**Teaching Note**

**CHAMPAIGN PARKING ENFORCEMENT**

**General objective**

This case trains students to recognize objectives and identify risks that threaten the achievement of these objectives. It also teaches them to analyze risk by assessing the likelihood and magnitude of identified risks. Furthermore, it trains them to think of control improvements. Specifically, it requires them to consider the effectiveness and efficiency of control mechanisms.

Finally, it provides the students with an opportunity to practice process mapping and data flow charting.

**Questions**

1. Create a process map and a data flow map for the Parking Enforcement Division. Create a column for each involved party.

*See Exhibit 1 & 2.*

1. Indicate the accounting clerks’ objectives for the cash collection process.

*The accounting clerks’ must collect, record and deposit all parking payments completely and accurately, while ensuring validity, existence and presentation. Furthermore, the accounting clerks’ must ensure security of all records and payments.*

* + *Validity / Existence: All recorded transactions actually occurred and events are the ones that should have been recorded*
  + *Completeness: All valid transactions and events have been fully recorded, and none are omitted*
  + *Valuation: Measurements of transactions and events are properly calculated using appropriate measurement policies and procedures*
  + *Presentation: Transactions and events are properly categorized in the measurement system taxonomy and recorded in the proper time period*
  + *Security: Information system elements are protected from unauthorized access, entry disclosure or destruction.*

1. Identify risks that could threaten the achievement of these objectives. Create a risk map indicating the magnitude and frequency of the risks.

*Some of the possible risks that student could identify:*

1. ***Employees stealing cash***
2. ***Mistakenly under-recording over-recording payments***
3. ***Purposely erasing records (of friends)***
4. ***IT failure***

IT

Failure

Frequency

(Likelihood/Uncertainty)

Employee cash theft

Recording mistakes

Erasing records

Magnitude

(Significance/Impact on goal)

1. Make recommendations for control improvements and indicate how the controls change the risk map (i.e. reducing frequency, magnitude or both).
2. ***Employees stealing cash payments***
   * *Separation of duties (reduce frequency)*
   * *Supervisor / Assistant random checks (reduce frequency)*
3. ***Mistakenly under-recording over-recording payments***
   * *Supervisor / Assistant random checks. (reduce frequency)*
   * *Peer review system (reduce frequency)*
4. ***Purposely erasing records***
   * *Supervisor / Assistant random checks. (reduce frequency)*
   * *Peer review system (reduce frequency)*
5. ***IT failure***
   * *Backup of system (reduce magnitude)*
   * *Regular checks for viruses etc. (reduce frequency)*

IT Failure

Frequency

(Likelihood/Uncertainty)

Employee cash theft

Recording mistakes

Erasing records

Magnitude

(Significance/Impact on goal)

*It is important that the students consider both the effectiveness and efficiency of their suggested controls. The money amounts at risk at the parking agency are not immense and very expensive monitoring systems to for e.g. reduce the risk of employee theft are therefore not appropriate. Students should also understand that risks can be reduced but no completely alleviated.*

Also think risk of hackers stealing personal credit card information.

Suggestion: give bonus/less penalty for internet use so only one clerk can be used.