THE INFLUENCE OF MANAGEMENT COMPETENCE, EMPLOYEE SALARY ON TURNOVER KEY-USER OF ENTERPRISE RESOURCE PLANNING THROUGH JOB SATISFACTION AND JOB ENGAGEMENT AND ORGANIZATION ENGAGEMENT

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ABSTRACT

Enterprise Resource Planning is an integrated information system technology and is used by world-class manufacturing in improving company performance. In this research there are three major research questions to answer. Firstly, how the ERP implementation in manufacturing companies in East Java can be carried out not dependent on the personal staff. The second question is how management competence and employee salary will be able to engage employees so that the implementation of ERP technology will have an impact on producing effective key-users (effective managers) for the company. Thirdly, whether the employee engagement and the effectiveness of key-users can bring about employee satisfaction and retain them in the company to actualize their ability in order to increase the competitiveness of the enterprise.

Based on preceding literature study, it is indicated that the competence of employees and employee salary will influence job engagement, organization engagement and employee satisfaction which finally reduce employee turnover intention.

This research will investigate whether there is influence of management competencies and employee salary on turnover of the key-user of Enterprise Resource Planning through job satisfaction, job engagement and organization engagement on several manufacturing enterprises in East Java. The data collection will be done through interviewing and distributing questionnaires to industry practitioners as well as direct observation on several enterprises in Surabaya, Sidoarjo, Pasuruan, Mojokerto and Gresik.

This study will test the hypothesis in order to produce a viable model (fit), in this case the analysis used is Partial Least Square (PLS) with the calculation process is assisted by Smart PLS software application program.

Keywords: management competence, turnover intention, employee salary, job satisfaction, job engagement and organization engagement

1. INTRODUCTION

Competition among companies in business world has increasingly become more complex. Efforts to increase the number of customers, many companies do fast service and low cost to enhance competitiveness (Shebab et al., 2004). One way to achieve that success can be done by integrating information systems, increasing the efficiency of information systems to produce a more efficient management of business processes (Shebab et al., 2004). The impact of efficiency in management is expected to further increase its competitiveness in a competitive market (Tsamantanis & Kogetsidis, 2006; Suprijanto, 2006).
The problem is that still there are companies that have not integrated information system in the management of the organization. So far in the process of these companies are only supported by individual activities at each work location (Warta Ekonomi, 2002). This reality can easily lead to misunderstandings in the communication of data between one work location to another work location. Each individual will submit data on its own site, that there may be fundamental differences in the delivery of data, so it takes a long time to coordinate the provision of data compared with companies that have integrated their functions. This integrated data can help an efficient business processes and facilitate decision making by the management company (Shebab et al., 2004).

One technology that integrates the role of each function within the company, is Enterprise Resource Planning (ERP). ERP technology can integrate the functions of marketing, production function, logistic function, the function of finance, human resources functions, production functions, and other functions (Baheshti, 2006). ERP has evolved as a means of integration, has the aim to integrate all enterprise applications into a data storage center easily accessible to all parts requiring (Savannah, 2002). According to Leon (2005), as also revealed by Genoulaz & Millet, (2006) integration of data in ERP technology performed with single data entry that is a function of the department to enter data, then data can be used by other functions in the company.

Enterprise Resource Planning (ERP) is a way to manage corporate resources by using information technology (Spathis and Constantinides, 2003). The use of ERP technology is equipped with hardware and software. This technology serves to coordinate and integrate the data information on each area of business processes resulting in faster decision-making because it provides analysis and rapid financial statements, sales reports on time, production and inventory reports (Gupta, 2000). Different opinions expressed Bradford & Florin (2003) which states that no influence of technical compatibility of ERP technology on job satisfaction and effectiveness of key-users on hardware and ERP software.

ERP program helps companies that have extensive business process by using a database management and reporting tools that are divided. Business processes are a group activity that requires one or more types of input that will produce output as a value for the consumer. ERP Software supports the efficient operation of business processes by integrating the activities of the whole business including sales, marketing, manufacturing, logistics, accounting, and staffing (Leon, 2005).

