System Application E-dash-board on the Performance of Worker Motivation as an Intervening Variable Special Child Guidance on Institutions

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Abstract

Application of the E-Dashboard System on Worker Performance with Motivation as an Intervening Variable at LPKA Class 1 Palembang. Aims to determine the effect of the implementation of the E-Dashboard System on Worker Performance with Motivation as an Intervening Variable at LPKA Class 1 Palembang. The research sample was LPKA Class 1 Palembang employees as many as 90 respondents using the purposive sampling method. The analysis of this research uses SEM-PLS, which is operated through the Smart PLS program. The results of the study show that the direct influence of the e-dashboard system variable on Worker Performance is 0.567, the effect of the e-dashboard system variable on the motivation of 0.893, and the influence of the motivation variable on Worker Performance of 0.349. The magnitude of the indirect effect of the E-Dashboard System variable on work motivation has implications for the Worker Performance of Class 1 LPKA Palembang by 0.311.

Keywords

E-Dashboard, Motivation, Employee Performance.

Introduction

The development of information technology that has been integrated with work in an organization has become a very important requirement. The use of information technology
products can save time in managing data, producing quality information, and making
decisions to improve performance. e-dashboard is one of the efforts to answer the needs of
the organization. The development of information technology allows the integration of
LPKA service data in an e-dashboard system with a centralized database, (Hadiwijaya et
al., 2021b).

Dashboards are a direct descendant of the old EIS (Executive Information System) and
DSS Decision Support Systems with improved functionality and appearance (Scheps, 2008).
Digital dashboards, usually called executive dashboards or management cockpits, provide
quick and timely access to information, and direct access to management reports. The
digital dashboard is very user-friendly and supported with graphics. Digital dashboards
allow managers to check specific reports and detailed reports, (Rainer & Cegielski, 2011).
According to (Eckerson, 2006) the dashboard has 3 main functions, namely: 1). Monitoring
Dashboard makes it possible to monitor operational processes and monitor the performance
of a metric related to the company's strategy. 2). Analysis Provides the ability for dashboard
users to explore very large and very detailed data that is very old, allowing users to evaluate
the root of a problem. 3). Management Supports all types of business processes, both formal
and informal, and allows users to communicate and share the Performance of information.
Its main purpose is to help executives direct the organization to the right decisions.
According to (Eckerson, 2006) one of the advantages of using a dashboard is that it can
increase motivation, by publishing the measures and results of performance, the dashboard
increases the motivation of people to advance in the area being measured.

Motivation is very important for a leader because leaders work through other people.
Leaders need to understand the behavior of their subordinates to influence them to work
according to what the organization wants (Effendi, 2014). According to (Hasibuan, 2018)
several factors influence employee work motivation, namely physical needs, the need to get
a sense of security and safety, social needs, the need for appreciation, and the need for
self-realization. According to (Robbins & Judge, 2017) work motivation is a course of the
power, bearing, and constancy of a person to accomplish an objective, inspiration is the
wellspring of the determinants of resolve. As per Maslow's hypothesis, there are 5
& Judge, 2017). The process of motivation is a personal/internal influence that leads to
outcomes such as choice, effort, persistence, achievement, and environmental regulation,
(Schunk & DiBenedetto, 2020). In research (Andriani et al., 2018) work inspiration has a
positive and critical impact on Performance, implying that the better the inspiration, the
higher the presentation.
Performance is the consequence of work that has been accomplished by a representative both as far as quality and amount in completing the work given to him. (Hadiwijaya, 2017; Hadiwijaya & Febrianty, 2019). There are three elements of worker Performance, in particular errand Performance, versatile Performance, and relevant Performance. (Pradhan & Jena, 2016). According to (Mathis & Jackson, 2018) there are five measurements to quantify Performance, in particular: (1) nature of work, (2) amount of work, (3) promptness, (4) participation at work, and (5) helpful demeanor. Meanwhile, according to (Mangkunegara, 2016) two factors affect performance, namely: a). Ability factor and b). Motivation factor. The capacity factor is framed mentally, the capacity of representatives comprises of expected capacity (level of intelligence) and reality capacity (instruction). Thusly, workers should be set in positions that match their aptitude. While the inspiration factor is framed from the disposition of a worker in managing circumstances work and mental perspectives.

The Child Special Guidance Institute (LPKA) is a place used to foster and educate correctional students (Andikpas). LPKA is tasked with providing services related to the fulfillment of Andikpas rights. LPKA services that are the focus of research are visits to Andikpas and processing services for leave requests, remissions, assimilation, complaints from the general public and Andikpas, as well as obtaining service user responses from questionnaires, (Hadiwijaya et al., 2021a). e-dashboard to facilitate the Performance of LPKA services in the fields of visits, complaints, requests for leave, remission, and integration of Andikpas, obtaining feedback on service Performance through filling out online questionnaires and delivering information about Andikpas records to Andikpas families, (Hadiwijaya et al., 2021b).

