

Qrb 501 inventory system



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Inventory Management Problem QRB/501 August 30, 2010 Abstract The purpose of this paper is to discuss an inventory management problem that currently exists within the California Department of Corrections and Rehabilitations (CDCR). This paper will focus solely on a sub-division of CDCR.

The sub-division that will be discussed in this paper is North Kern State Prison. A proposal will be created to describe the organization as well as the inventory problem it faces. The proposal will address the benefits that are motivating the organization to implement a solution.

Summer Historical Inventory Data will be used along with the Business Inventory System (BIS) to analyze the inventory problem. With the implementation of this proposal the forecasting of future inventory costs will be more precise.

Inventory Management Problem North Kern State Prison (NKSP) is a sub-division of California Department Corrections and Rehabilitation (CDCR). NKSP was open in April 1993 and covers approximately 640 acres. NKSP currently employees 1, 008 custody staff and 1, 557 non-custody staff. NKSP houses approximately 5364 inmates. The annual operating budget for NKSP is \$171 million.

NKSP functions as a reception center for the processing of incoming inmates from Southern and some Northern counties. NKSP also functions s the Central California Transportation Hub for CDCR. NKSP went live with a new inventory system called Business Inventory System (BIS) on March 1, 2010. This system has been adopted by CDCR to ensure that all prisons are

uniform in their inventory. This inventory system has been utilized by numerous well known corporations, who have commented that this system is advanced and has the capability to handle every aspect of a company's need.

Given that NKSP inventory includes everything from ordering food, office supplies, and medical supplies to armory equipment. With this vast inventory the need for a system to collaborate with accounting, procurement and warehouse as well as having the capability to account for stock, re-ordering-, expiration and delivery schedules was imperative. The new inventory system now faces problems with being compatible to the previous CDCR inventory system. The problems that our organization is facing with the new inventory system are that the size of units does not match from the old inventory system to the new inventory system.

There has been a lost of history from the transudation from the old inventory system to the new inventory system. The lost of history is directly to the both systems not being compatible to one another. The web server support often goes down. Although the organization has faced inventory problems with the new inventory system there have been benefits that have motivated the organization to implement a solution. The benefits of this new inventory system is that it is paper less which is a cost saving mechanism.

This new inventory system allows for in dept information through one entry, allows for real time where as with the prior inventory system it could be 45 - 60 days before every entity was able to view all transactions. The inventory system has the ability to drill down to allow for a viewer to see substantiate

documentation. The drill function has alleviated staff from having to contact other staff for additional information. The BIS inventory system allows for better control over all of our assets. Our organization has decided to figure out a solution in order to maximize the use of this new inventory system.

The management team as well as our Informational Technical (IT) Support team met with the manufacture company to discuss the breaking down units of measurement to conform to CDCR language. The resolution was that the system would be updated to allow for more CDCR languages. The changes that could not be updated will be noted in the text box field to inform vendors of our measurements. The management teams also met with the vendors to discuss the ability to order by the unit so that our new system would accept the orders.

Through the meetings and discussions we where able to come up with a solution that would allow for NKSP to utilize the new inventory system without it impeding upon our budget. The current worth and future sum of the CDCR inventory system is utilized to calculate the value of money in which is being invested to organize a budget plan. The histogram in figure 1 was created to show the present value of money and future forecasting. The value of future investment into the inventory system is to identify the cost of resources for all departments and appropriate compound of interest and rates. The present value method is indicated in figure 1 that forecasting the average cash flow into the fifth year is a stable figure of 10% in reverse to the compound calculation of time value money. The capital investment of the inventory system is projected to measure through the overall stream of costs of the standard deviant in return for the figures of year one beginning

at 23686, year two 12769, year three 14752, year four 18369, and year five 13989.

The figures indicated the forecasting of future data that is accountable for the use of a discounted cash flow analysis that is being currently applied into the CDCR system. The CDCR system is an eminence inventory program that indicated data in which shows the problem and select a response for the suggested variables and figures to point out the future expense and investment of all departments resources.