

## **DEVELOPING A COMPETENCY-BASED CAREER PATH FOR TECHNICAL JOB POSITION IN SPECIAL VEHICLE DIVISION OF PT. PT. XYZ**

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**Abstract.** *Special Vehicle Division of PT. XYZ is the division that provides the defense vehicle for both defense ministry and also for commercial. As the development of the defense industry, Special Vehicle Division of PT. XYZ must keep their performance high to stand in market competition. To improve their performance, Special Vehicle Division should be supported by competent people. In the recent years, Special Vehicle Division of PT. XYZ face a problem of the loss of technical competencies. The Human Resources Department of PT. XYZ identified that the loss of competency is caused by the un-updated system of Career Planning in PT. XYZ. Specifically, PT. XYZ does not have a clear career path for the employee. The absence of the clear career path has made the employee moved from one job position to another job position without considering the competency that they already have in the previous position and what competency that required by the new job position. This unclear career path directly impact to the production divisions of PT. XYZ since they required specific technical competency to run the production process well. This research aimed to develop a competency-based career path for technical job position in Special Vehicle Ddivision of PT. XYZ in order to maintain the competency in the division. The development of career path is derived from company's vision, mission, values and objective, and also from the analysis of the competency that is needed in Special Vehicle Division. The research developed career path for 41 technical job position in Special Vehicle Division of PT. XYZ based on the competency required for each job position.*

*Key words : Competency, Career Path, Career Planning*

### **Introduction**

PT. XYZ is an Indonesian state-owned company specializing in military equipment. PT. XYZ is expected to efficiently produce the needed military equipment and create business oriented commercial products. PT. XYZ supplies and produced products needed by the Department of Defense and Security such as light ammunition, heavy ammunition, and other military equipment to diminish dependence on foreign support. Its second main task is to produce commercial products such as tools, cast products, air brake system, also custom tools and equipment.

PT. XYZ has strategic position in Indonesian national industry specifically in defense industry as one of the top three companies together with PT. Dirgantara Indonesia and PT. PAL. As military forces has become increasingly important for developing country to become facilitators in government foreign policy, taking part in peace-keeping operations, military exercise, and humanitarian relief mission (Chretien, 2007), . PT. XYZ has important role to support independence in defense and security of Republic of Indonesia by providing main weapon system (Alutsista). Furthermore, PT. XYZ also produces several industrial products to support other aspects such as transportation and commercial explosives.

### **Problem Identification**

The current conditions that occur in the Special Vehicle Division that are identified are caused by the loss of competency are:

1. The stagnancy of overall division performance.
2. The decrease of the employee satisfaction.

While the Human Resources Department of PT. XYZ also faces several challenges regarding of the loss of competency in production division of PT. XYZ. Those are:

3. Hardly to maintain the competency of the production division
4. Hardly to design training and development for the employee in the production division
5. Hardly to make succession planning

Based on the facts above and the phenomenon that caused the loss of competency in the production division especially in Special Vehicle Division of PT. XYZ, the researcher got the conclusion from the Human Resources Department that the problem is caused by un-updated system of career planning in PT. XYZ. Specifically, they do not have clear career path for technical job position in the division that manages the career progression or path that will be taken by an employee in the specific job position. As stated before, the impact of the absence of the clear career path was just realized by the Human Resources Department of the PT. XYZ in the recent years since there are rapidly change in the job position. The absence of career path may not affect directly to the non-production divisions since they do not require specific hard (technical) competency. But for the division like Special Vehicle Division of PT. XYZ, the absence of career path would affect directly to the production process. The change of job position of the employee without considering the competency that they have in the recent job position and what competency is expected in the new job position has become the main reason of the loss of competency in production division of PT. XYZ.

## **Literature Review**

Following the development of Human resources management, nowadays many companies believe that employee is one of the best capitals for the development of the company. The skill and knowledge of the employee becoming the main capital that a company must keep in order to grow. Hence, the competency of the employee become the most potential value in order to increase the value of the company.