E-dashboard is an integrated information system designed to increase efficiency by collecting Human Resources (HR) data and to make HR documents more useful as a source of information. The quality of the system is related to the ease, functionality, flexibility, and reliability that includes the software and the quality of the processing of the system itself. (Peters et al., 2016). The quality of the information system used by the company is related to the needs and abilities of users in processing data to produce quality and useful information in decision making, (Amalia & Pratomo, 2016).

This study was conducted to analyze aspects of the implementation of the system on E-Dashboard Worker Performance with Motivation as an Intervening Variable at LPKA Class I Palembang.
Methods

Sample of this research is LPKA Class 1 Palembang employees as many as 90 respondents using the Saturated Sampling method. The data analysis technique used in this research is Structural Equation Modeling (SEM) with Variance or Component-Based (VB-SEM) approach with Partial Least Squares (PLS) technique.

Analysis and Discussion

Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis is intended to test the unidimensionality of a hypothetical development or frequently called testing the legitimacy and unwavering quality of a hypothetical build. The dimensional legitimacy trial of the builds in this review was led by taking a gander at the standard factor load upsides of every pointer in the general model (full model). The pointer is announced legitimate on the off chance that it has a standard factor load esteem more noteworthy than 0.5. The unwavering quality test is finished by taking a gander at the Composite Dependability esteem in the full model. The pointer is pronounced acceptable on the off chance that it has a worth > 0.6.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Construct</th>
<th>Loading factor (&gt; 0.5)</th>
<th>Composite Reliability (&gt; 0.7)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Dashboard System (ED)</td>
<td>ED1</td>
<td>0.787</td>
<td>0.854</td>
<td>Valid &amp; Reliable</td>
</tr>
<tr>
<td></td>
<td>ED2</td>
<td>0.801</td>
<td></td>
<td>Valid &amp; Reliable</td>
</tr>
<tr>
<td></td>
<td>ED3</td>
<td>0.748</td>
<td></td>
<td>Valid &amp; reliable</td>
</tr>
<tr>
<td></td>
<td>ED4</td>
<td>0.748</td>
<td></td>
<td>Valid &amp; reliable</td>
</tr>
<tr>
<td>Motivation (M)</td>
<td>M1</td>
<td>0.763</td>
<td>0.866</td>
<td>Valid &amp; reliable</td>
</tr>
<tr>
<td></td>
<td>M2</td>
<td>0.869</td>
<td></td>
<td>Valid &amp; reliable</td>
</tr>
<tr>
<td></td>
<td>M3</td>
<td>0.845</td>
<td></td>
<td>Valid &amp; reliable</td>
</tr>
<tr>
<td>Employee Performance (EP)</td>
<td>EP1</td>
<td>0.872</td>
<td>0.925</td>
<td>Valid &amp; reliable</td>
</tr>
<tr>
<td></td>
<td>EP2</td>
<td>0.767</td>
<td></td>
<td>Valid &amp; reliable</td>
</tr>
<tr>
<td></td>
<td>EP3</td>
<td>0.902</td>
<td></td>
<td>Valid &amp; reliable</td>
</tr>
<tr>
<td></td>
<td>3P4</td>
<td>0.929</td>
<td></td>
<td>Valid &amp; reliable</td>
</tr>
</tbody>
</table>

Source: primer 2021

Based on Table 1. Each indicator variable E-Dashboard System, Motivation, and Worker Performance has a loading factor > 0.5 so that all indicators are declared valid. The results of the calculation of reliability with Composite Reliability on the E-Dashboard System, Motivation, and Worker Performance variables show the Composite Reliability value > 0.7
so it can be stated that each variable has great dependability so it tends to be investigated further.

![Figure 1 SEM-PLS Algorithm](image)

**Test Fit Goodness of Fit Index**

To validate the overall model, *goodness of fit* (GoF) is used. This GoF index is a single measure used to validate the combined Performance of the measurement model (*outer model*) and structural model (*inner model*). The GoF index value is obtained from the *average communalities index* multiplied by the $R^2$ model.

**a. Test Goodness of Fit Index Fit**

To validate the overall model, *goodness of fit* (GoF) is used. This GoF index is a single measure used to validate the combined Performance of the measurement model (*outer model*) and structural model (*inner model*). The GoF index value is obtained from the *average communalities index* multiplied by the $R^2$ model.

\[
GoF = \sqrt{Com \times R^2}
\]

\[
GoF = \sqrt{0.882 \times 0.796} = 0.75
\]

In the calculation results show the *goodness of fit* (GoF) value is good, namely 0.75.

