ILLINOIS INSTITUTE OF TECHNOLOGY

Web-Based Supervisor, Management and Leadership Training

Final Report

IPRO 306

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Section 1.0 Introduction

IPRO 306 sought to develop a web-based supervisory, management, and leadership training product for next generation of business professionals. The training we developed is both fast paced and innovative, fitting the needs of both the employer and the employee.

Section 2.0 Background

Over the past few decades, there has been little innovation in supervisory, management, and leadership training. In general, the same approaches are taken to the same issues year after year during training seminars, leadership retreats, and role playing exercises. The workplace is changing, but training delivery methods tend to lag behind. Furthermore, today's workforce is busier than ever before. It is becoming increasingly difficult to schedule time for intensive training seminars, and the costs of many of these programs are severely prohibitive. This outdated training, combined with a lack of time and resources, gives rise to a dire need for innovation. Many training programs have been developed; classroom-based instruction still dominates leadership training, but some programs explored the use of multimedia through programs on the internet or compact discs. Few of these new programs have been tremendously successful, however, primarily because they often attempt to copy direct information from lecture or book-based instruction to the multimedia format.

We believe that the solution to these problems lie in a two-fold approach. First, new training must be innovative, not merely a rehash of previous techniques. This new program must be relevant to the vast majority of the issues prevalent in today's workplace, not just a guide of how to handle a few specific dilemmas. Secondly, this new training program must be fast-paced and require many very short sessions rather than the traditional lengthy sessions. Thus, companies will not be forced to set aside several hours or even days to devote to training of its supervisors, managers, and leaders. Many executives today do not believe they have the resources for their companies to remain competitive if they allow many of their employees to stop working for such long times; the present-day work culture mandates that training be "on-the-go."

Section 3.0 Purpose

The IPRO 306 team decided to confront the challenge of creating a completely novel training program coupled with an innovative training delivery method over the course of two semesters. Our goals for this semester were to select a delivery method, to begin writing the training programs, and to create training modules that would serve as exemplars for training modules developed next semester.

While other training programs have begun to utilize computer technology, our group elected to go one step further in the delivery of training programs – to personal digital assistants and cell phones. This would enable us to create programs that are short and simple, and that may be accessed at any time of the day, almost anywhere. One innovation of this goal is to allow training to occur when the trainee most desires. For example, one manager may prefer to watch a five-minute training session twice a week while riding a train to work, another may enjoy starting his workday with a training session, and others may wish to do all of their training on the weekends. This design would allow every trainee almost complete freedom in selecting their own unique training regimen.

To accommodate the flexibility of the training program, our team decided to create a large number of short training modules. A few of these modules were to be scripted and adapted into an actual, functional, module which would serve as models for the spring 2008 continuation of this IPRO.

Section 4.0 Research Methodology

The IPRO 306 group conducted three primary areas of research: delivery methods, leadership literature, and training literature. The delivery methods research was conducted largely by IT subgroup members, and included the investigation of numerous animation programs and their technical and budgetary feasibility to our project. The leadership literature research was conducted by all members of IPRO 306, with certain members from the writing and development sub-team specializing in this topic. These investigations served to familiarize IPRO group members with popular theories of leadership and to acquaint us with

the merits and drawbacks of each theory. Lastly, members of the writing and development sub-team conducted research into training literature, which included the comparing of IPRO 306 objectives with other leadership training programs.

Section 5.0 Assignments

Tasks were distributed between two primary teams, Information Technology and Writing and Development, each of which had a team leader. The breakdown of these teams was as follows:

Sub-team – Information Technology	**Sub-team – Writing and Development**
Team Leader: Jeff Engel	Team Leader: Kelleny Allen
Michael Greiling	Andrew Mehr
Julian Hays	Andrew Hofland
Florence Lee	Michael Lagiglio
Adam Kadzban	Nivedita Chandrasekharan
	Elizabeth Moss

The IPRO operated according to these groups until the middle of October when we found it necessary to divide both groups further to adequately accomplish many of our more specific tasks. This second-level division created the following collaborative groups: Digital Media (Adam and Julian), Software (Jeff, Florence, and Michael G.), Writing (Kelleny, Nivedita, and Elizabeth), and Research (Andrew M., Andrew H., and Michael L.).