ERP implementations in companies in Indonesia have hopes to speed up business processes, increase efficiencies, and reap greater revenues (Warta Ekonomi, 2002). The problem is at the time of implementation there are many factors that can disrupt the process. These factors are the problems faced among others: first, to provide project management is not the best team in the implementation project team members regarding the competence, credibility and creativity of project teams, effective team leadership, team commitment, team responsibilities, a sufficient number of teams, overlapping responsibilities in the team, a less obvious approach, goals are not understood by the project team.

The research of Bradford & Florin (2003) showed that top management commitment to support the ERP implementation team, especially the key-users and the other users in general significantly increase work effectiveness. Support that is paid by top management in the form of explanation of the company mission and vision well communicated to the implementation team.

Secondly, management is not able to distinguish that e-business is not just information technology investment but business process improvement or business improvement supported by information technology (Warta Ekonomi, 2002). This resulted in e-business value of investments cannot be re-invested, as many corporate leaders who have the understanding that e-business is simply an information technology investment, not a business investment supported by information technology. According to Goenawan in Warta Ekonomi (2002), many companies in Indonesia have information technology investment by 1% - 2% of its income, and most of the investments cannot provide a return. While the third problem, as presented by Goenawan (Warta Ekonomi, 2002), is the insufficient
understanding of the management of the right e-business implementation. In this case, the management does not provide effective support to the implementation of e-business in his company.

The application of electronic solutions business, known by the term e-business in Indonesia started to develop since 2002. Finance division is part of the most widely associated with this application. In the mid of 2002, Indonesia businessmen believed that the use of e-business technology could fix the company’s performance, in particular, related to efforts to streamline the company’s operating performance (Warta Ekonomi, 2002). Research conducted by the Warta Ekonomi shows that about 54.2% of companies which responded have implemented a variety of applications/e-business solutions such as enterprise resources planning, supply chain management and customer relationship management. The same research, some 31 of the 33 sample firms (93.9%) stated that most departments are associated with e-business applications is the financial division. The next position is occupied by their respective fields of application for marketing and production. The survey results also pointed to the manufacturing industry recorded the most widely used applications / e-business solutions which amounted to 41.9%. The Company does not hesitate to mention that the use of e-business solutions can increase productivity. It is evident from the survey result showing that around 26 out of the 33 companies (or 78.8%) experience productivity increase.

Fan, et al. in Joseph, et al., (2006) found ERP is a software application system functions that can assist organizations in better control of the business because it can reduce stock levels and inventory, increase inventory turnover, reduce order cycle time, increase productivity, better communication and the impact on increasing the benefit (profit) company. Meanwhile, Leon (2005) states that the ERP has the advantage of a reduced lead-time, on-time delivery, reduction in cycle times, better customer satisfaction, supplier performance, increased flexibility, reduction in quality costs, the use of resources better, increasing the accuracy of the information and decision-making abilities.

Herdiawan in Warta Ekonomi (2003) reported that the ERP system has been applied to food manufacturing companies have the advantage of system integration across the enterprise group; data information becomes more complete, detailed and fast; directors are facilitated in analysis and decision making; business processes become more simple; production is more cost saving; and finally cash flows become more controlled. In contrast, Herdiawan, Bradford & Florin (2003) argue that business process re-engineering has no influence on the effectiveness of work and the satisfaction of the key-user in implementing ERP in the company. Research conducted by Zhang et al., (2005) state that business process re-engineering has a positive effect on user satisfaction and individual impact, since the redesign of processes in the company by key-user will ease the adjustment between the software and the needs of the company as well as affecting the acceleration of ERP implementation.

In an interview with one of the practitioners of the company in Indonesia who is the vice president of a company, Herdiawan (2006) reveals the value-added ERP after being applied to the company, which are: 1) facilitating analysis and decision making, 2) integrating the business processes and information systems, 3) increasing control and simplify the planning process, 4) decreasing in inventories by 40%, and 5) increasing level of service to the customer. This fact is supported by the results of research by Sun et al., (2005) which states that the data in which there are ERP master data, transactional files, data structure and maintenance data have a positive influence on the achievement of company performance in general.