**b. Resampling Bootstrapping**

Given the research objectives, the hypothesis test design that can be made is a design Hypothesis testing in this study is presented given the research objectives. The level of
confidence used is 95%, so the level of precision or the limit of inaccuracy is \((\alpha) = 5\% = 0.05\). And it produces a table value of 1.96, so:

\[
\begin{align*}
\text{Table 2 Coefficient and t-count values at the 5\% level} \\
\hline
\text{Coefficient} & \text{T Statistics} & \text{P Values} & \text{Description} \\
\hline
\text{E-Dashboard System -> Employee Performance} & 0.567 & 6.049 & 0.000 & \text{Significant} \\
\text{E-Dashboard System -> Motivation} & 0.893 & 40874 & 0.000 & \text{Significant} \\
\text{Motivation -> Employee Performance} & 0.349 & 3.780 & 0.000 & \text{Significant} \\
\hline
\text{Source: primer 2021}
\end{align*}
\]

In view of the table above, the following equation is obtained:

c. Equation Sub-Structural

\[ M = 0.893ED \]

Given the sub-structural model, it can be explained that motivation is directly affected by the e-Dashboard System (ED) of 0.893. This shows that the e-Dashboard System (ED) has a positive and significant effect on the work motivation of Class 1 Palembang LPKA Employees.

d. Structural Equation

\[ EP = 0.349*M + 0.567*ED \]

Given the structural model, it can be explained that Worker Performance (EP) is directly affected by the e-dashboard system (ED) and motivation (M). The influence of the direct e-dashboard system (ED) on Worker Performance is 0.567. This shows that the e-dashboard
system (ED) has a positive and significant effect on Worker Performance (EP). While the magnitude of the influence of motivation on Worker Performance (EP) is 0.349. This means that work motivation has a positive and significant effect on Worker Performance (EP) at LPKA Class 1 Palembang.

**Direct Influence**

<table>
<thead>
<tr>
<th>Table 3 Direct Effect of</th>
<th>Employee Performance</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Dashboard System</td>
<td>0.567</td>
<td>0.893</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.349</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primer 2021

Given the results of Table 3, the magnitude of the direct influence of the E-Dashboard System variable on Worker Performance is 0.567, the influence of the E-Dashboard System variable on Motivation of 0.893, and the influence of the Motivation variable on Worker Performance of 0.349.

**Indirect Effect**

<table>
<thead>
<tr>
<th>Table 4 Indirect Effect of the E-Dashboard System</th>
<th>Employee Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Dashboard System -&gt; Motivation</td>
<td>0.311</td>
</tr>
</tbody>
</table>

Source: primer 2021

Given the results of Table 4 the magnitude of the indirect effect of the E-Dashboard System variable the work motivation implication of on Worker Performance LPKA Class 1 Palembang is 0.311.

The results of the study (Isaac et al., 2017) show that there are four principle results, to be specific (a) real use emphatically affects client fulfillment, task-innovation fit (TTF), and Performance sway. (b) client fulfillment impacts Performance. (c). TTF emphatically affects client fulfillment and its effect on Performance. (d). client fulfillment and TTF intervene in the connection between real use and Performance sway. Research (Tovar et al., 2017) clarifies that client fulfillment results are affected by framework quality, data quality, administration quality backings hierarchical manageability. Nonetheless, it is unique concerning the aftereffects of examination (Stefanofic et al., 2016) that client fulfillment is not impacted by data quality and administration quality, yet framework quality influences Performance. Research (Widagdo et al., 2018) states that work inspiration has a positive and critical impact on worker performance. A person's motivation is strongly influenced by
psychological conditions such as stress. Stress is a condition of discomfort to a person in the surrounding environment (Suhron, 2018; 2019), long-term stress not only affects employees but also their families (Yusuf, 2018; 2020). Employees who have psychological disorders can have an impact on their self-concept, namely their self-esteem (Suhron, 2017; 2016) so that motivation decreases due to the disorder. Meanwhile, research (Mariati & Mauludin, 2018) states that work motivation does not affect employee performance. Likewise, research (Lindawati & Parwoto, 2021) states that work inspiration straightforwardly has an immaterial impact, however, work fulfillment has a positive and critical impact on worker performance.

Conclusions

Given the results of the research and the results of the examination that has been done, the accompanying ends can be drawn: the e-dashboard system variable has a positive influence on employees and the e-dashboard system variable has a positive influence on motivation and the influence of motivation variable on employee performance. E-Dashboard System has an indirect effect on work motivation, its implications for Worker Performance LPKA Class 1 Palembang.

Acknowledgment

On account of RISTEKDIKTI who has financed this Applied Exploration with the goal that this examination can be done appropriately and add to accomplices, in particular, LPKA Class I Palembang.

References