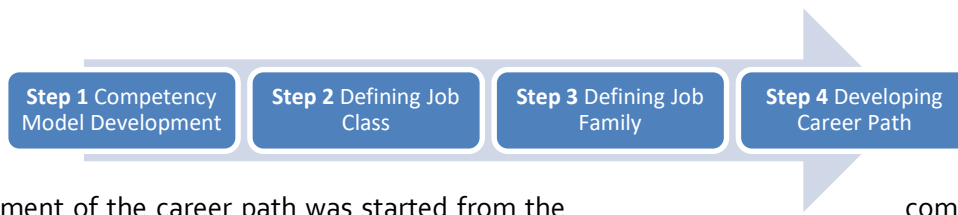
According to Brockmann et, al (2008) Competency-based management is a new trend in human resources management that emphasizes specific competencies utilized in a given job, allowing for more individualized management and more individual competency development within career paths. From this perspective, competencies are specific to companies or given jobs in an organization.

Dubois & Rothwell (2008) also stated that Competency-based human resources management assumes looking at expected results and organizational requirements from the perspective of an employee rather than from the perspective of a job position held by an employee. Competencies then become the foundation for the functioning of the entire human resources management system. Competencies constitute the factor that determines the process of recruitment, selection, filling vacancies, induction, performance management and rewarding of employees. An organization applies competency-based human resources management when all aspects of personnel management are focused on competencies and not on the traditional matters related to tasks or jobs.

## **Methodology**

The research methodology used in this study is a mixed method, using both qualitative and quantitative method. The qualitative method used for collecting and analyzing data both primary data and secondary data, and the quantitative method used as a part of the data analysis.

The process of career path development shown in the diagram below :



Development of the career path was started from the competency model development. This stage was conducted by combining the data collected from the interview with the key persons, and also the existing data of Job Position in Special Vehicle Division of PT. PT. XYZ. The second step is Defining Job Class. In Defining Job Class the Researcher referred to the level of Job Position in PT. XYZ. The next step was Defining Job Family which was done by using statistical approach of Hierarchical cluster Analysis. The last is career path Development which is collaborating the result of the Job Class and Job Family.