Moreover the results of research by Zang et al., (2005) mentions that the design process has a positive influence on the achievement of corporate performance and has an impact on the acceleration of the implementation of ERP which has impacted on the implementation costs, increasing the quality and speed of service. Meanwhile, according to f and Kim (2002), process fit has a positive influence on the achievement of company performance. These advantages can be achieved when the stages of ERP implementation are
carried out successfully. To achieve the success of ERP it is necessary to know what factors give influence on implementation success or implementation failure.

The theory presented by Gargeya and Brady (2005) states that there are success factors as well as failure factors in ERP implementation, among other things: first, the ability to streamline business processes or operations that reduced the company's customization and secondly, the success of the project team is supported by management, consultants and vendors; third, the ongoing training during the ERP implementation in a company; fourth, according to Gargeya and Brady (2005), it is also important to adjust the same organizational culture to avoid that every function/department operates with different procedures and different business terms, in that case, there should be a department for knowledge sharing on ERP in the company. This is confirmed by the results of the study by Jones et al., (2005) that the organization culture has a positive effect on the ERP project team in the knowledge sharing department. Xue et al., (2005) argues that the organization culture has a positive influence on the failure of ERP, and implicitly explained that the ERP implementation project conducted by a team together with the management. This research finding is also supported by Zang et al., (2005) showing that the organizational culture in terms of professionalism of employees towards work and responsibilities, as well as communication between employees and management in an open and transparent way have a positive influence because it can accelerate the process of ERP implementation.

Moreover, planning the cost of implementation and development of ERP to avoid unexpected expenditure exceeding the ability of the company to pay is the fifth factor that may cause either ERP implementation success or failure. Then, the testing system that is proven to be an element of success for some companies and the immediate cause of ERP implementation failure in the company is the sixth factor. Other researchers who studied the achievement of the ERP implementation success is influenced by many factors, as shown in table 1 below:

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There are researches that study ERP implementation failure factors, among others, Xue, et al. (2005). According to Xue, et al. (2005), cultural organizations, environmental organizations, technical factors are factors of ERP implementation failure. The research was conducted at five companies in China which are the company of cosmetics, pharmaceuticals, electronics, furniture, and mining. Moreover, based on the survey done by Robbin-Giowa in American corporations in 2001, it was found out that only 51% which experienced failure of ERP implementation (IT Cortex, 2003), unlike in China which is estimated that the ERP implementation success rate of 10% as stated by Zhang et al. (2003). Griffith et al., (1999) reported that three-quarters of the ERP project was bound to fail in the implementation in the companies. Moreover, Olhager and Selldin (2003) stated that 83.6% of companies in Sweden have implemented ERP, 9% was implementing and 11% was not planning for ERP implementations based on the results of a survey of 158 companies.

According to Gillooly (1998) as cited by Gargeya (2005), at least 70% of all ERP projects fail to be implemented fully, even after 3 years. ERP implementation failures cannot be blamed to the person, because it involves the implementation of all components that exist in the company. In general, there are two levels of failure as presented by Gillooly (1998), namely: a total failure and partial failure. In a total failure, the project may be terminated since the beginning of the implementation or failure in the implementation process so that companies have a significant impact on its finances in the long run. While in the partial failure, ERP implementation can deliver a disruptive influence that disturbs the day-to-day operations. In the same case, a successful ERP implementation can be successful as a whole, everything is running smoothly without any jerk or disturbance occurs or in the implementation of some problems in the alignment, but only cause a little discomfort or downtime.

