

CONCEPT PAPER

OJT Program for UP Industrial Engineering Students of IE155: Industrial Systems Design in the Department of Public Works and Highways

Background

The Department of Public Works and Highways (DPWH), thru the Road Information and Management Support System (RIMSS) project, has employed Business Process Reengineering (BPR) to improve the quality and delivery of its services enabled by Information Technology (IT). The RIMSS project was started in 1997 up to 2007 thru the World Bank (WB) funded National Road Improvement Program Phase I (NRIMP1). Continual improvement of these reengineered processes and enhancement of enabling technologies are being undertaken under the WB's National Road Improvement Program Phase II (NRIMP2) via the Institutional Capacity Development (ICD) component.

To strengthen and institutionalize business process improvements in the Department, a new office, the Business Innovation Division (BID), was created under the Information Management Service (IMS) by virtue of the Department's approved Rationalization Plan (RatPlan). It is BID's responsibility to sustain the institutional capacity development (ICD) efforts done during NRIMP-1 and NRIMP-2 and at the same time introduce creative and innovative solutions for the entire Department.

Objective

To network with the University of the Philippines (UP), the country's premier educational institution, by offering UP Industrial Engineering students of IE155: Industrial Systems Design a venue for the practical application of the theories, principles and models learned in school. This will also complement the BID's efforts toward continuous process improvement initiatives.

The OJT Program Outline

1. The IMS shall assign the students to study the "as-is" situation of a particular process area.
2. The students shall submit a Recommended Process Improvement Report with a discussion of the following topics at a minimum:
 - a. "As-is" analysis (current system design and problem statements)
 - b. "To-be" recommendation report (proposed system design and other recommendations)

The Program is expected to be completed within 528 hours or 66 working days.

The University's IE objectives¹ of (1) increase productivity, (2) to eliminate waste and non-value-added activities, and (3) to come up with the optimum use of scarce resources that would bring out the best result, is similar to the goals of the different business process reengineering

¹ <http://updieor.org.ph/about-us/definition-objectives-of-ie>

projects. Using the theories and knowledge acquired from the University and connecting it with actual situations/realities in the Department, the students are expected to analyze existing process areas and to recommend innovative solutions to improve these processes.

Expected Benefits from the Program

1. A solid training and exposure for academically outstanding IE student by providing them a venue to challenge and test their schooled-knowledge and applying their learning to real-life workplace situations;
2. Attract brilliant and service-oriented individuals to join the government workforce and contribute to nation-building as government is becoming one of the most dynamic sectors in the country. (*Reforms had been implemented to improve the working conditions for civil servants; currently, salaries earned by professionals in government are now getting competitive with what the private sector offers.*)
3. Open areas and opportunities for collaborative actions/projects with learning institutions/ agencies/organizations for mutual enrichment and development.

Support from the Information Management Service (IMS) of the DPWH

1. IMS shall provide the students a work area and connection to the Department's communications network, including access to the internet.
2. IMS shall make available process improvement related documentations to the students for reference.
 - a. *The Department has invested heavily in business process reengineering projects enabled by information and communications technology. These projects are well documented and the following information are readily available:*
 - b. *"As-is" analysis*
 - c. *"To-be" recommendation report*
 - d. *Process Flow*
 - e. *Data Flow*
 - f. *The information provided by the different documentations can enable the IE students to learn how these process reengineering projects were introduced, and the strategies used to implement them in a bureaucratic environment. They can also study best practices worldwide and how these were adapted and configured for the Philippine settings.*
3. IMS shall provide a half-day orientation on the history, mandate, mission, vision, organizational structure and functions of the DPWH; and overview of the reform efforts and business process improvements projects in the DPWH.
4. IMS shall assign a coordinator for each study group with the following responsibilities:
 - a. Assistance in liaising with the owners of the identified process areas;
 - b. Review and provide feedback to their findings if the students so desire; and,
 - c. Conduct a coaching and mentoring session upon the students' request.