**Data Analysis**

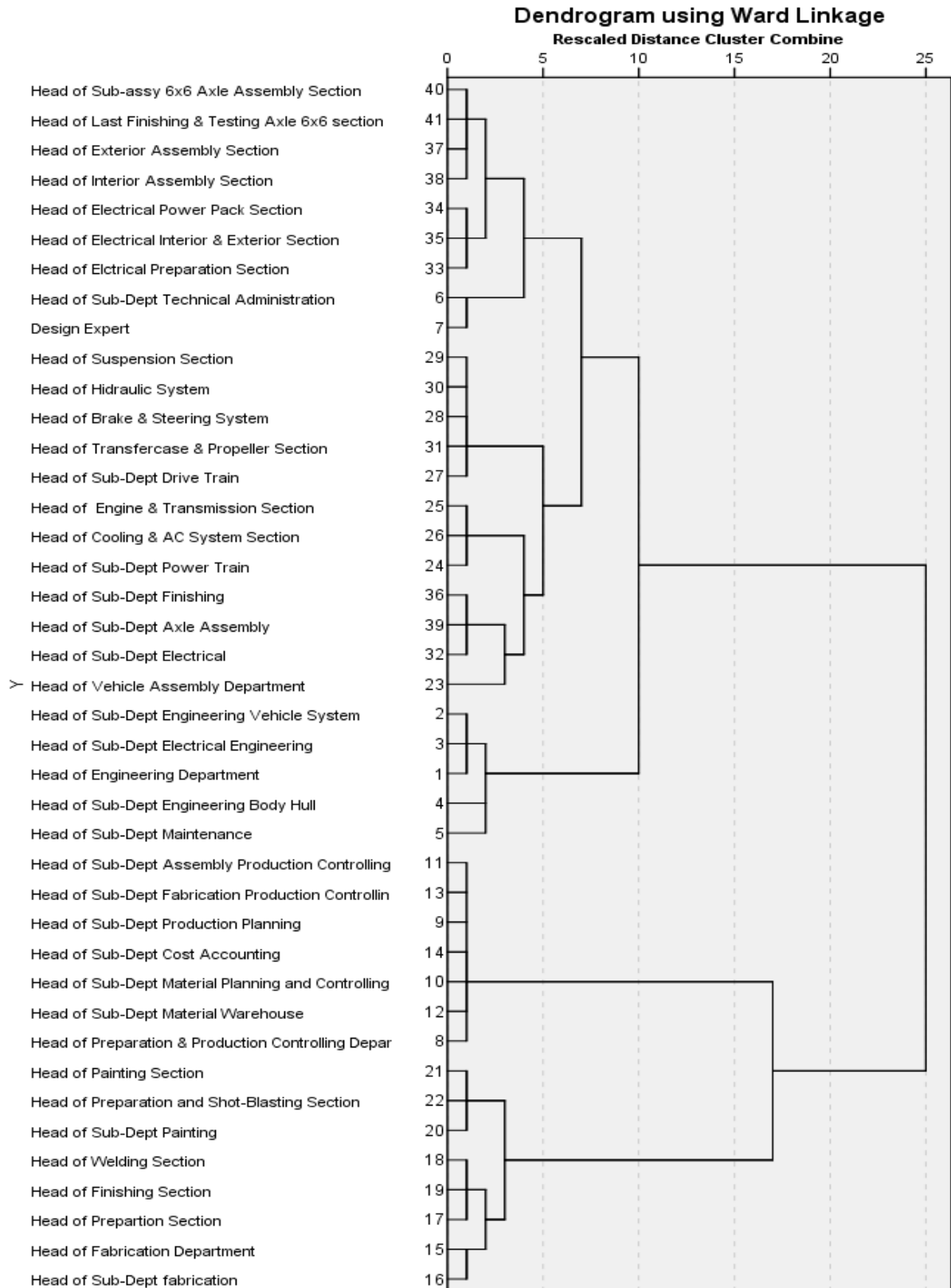
Job title that will be analysed shown in table below :

Head of Engineering Department	Head of Preparation and Shot-Blasting Section
Head of Sub-Dept Engineering Vehicle System	Head of Painting Section
Head of Sub-Dept Engineering Body Hall	Head of Vehicle Assembly Department
Head of Sub-Dept Technical Administration	Head of Sub-Dept Power Train
Head of Sub-Dept Electrical Engineering	Head of Engine & Transmission Section
Head of Sub-Dept Maintenance	Head of Cooling & AC System Section
Design expert	Head of Sub-Dept Drive Train
Head of Preparation & Production Controlling Department	Head of Brake & Steering System
Head of Sub-Dept Production Planning	Head of Hydraulic System
Head of Sub-Dept Assembly Production Controlling	Head of Suspension Section
Head of Sub-Dept Material Planning and Controlling	Head of Transercase & Propeller Section
Head of Sub-Dept Material Warehouse	Head of Sub-Dept Electrical
Head of Sub-Dept Fabrication Production Controlling	Head of Electrical Preparation Section
Head of Sub-Dept cost accounting	Head of Electrical Interior & Exterior Section
Head of Fabrication Department	Head of Electrical Power Pack Section
Head of Sub-Dept fabrication	Head of Sub-Dept Finishing
Head of Preparation Section	Head of Exterior Assembly Section
Head of Welding Section	Head of Interior Assembly Section
Head of Finishing Section	Head of Sub-Dept Axle Assembly
Head of Sub-Dept Painting	Head of Sub-assy Axle Assembly Section
Head of Preparation and Shot-Blasting Section	Head of Last Finishing & Testing Axle 6x6 section
Head of Painting Section	