Huang and Palvia (2001) proposed 10 factors of ERP implementation in developing countries as compared with developed countries. They also add that, the maturity of information technology, computer culture, business size, business process, re-engineering experience, and management commitment are the factors that influence the level of the organization. However, Huang and Palvia (2001) would not categorize the factors which contribute to the success or failure.
The implementation of ERP technology in organizations is generally viewed as a very difficult and complex thing so that top management and users are reluctant to implement it. An interesting phenomenon when implementing ERP in the organization is that success is determined by the key-users (project implementation team) supported by top management and users (Amoako and Gyampah, 2004). In a research conducted by Wu and Wang (2007), it is revealed that ERP products, consultant and contractor service, knowledge and improvement are the success factors of ERP implementation which are measured to determine the key-user satisfaction. Wu and Wang propose to conduct further research on the influence of key-user in achieving successful implementation of ERP. Based on the above explanation, many companies that want to implement ERP, but the company is still struggling to figure out how to implement it effectively, especially on the effectiveness of the project team who will work on the project implementation. (Wu and Wang, 2007).

The effectiveness of the ERP implementation project team is strongly influenced by members of the team consisting of management, key-users, information system staff and end-users (Wu and Wang, 2007). Constraints faced by the project team, such as there is a gap authorization so that there is no transparency between the members so that the communication that occurs is one-way communication; training is given relatively the same resulting in a very different understanding ability. This affects the stability in the team, the team is big enough which leads to difficulties in coordination and communication among members, team members should have a strong competence base and there should not be large gap in the project team. However there are a large number of members with different competencies so that it takes quite a long time to coordinate.

Based on the interviews with several companies, it is expressed that the difficulties faced by companies is not on the ERP implementation in the company, because during the implementation process, companies are accompanied by consultants from outside the company who know about ERP. The problems that arise in the company after the ERP implementation where consultants are no longer used because the contract has come to an end and the company is able to run the ERP system and ERP has been used throughout the company. Some of the arising problems are: employees assigned as the persons in charge of the department in fact do not understand properly the existing ERP concepts and another difficult issue faced by the company is that an employee who has the knowledge and experience in the ERP system is moved to another company. Therefore, the company has to struggle to develop ERP. One company, for example, which is located in Pasuruan stated that there were 15 employees working in the company when the initial ERP implementation but then there was only one employee who could survive while the others have moved out of the company, and it was difficult for the management to maintain the ERP system.

Based on the fact in the implementation of ERP technology above, the researchers try to observe the continuity of the company’s ERP system from the perspective of employee turnover (Min, 2007). This research synthesizes the key-user turnover intention to maintain the continuity ERP system in the company. High turnover rate at a company creates inefficiencies in the cost of human resource management due to the fact that to replace an employee takes a long time and huge costs. The cost to replace an employee can be translated into three components, namely the release of employee costs, the cost of hiring new employees, and training costs. According to Mitchell (Arocas & Camps, 2008) retaining employees is a better way or investment, considering the amount of costs to recruit new employees.

Given the high costs for hiring new employees and the time and costs to train a new employee, then retaining employees who have worked in the company is an option that can be taken by management to save costs. In the event that an operator is out, the company incurred costs including fees payable to the supervisor to provide training to the new employee. The higher the position held, the greater the cost incurred to provide training because the trainer who provides the training is from a higher position and time required will be much longer.
The company is able to analyze what factors may affect turnover intention of employees. Based on the research conducted by Arocas and Camps (2008) about the factors that affect turnover intention, salary can influence turnover intention negatively. This is similar to the findings of Zhao and Zhou (2008). Another thing that is thought to affect job satisfaction is turnover intention. According to Lee (2008), job satisfaction negatively impacts turnover intention.

