespread as evidenced by the 3rd International Conference on Fish Telemetry

- The Canada Foundation for Innovation (CFI) provides the support for the global acoustic receiver infrastructure.
- OTN's underlying concept is to share costs, resources, expertise and data with global partners to enable the creation of a global acoustic telemetry network.

With this information in hand students can be challenged to identify an analytic framework that will help them organize their thoughts.

- A clear electronic paper trail connects the counterfeiting company to VEMCO products. Sandra Greer has communicated her company's concerns to the counterfeiter and to its customer base. What stakeholders should be informed of this counterfeiting activity? The instructor may ask the students to read a 2007 KPMG White Paper on counterfeiting. This paper suggests that Vemco. might focus its communication activity on alerting its employees, its business partners, its independent distributors, national and local governments in Canada and Australia and its customers. How might the behavior of the counterfeiting organization be characterized from an ethical perspective? Instructors might ask their students to read Paine (2007) description of an ethics framework or Paine, Deshpande, Margolis and Bettcher's (2005) HBR article entitled 'Up to Code: Does your company's conduct meet world-class standards'. Students can assess the counterfeiting organization's behavior through the lens of the principles of Global Business Standards Codex described in both articles. Students might be asked to comment on which principles appear to apply in this instance. An argument can be made for the relevance of the principles of transparency, dignity, citizenship and responsiveness. Students might also approach the question of ethics by examining the behavior of the counterfeiting company in terms of four basic questions that Paine (2007) suggests should be posed. These include. Is the action consistent with the actor's basic duties? Does it respect the rights and other legitimate claims of the affected parties? Does it reflect best practice? Is it compatible with the actor's own deeply held commitments? Although students cannot answer the last question, they should be able to create responses for the first three questions.

Alternatives:

Effort focused on research coupled with analysis should enable students to present a series of options. These can be compared to the options offered by the interviewee which are also summarized below and found in the *Alternatives* video clip.

- What might Sandra Greer and her team do about this counterfeiting incident? A 2008 article by Barry Berman in *Business Horizons* journal suggests some activities that can be undertaken by Greer and her team although the relatively small size of her organization is a limiting factor. Her team can create a consumer education program to build awareness among its existing and potential client base and its resellers of the existence of counterfeit products and the dangers of purchasing them or selling them. In the latter case these include possible lawsuits for breach of implied warranty, negligence, concealment or consumer fraud. As part of this program Vemco can also present some of the signs of counterfeit products such as very low prices. It can build authentication software into its products. It

can create a telephone hot-line to deter future counterfeiting activity. It can also protect itself by continuing to manufacture its own products and not outsource that activity. It can track websites seeking other counterfeit activity related to its products and Vemco can take legal action in the Australia court system.

Solution:

The *Solutions* video clip offers the interviewees' solution to the issue along with a rationale. A summary of the response is highlighted below, this can be compared to the student response and explanation.

- The option that we chose was to educate and communicate with the user community. It is a small community. We felt that armed with the truth and factual information they would not likely be buying clones that are not technically compatible believing claims that were made by this manufacturer. So we have taken on quite a communications campaign to approach everybody and have them understand the dangers. We chose not to collaborate with this organization because it is difficult to work with an organization that you know has stolen your intellectual property. It is hard to trust that organization. And quite frankly they do not have much to collaborate with. They have stolen our technology. We have chosen not to consider an acquisition. Again we have nothing to acquire here. We would be acquiring a reverse engineered version of our own product. So there is no value in acquiring this organization. They have no market share so there is nothing to pay for. We have talked about litigation. We have chosen at this point not to litigate. The product that we have is not patentable. It is an algorithm and a system that works with our receiving equipment as well. We have been told that we cannot patent that. So we can take other forms of legal direction and we may do that. We just have not done so to this point. We have approached this organization and others with the idea of licensing a group of tags and charging them for those tags. Our understanding is that would rather take the technology than enter into a legitimate business relationship. Technological innovation is what we have developed as well and we are protecting our intellectual property more and more today but we have not developed anything at this point in time that can shut them out.

SUGGESTED COURSES

We suggest that this case would be suitable for a number of courses. These courses include:

- Introduction to Management
- International Business
- Ethics
- Introduction to Marketing
- Business Strategy

ADDITIONAL RESEARCH

The case offers students opportunities to undertake interesting additional research.

Students may want to delve deeper into how managers make decisions. Classic approaches to decision making include works by Cyert and March (1963) and Tversky and Kahnemann (1974).

Students interested in learning more about industries in general might make use of numerous online information sources some of which are noted below.

High Beam Business, <http://business.highbeam.com/industry-reports>, Industry Overviews
Plunkett Research, <http://www.plunkettresearch.com/>, Industry Overview
Value Line, <http://www.valueline.com/Stocks/Industries.aspx>, Industry Overviews

Other important sources include:

- Government websites
 - Natural Resources Canada (<http://www.nrcan.gc.ca>)
 - Statistics Canada (<http://www.statscan.gc.ca>)
 - OECD Guidelines for Multinational Enterprises
http://www.oecd.org/document/18/0,3746,en_2649_34889_2397532_1_1_1_1,00.html
 - World Intellectual Property Organization, Anti-piracy outreach aimed at consumers. http://www.wipo.int/ip-outreach/en/tools/guides/examples/ip_respect/consumers/
- Industry Association Websites
 - Fish Aggregating Devices (FADs) as instrumented observatories of pelagic ecosystems (FADIO) (<http://www.fadio.ird.fr>)
 - Ocean Technology Network (OTN) (<http://www.oceantrackingnetwork.org>)
 - Pacific Ocean Shelf Tracking Project (POST) (<http://www.postcoml.org>)

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