Our IPRO 306 group followed the plan listed in the Midterm Report quite closely in most regards. Some of those goals that we achieved as expected were to:

- maintain meeting minutes,
- utilize the critical incident technique,
- select appropriate workplace situations for the training modules,
- write scripts for the critical incidents and the full modules,
- create samples using various animation software
- create the training website
- test the training material on laptops, PDA's and cell phones, and
- complete the IPRO deliverables.

The only significant point of departure from our Midterm Report related to an obstacle that will be mentioned in Section 6.0 below – the switch from animation to video.

Section 6.0 Obstacles

Indisputably, the largest obstacle that hindered our progress in IPRO 306 regarded the delivery method of the eventual training program. The initial assumption of the group was that we would create a partially animated training program. However, we were unsure what program would be used to generate the required animation. After we had compiled and selected particular critical incidents and after we had scripts prepared for two modules, we had still not resolved the animation issues. Our group was unable to progress significantly towards the end-of-semester objectives until these issues were settled. After much debate, we concluded as a full IPRO, to abandon animation in favor of video. Once the animation obstacle had been overcome, the IPRO again progressed rapidly towards the completion of our semester goals.

A related obstacle we encountered regarded the use of the Valve animation software. This was the type of animation preferred by the IT subgroup, but it was unclear whether the licensing would cover this IPRO project. The cost of the full professional license was well beyond our budget ($500,000), so we contacted Valve asking for clarification of their policies. They did not reply in a timely manner, which is part of the cause for the significance of the delay from delivery method deliberation. It remains unresolved as to whether the Valve software would have been a viable alternative to video.

Section 7.0 Results

The research conducted by IPRO 306 served, foremost, to familiarize group members with the practices, methods, and theories of leadership, management, and supervisory training in organizations. Additionally, it reinforced the conception that the final objective of creating a training program to be delivered primarily through PDA's or cell phones was indeed an innovative design. Lastly, the IT research pushed the IPRO 306 group to the unfortunate realization that animation was not a viable option for this project, given our particular group

dynamics and budgetary limitations.

We have selected to deliver our training modules over the internet and have maintained the objective of ensuring that they are easily accessible on phones and PDA's. Our interface currently works best on computers, PDA's, and high-end cell phones (e.g. iPhones). IPRO 306 intends for these modules to be available to less high-end cell phones but no usability testing on these particular devices has been completed this semester.

IPRO 306 this semester may be seen as a proof-of-concept in the development of a mobile-based leadership training program. With greater funding and an artistically talented team of animators, this project could be completed using available animation software. Without approval from Valve, and without a team of animators, our IPRO was obliged to make an undesirable switch to video production. We have demonstrated that a training program of our intended design is possible, but our IPRO cannot produce an ideal or marketable product given the aforementioned constraints.

Section 8.0 Recommendations

Any group attempting to create a leadership, management, or supervisory training program to be delivered via mobile devices with a significant amount of animation should focus on the technical difficulties of such a project. Professional animators or a professional license to software similar to Valve should be deemed a prerequisite to beginning a project of this nature. This IPRO is not, as was originally intended, going to continue in the spring of 2008. However, it may continue in the fall of 2008, again under the direction of Dr. Stanard. If this does occur, the focus will be transferred from the animation or visual aspects of the training modules to text and module development, with animation as serving a merely supplementary role.

As noted in Section 7.0, further testing with low and moderate quality cell phones should be completed to verify the functionality and the quality of the interface design. Even with a greater focus on text-based training, this will be vital to the success of the project.

Section 9.0 References

The most substantial source for leadership literature was Peter G. Northouse's (2004) *Leadership, Theory and Practice, Third Edition.* Thousand Oaks, CA: Sage.

Much of our training literature was available in Irwin L. Goldstein and J. Kevin Ford's (2002) *Training in Organizations, Fourth Edition.* Wadsworth.

Section 10.0 Acknowledgements

We would like to thank William Doster and Limey Nargelaneous, two of the actors in our videos. Each made greatly appreciated sacrifices, including travelling to Chicago simply to assist our IPRO.

We would also like to acknowledge our adviser, Dr. Steven J. Stanard, who was an actor in the modules, provided the funding for the project, and helped the team achieve its many objectives.

Lastly, we are grateful to our family and friends who provided many useful critical incidents, to IIT and the IPRO office specifically for providing us with the opportunity to pursue this project, and to all of our judges and guests who took an interest in our project and our presentation.