The research done by Vidal et al., (2007) in Spain about job satisfaction of managers in companies delivers negative influence on turnover intention due to the greater satisfaction toward the job so that the managers stay longer in the company. This study also suggested the higher career achievement of the employees working in the Spanish companies gives a negative impact on turnover intention. While the research conducted by Lan (1996) and Testa (2001) suggest that employee satisfaction in a company will give a lower turnover intention. Vidal et al., (2007) also states that the compensation gives satisfaction to the employees so that employees can last a long time in the company. Moreover, Bonache (2005) states that adequate revenues will reduce employee dissatisfaction in the company and even improve the performance of the company. Schaufeli and Bakker (2004) suggest that a growing career in the company will provide job satisfaction for employees in the company so that they can survive longer in the company. In addition to salary and job satisfaction, employee engagement is also thought to affect turnover intention. According to Schaufel and Bakker in Saks (2006), employee engagement can affect the desire to quit from an employee, employee engagement is a positive attitude held by an employee of the organization and the values espoused by the organization. A dedicated employee will work in earnest along with co-workers to improve the quality of his work for the betterment of the company where he works. Employee engagement is comprised of two main parts, namely job engagement and organization engagement (Shaw, 2005).

Researches on factors affecting the turnover intention have been carried out in companies. Employee engagement has a direct influence on turnover intention (Saks, 2006). There are two types of employee engagement that influence turnover intention, namely: job engagement and organizational engagement. Organizational engagement, or known as the involvement of employees of the organization is very important in the industry due to reducing the risks. Job engagement, in addition to an effect on turnover intention, can also affect the results of the work produced. In doing the work, an employee who is engaged to his work will do the job duties earnestly. Based on the explanation that has been presented above, it can be seen that it would be more profitable for companies to retain employees rather than having to recruit. Therefore, studies will be needed to identify the variables that can be used by management to influence employee intentions to quit (turnover intention). Variables that are thought to bring direct influence on turnover intention are salary and job satisfaction (Luna-Arocas & Camps, 2008).

2. RESEARCH HYPOTHESIS AND CONCEPTUAL FRAMEWORK

The conceptual framework of this research is the development of the concept of thinking of previous studies as shown in Figure 3.1. The prior studies synthesis several companies that implement ERP technology in the enterprises. This research discusses the synthesis to sustain the company's ERP system with respect to factors that are able to retain the employees as key-users in the company.

![Conceptual Framework](image-url)
of management competence and employee salary on turnover of key-user of enterprise
resource planning through job satisfaction and job engagement and organization
engagement.

Based on the conceptual framework described above, it can be seen that there is some
relationship or influence among the research variables. Research hypotheses of Bradford &
Florin (2003) argued whether top management gave full support to the project team in
implementing ERP. The results of Bradford & Florin (2003) research show that the
commitment of top management to support ERP implementation team, especially the
manager function (key-users) and users significantly increase work effectiveness. Support
that is given by the top management of the company’s vision and mission description is well
communicated to the implementation team includes obedience, loyalty and participation will
create a favorable climate for the working conditions within the organization, from a more
conducive climate will form a better performance level. This will improve the work
performance of human resources. In the implementation of the work, the organization sets
some rules and guidelines for members of the organization. Employees who adhere to work
rules will work in accordance with the direction of organized labor in achieving
organizational goals. Organization that develops, it involves a number of employees or
members of their human resources in decision making. Through participation, mechanisms
of information exchange will exist; information exchange will provide employment
information. Zhang et al., (2005) suggested that the commitment of top management
support to all staff use the rules to avoid a debate between the users and provide a suitable
‘department’ to give a positive and significant impact in accelerating the implementation
process. In the process of ERP implementation is not only changing but the ERP software to
manipulate the system back toward transforming the company into the best business
practice.

King & Burgess (2006) expressed the commitment of top management have a
positive influence in determining the target cost and quality of work will be used for
company business processes (process cost reduction, reduction of processing time, increase
productivity) by monitoring reports of the project team. Given clear objectives established by
top management will support the effectiveness of the project team. Soja (2006) expressed
the commitment of top management has a positive effect on the effectiveness of the key-user
as a project team member in setting goals, the need for additional manpower, lack of
facilities, support funds, the stability of the project and top management involvement in the
implementation team. Umble et al., (2003) explores of the ERP implementation steps, where
the project team can understand the vision of top management in ERP implementation,
while the ranks of top management support the project team. Commitment of top
management in ERP implementation, such as: allocating appropriate resources, determining
the right people on the project team, providing the people who are capable, and providing
training on a regular basis to help resolve problems and influence the effectiveness of key-
user.