Technical Competency of Special Vehicle Division of PT. XYZ that has been listed by the researcher

<b>Competency</b>	<b>Competency</b>
<i>Metode Kerja Proses Produksi</i>	<i>Urutan proses pemesinan</i>
<i>urutan proses pemesinan</i>	<i>Engineering mutu</i>
<i>Urutan proses perakitan</i>	<i>Adiministrasi teknik</i>
<i>Pengerjaan Perakitan</i>	<i>Engineering desain</i>
<i>Gambar Teknik</i>	<i>Pengelasan</i>
<i>Jig &amp; Fixture</i>	<i>Engine</i>
<i>Sistem pneumatik &amp; hidraulik</i>	<i>Transmisi</i>
<i>Pemesinan Manual</i>	<i>Transfercase</i>
<i>Pemesinan Konvensional</i>	<i>Suspension System</i>
<i>Proses Pembentukan Logam</i>	<i>Brake System</i>
<i>Desain proses Pengecoran</i>	<i>Steering System</i>
<i>Pengerjaan Porses Pengecoran</i>	<i>Electrical System</i>
<i>Pengukuran Produktifitas</i>	<i>Cooling System</i>
<i>PPC</i>	<i>Hardware Mechanism</i>
<i>Perencanaan Material</i>	<i>Power Train</i>
<i>Distribusi Material</i>	<i>Drive Train</i>
<i>Pengadaan Material &amp; Jasa</i>	<i>Automotive Desain Styling</i>
<i>Akuntansi Biaya</i>	<i>Konstruksi Body /Chassis</i>
<i>Pengamanan Material Produksi</i>	<i>Sistem Automotive</i>
<i>Shot Blasting</i>	<i>Pemeliharaan Elektrik</i>
<i>Painting</i>	<i>Pemeliharaan Mekanik</i>
<i>Body Hull</i>	

To define the job family of technical job position of Special Vehicle Division of PT. XYZ, the researcher used the Hierarchical Cluster Analysis with the Ward's Method. The Data that was input consists of the level of technical competency of each job position taken from the job specification of Special Vehicle Division of PT. XYZ. There are 44 variables that were input for the Cluster Analysis consists of job title and 43 technical competencies. There are 41 job titles listed in the analysis. The clustering process shown in the dendogram below :