Jones et al., (2005) suggested that organizational culture has a positive effect on the
ERP project team knowledge sharing. While Xue et al., (2005) argues that organizational
culture has a positive effect on ERP failure, caused by the provision of data because less
information is believed to prefer verbal communication; cooperation is difficult due to ERP
using a foreign language, and difficulty in making changes business processes are carried out
jointly between the project team with the company management. Park et al., (2007)
suggested that the sharing of knowledge in understanding the ERP system is measured by
indicators of knowledge sharing in general and specific positive effect on the effectiveness of
key-user in which there are key-users increased productivity, improved performance on the
task, effectiveness and quality of implementation of decisions, as well as time to determine
the decision.

Research hypotheses by Bradford & Florin (2003) reveal whether Business process
re-engineering best practice in ERP have a positive impact on ERP implementation at the
time to make adjustments to the process enterprise. Bradford & Florin (2003) suggested that
the business process re-engineering have no influence on the effectiveness of work and the satisfaction of the key-user in implementing ERP in the company. Zhang et al., (2005) stated business process re-engineering has a positive effect on user satisfaction and individual impact, due to the redesign of processes in the company by key-user will ease the adjustment between the software company's needs and have an impact on accelerating the implementation of ERP. Research by Soja (2006) states that the composition of project teams consisting of people who have the qualifications and knowledge of ERP and the active involvement of project team members have a positive effect on accelerating the design process of ERP implementation. Based on the research Amoako & Gyampah (2007) suggested that the appropriate business design changes in the use of ERP technology has a positive effect on labor intensity of key-user in the implementation of ERP.

Wu and Wang (2007) suggested key-user satisfaction has a significant influence on ERP product technologies consisting of the accuracy of information data generated by the ERP product, the reliability of the information system consistently generated by the ERP product, the fast response time generated by the ERP product, the completeness of the information generated by the ERP product, the system stability to facilitate customization, auditing and control systems, as well as data communication through the integration between departments in the company. The research by Zhang et al., (2005) showed that the ERP software package suitability has a positive influence on user satisfaction and individual impact, because it can reduce the customization process which results in a reduction in the time and costs incurred to comply with the process provisions of the company.

In contrast with the results of Wu and Wang (2007) and Zhang et al., (2005), Bradford & Florin (2003) points out that there was no influence of technical compatibility of ERP technology on job satisfaction and effectiveness of key-users on ERP hardware and software. Bueno & Salmeron (2008) suggest that the advice of key-user has a positive influence on the sustainability of ERP technology. In the same study, it is pointed out that the education of key-user has a positive influence on the effective use of ERP technology. Choi et. al., (2007) state that the experiences and the desire of the key-user to learn has a positive influence on the work effectiveness in using ERP technology. Umble et al., (2003) suggest that the accuracy of the data is absolutely necessary in ERP systems, because the correctness of the data and the accuracy of the data are absolutely needed by the project team as their accountability to the top management.

Xue et al(2005) states that the reports and data tables positively give influence to the technical issues of the ERP product. Studies conducted in the cosmetics companies and building technology companies that have difficulty in deciding on the format of financial statements and their accounting as they are not in accordance with company reports and standard forms for reporting to the government of China. Bradford & Florin (2003) suggest that the business process re-engineering influences the performance of the company but not significant. While Sun et al., (2005) states that the process procedures, in which there is consent, documentation, integration and design processes, give influence on achieving corporate objectives in general and the company costs and faster time planning. Zang et al., (2005) says that the design process has a positive influence on the achievement of corporate performance and gives impact on the acceleration of the ERP implementation that leads to implications on the implementation costs and quality improvement and speed of service.

One theory of motivation that can be used is the equity theory propounded by Stacy Adams. According to Stacy Adams (Miner, 2005) equity theory is a model of motivation in which a person struggling to get a fair and equitable treatment in exchange of what he gives and what he receives. The main source of motivation is the desire for justice but to make this happen we need a benchmark that is an unfair situation. This theory states that one expects the exchange or a fair reward for what he has done, or in other words a person expects a reward as fair as possible for the contribution he has made. According to this theory, people will be motivated if a proper balance between the contributions made to the company and the reward given by the company towards the employees (Kreitner & Kinick, 2008). While what is meant by fairness in this theory is the fairness against contributions made by employees of the company against the reward given by the company with regard to the
employee contributions and fairness of the reward given by the company to other employees (Kreitner & Kinick, 2008).

According to Kreitner and Kinichi (2008), there are three types of equity that could happen, that is equitable situation, negative inequity, and positive inequity. Equitable situation occurs when a person feels the comparison between what is gained by what he gives as to what other colleagues earn. While negative inequity occurs, when a person feels the comparison between what he earns with what is given less than the other colleagues earn. The third condition is the positive inequity in which a person feels a comparison between what is gained by what he gives is greater than the other colleagues earn.

The development of this theory leads to the emergence of a new term called organizational justice. Organizational justice reflects a sense of justice felt by employees due to the treatment of their organization (Kreiner & Kinick, 2008). Organizational justice can be distinguished or divided into three main components, namely distributive justice, procedural justice and interactional justice. Distributive justice is the perceived fairness of the balanced distribution between resources spent and rewards obtained. Procedural justice is the perceived fairness of the process and procedures used in allocating decision. Interactional justice refers to fairness that one feels when the procedure is implemented.

Along with the changing times, the compensation is not only used to reward employees to meet extrinsic needs alone but also to meet the intrinsic needs. According to Martocchio (2006) compensation is both intrinsic and extrinsic rewards provided by the company to its employees for work performed. There are basically eight hypotheses to be the focus of this research:

H1 = adequate employee salary will have a positive influence on job satisfaction.
H2 = adequate employee salary will have a positive influence on job engagement.
H3 = adequate employee salary will have a positive influence on organizational engagement.
H4 = adequate management competence will have a positive influence on employee job satisfaction.
H5 = adequate management competence will have a positive influence on organizational engagement.
H6 = increased employee satisfaction will negatively influence employee turnover intention.
H7 = organized job engagement will negatively influence employee turnover intention.
H8 = organized organizational engagement will negatively influence employee turnover intention.

3. RESEARCH METHOD

The type of research is the one which explains the reciprocal relationship between the variables through hypothesis testing (Singarimbun, 1995). The research takes its data source from companies that have been registered with the Ministry of Industry and Trade of East Java (DISPERINDAG) at the municipality regions of Surabaya, Sidoarjo, Pasuruan, Mojokerto and Gresik consisting of manufacturing enterprises. There are in total 324 companies consisting of: 181 domestic investment companies and 143 foreign investment companies. Out of the 324, there are as many as 143 companies which have implemented ERP for more than 6 months. From the population of 143 companies that have implemented ERP such as SAP, Oracle, Baan, PeopleSoft, JD Edwards, MFG Pro and their own development of integrated information systems in East Java will be determined which companies are to be sampled in the research. In this research, it is chosen from those municipality regions because the number of manufacturing companies are concentrated in those regions.

Determination of the number of samples in this research, with a population of 143 companies (N) that have implemented ERP, with confidence interval degree of 95% (α = 5%) and the proportion of data at 0.5 (p) and the presentation of the estimated probability error (B) in making a sample rate of 5%, then the amount of data (n) required is 50 companies (Supranto, 2000).
### Tabel 3.1. Samples and Survey Results