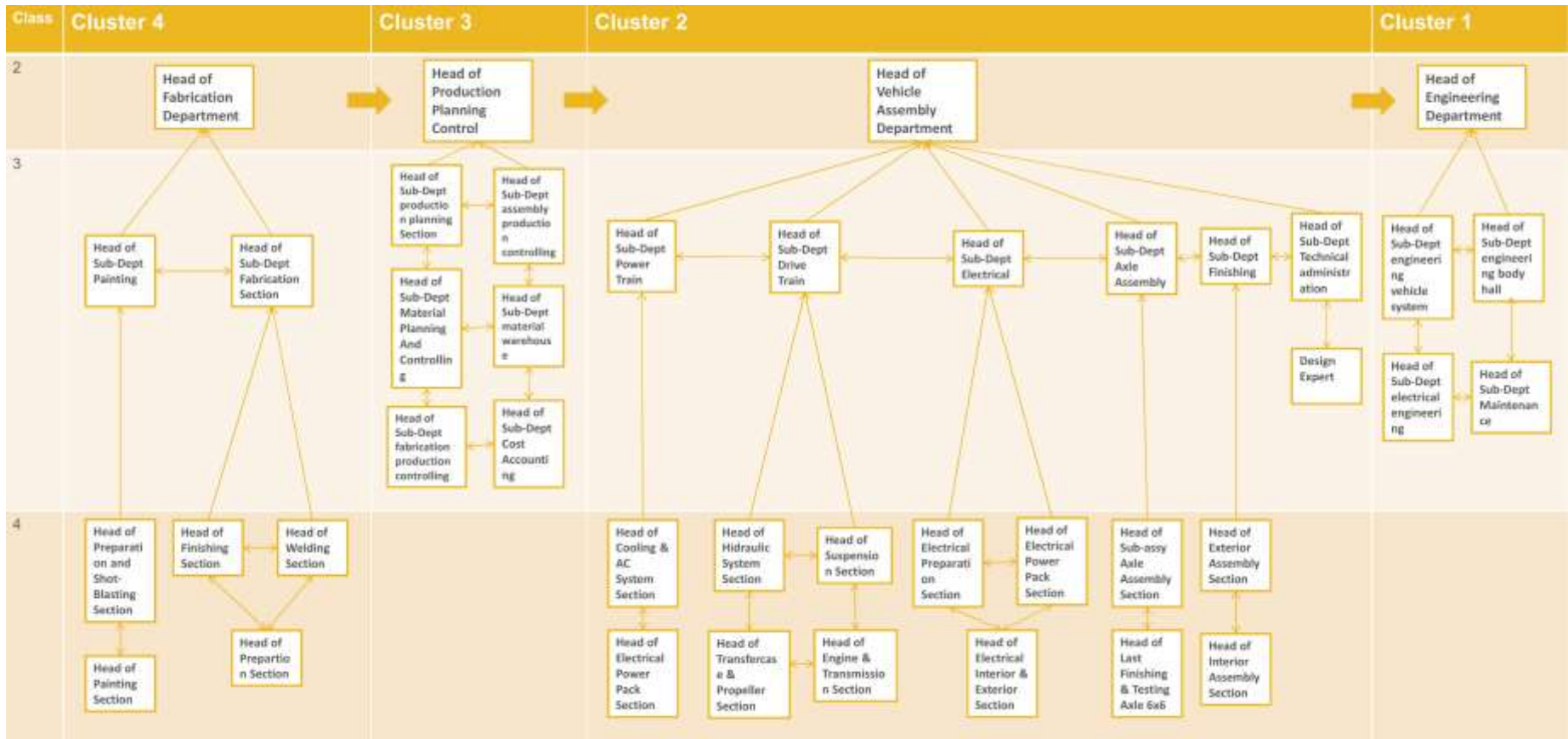


Based on the Career Path Development process, the career progression of one job position is not merely based on the adjacent of the technical competency that showed in the cluster membership, the career path also consider the job class of the job position. So the result of the 4 cluster membership was re-grouped based on the job class of each position.

The cluster membership then adjusted with the Job class of each job, result in :

Class	Cluster 4	Cluster 3	Cluster 2	Cluster 1
2	Head of Fabrication Department	Head of Production Planning Control	Head of Vehicle Assembly Department	Head of Engineering Department
3	Head of Sub-Dept Painting Head of Sub-Dept fabrication	Head of Sub-Dept production planning Head of Sub-Dept assembly production controlling Head of Sub-Dept material planning and controlling Head of Sub-Dept material warehouse Head of Sub-Dept fabrication production controlling Head of Sub-Dept cost accounting	Head of Sub-Dept Technical administration Design expert Head of Sub-Dept Power Train Head of Sub-Dept Drive Train Head of Sub-Dept Electrical Head of Sub-Dept Axle Assembly Head of Sub-Dept Finishing	Head of Sub-Dept engineering vehicle system Head of Sub-Dept engineering body hall Head of Sub-Dept electrical engineering Head of Sub-Dept Maintenance
4	Head of Preparation and Shot-Blasting Section Head of Painting Section Head of Finishing Section Head of Welding Section Head of Preparation Section		Head of Cooling & AC System Section Head of Brake & Steering System Head of Hydraulic System Head of Electrical Preparation Section Head of Electrical Power Pack Section Head of Electrical Interior & Exterior Section Head of Exterior Assembly Section Head of Interior Assembly Section Head of Sub-assy Axle Assembly Section Head of Last Finishing & Testing Axle 6x6 Head of Suspension Section Head of Transercase & Propeller Section Head of Engine & Transmission Section	

Then the career path is developed. The illustration of the career path can be seen in the figure below.



Career Path Illustration

Description of the career path illustration :

Based on the illustration of the career path showed in the Figure 4.3 there are 4 clusters of the career path for technical job position in Special Vehicle Division. The Path itself is shown by the arrow. Starting from the Fourth Cluster in the career path illustration, it consists of 3 different Sub-Cluster. The first Sub-Cluster consists of Head of Preparation and Shot-Blasting Section, Head of Painting Section, Head of Finishing Section, Head of Welding Section, and Head of Preparation Section. Rotation can be done between job positions in the same job class. The Second sub-cluster consists of Head of Sub-Dept Painting and Head of Sub-Dept Fabrication. The highest sub-cluster in the fourth cluster is filled by the Head of Fabrication Department. The career path follows the movement of job position from the first sub-cluster to the highest sub-cluster in one cluster.

Next is the third cluster which is filled by two sub-clusters. The lower sub-cluster consists of Head of Sub Dept production planning, Head of Sub-Dept assembly production controlling, Head of Sub-Dept material planning and controlling, Head of Sub-Dept material warehouse, Head of Sub-Dept fabrication production controlling, and Head of Sub-Dept cost accounting. All the job position in this sub-cluster can have rotation since they have high similarity in the competency. The upper sub-cluster is occupied by the Head of Production Planning Control Department. So all the position in the lower sub-cluster has a path to be promoted to the Head of Production Planning Control Department as the competency is being considered.

The Second Cluster in the Career Path illustration of technical job position of Special Vehicle Division of PT. XYZ is the largest cluster since it combines two departments that have similarity of the technical competency. The lowest sub-cluster in this cluster consists of Head of Cooling & AC System Section, Head of Brake & Steering System, Head of Hydraulic System, Head of Electrical Preparation Section, Head of Electrical Power Pack Section, Head of Electrical Interior & Exterior Section, Head of Exterior Assembly Section, Head of Interior Assembly Section, Head of Sub-assy Axle Assembly Section, Head of Last Finishing & Testing Axle 6x6, Head of Suspension Section, Head of Transfercase & Propeller Section, and the Head of Engine & Transmission Section. The rotation in this sub-cluster is based on the similarity of the job competencies that shown in the dendogram. So not all of the job position can have rotation in this sub-cluster. The middle sub-cluster consists of Head of Sub-Dept Technical administration, Design expert, Head of Sub-Dept Power Train, Head of Sub-Dept Drive Train, Head of Sub-Dept Electrical, Head of Sub-Dept Axle Assembly, and the Head of Sub-Dept Finishing. In this sub-cluster, all the job position can have the rotation based on the similarity of the competencies that is required. The Highest Sub-Cluster is occupied by the Head of Vehicle Assembly Department. This is the highest path that one job position can have in the Second Cluster.

The First Sub-Cluster consists of two sub-clusters. The lower one consists of Head of Sub-Dept engineering vehicle system, Head of Sub-Dept engineering body hall, Head of Sub-Dept electrical engineering, and Head of Sub-Dept Maintenance. This three job positions can be rotated between each other. This three positions have same career path to the higher sub-cluster that occupied by the Head of Engineering Department.

## **Conclusion**

Career path that was developed in this research is based on the adjacent of the technical competency since the nature of the job position is in the production division. Although the technical competency is the most influential competency in the production division such Special Vehicle Division of PT. XYZ, in designing the path and career planning we also have to consider the soft competency such as Core competency and Managerial competency. Both of the competencies define the behavior that must be performed by each job position that represented in the organization structure. Each employee that occupies one position must obtain the entire



competency shown in the Job Specification of the job position, not only the technical competency, but also the core and the managerial competency. The higher the level of one job position, the higher the competency that is required.

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