<table>
<thead>
<tr>
<th>Company Category</th>
<th>Total Numbers of Companies</th>
<th>ERP Implementation</th>
<th>Non ERP</th>
<th>Total ERP</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DIC</td>
<td>FIC</td>
<td>Total</td>
<td>ERP DIC</td>
<td>ERP FIC</td>
</tr>
<tr>
<td>Food &amp; beverages</td>
<td>13</td>
<td>19</td>
<td>32</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Household products</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Furniture and processed wood</td>
<td>44</td>
<td>19</td>
<td>63</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Plastics Products</td>
<td>16</td>
<td>6</td>
<td>22</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Packaging</td>
<td>8</td>
<td>4</td>
<td>12</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Animal feed</td>
<td>7</td>
<td>1</td>
<td>8</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Pulp and Paper</td>
<td>12</td>
<td>1</td>
<td>13</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Metal</td>
<td>20</td>
<td>18</td>
<td>38</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Ceramics</td>
<td>7</td>
<td>5</td>
<td>12</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Machinery and spare parts</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Construction materials</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Petroleum &amp; gas</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Electronics</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Electrics</td>
<td>5</td>
<td>8</td>
<td>13</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Garments</td>
<td>16</td>
<td>20</td>
<td>36</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Transportation</td>
<td>6</td>
<td>7</td>
<td>13</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Chemical industry</td>
<td>6</td>
<td>8</td>
<td>14</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>181</strong></td>
<td><strong>143</strong></td>
<td><strong>324</strong></td>
<td><strong>67</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

In determining the samples of 50 companies, purposive sampling was employed to determine which firms to be sampled. Consideration of sample selection is adjusted to the population proportions so that any type or manufacturing criteria are represented (Table 3.1). The respondents are managers / project coordinators who serve as key-users of the companies. Definition of key-user in this research is someone who is within the project team, and who can make changes directly on the working procedure in the section / department. For example, someone who is elected coordinator / project manager and who comes from one of these departments, namely: PPIC, Marketing, Accounting, Finance, Warehouse, Material Management (Purchasing), QA and HRD.

In order to test the hypothesis from the first to the eighth hypothesis, and to generate a good model (fit), then the analysis used in this study is using Partial Least Square (PLS) and the calculation process is assisted Smart PLS software application programs. The reason for using this model because there is a tiered structure of relationships between variables, and the software is suitable for the need of the research. At this stage, testing is done to check the suitability of the model through various criteria goodness-of-fit. PLS does not assume any particular distribution for parameter estimation so that parametric technique to test the significance of the parameters is not required. Measurement model or outer model with reflexive indicators is evaluated by convergent and discriminant validity of the indicators and composite indicators reliability to block indicators. While the outer model with formative
indicators is evaluated based on its substantive content that is by comparing the relative weight and looking at the significance of the weight (Solimun, 2007).

The structural model or the inner model is evaluated by looking at the percentage of variance explained by looking at $R^2$ (R-square exogenous variables) to the dependent latent constructs using Stone-Geisser Q Square test and also by looking at the amount of structural path coefficients. The stability of these estimates is evaluated using t-test statistics obtained through bootstrapping procedure.

4. CONCLUDING REMARKS

This research discusses the conceptual framework of company difficulties in maintaining consistency in the implementation of ERP when the contract with consultants hired by the company has ended and the company has been able to run the ERP system and has been used extensively in the company. Problems arise when the employee who is assigned to be in charge of the department does not understand thoroughly the concept of ERP implementation and the enormous problems faced by the company is that the employees who have the knowledge and experience in the customization of ERP systems turn out to move to other companies. This situation has caused difficulties for the company to develop ERP. Based on the fact, the research has been focused to the eight hypotheses. Firstly, the adequate employee salary will have a positive influence on job satisfaction. Secondly, the adequate employee salary will have a positive influence on job engagement. Third, the adequate employee salary will have a positive influence on organizational engagement. Fourth, the adequate management competence will have a positive influence on employee job satisfaction. Fifth hypothesis, the adequate management competence will have a positive influence on organizational engagement. Sixth, the increased employee satisfaction will negatively influence employee turnover intention. Seventh, the organized job engagement will negatively influence employee turnover intention. Finally, the organized organizational engagement will negatively influence employee turnover intention.

5. REFERENCES


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