



Effects of Systematically Approach of People Development Programs in Automotive Industry. A Case Study

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ABSTRACT

People Development Concept definition is an elementary key of success and should be placed to the base of any Production Management System, in any industry, but an extra attention is paid to the automotive field. Thus, People Development Concept the company has a systematically and permanent system which evaluate, define, monitor and successful develop the competence level within the entire organization. This paperwork presents a case study from automotive industry, of applying People Development Concept, in a unique and personalized approach to company needs. A systemic outlook and an appropriate involvement support the company's continuous improvement efforts. The introduction presents general information on the People Development Concept and its ad-vantages. Going forward, the People Development Concept approach of the mentioned elements are described, showing in parallel the evolution of the implementation in an automotive respectable company. The paper ends up with the formulation of conclusions regarding the deduced effects.

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1. Introduction

International competition and the development of technology are the elements that fuel permanent change at an enormous speed. If the speed of transformation is ever faster, the organization must be flexible, innovative and creative, able to face new challenges and the redefinition of industries (Fitzgerald, 2011; O'Toole, 2011).

Employees encounter a similar situation of changes and uncertainty in their work. People tend to work in increasingly flexible environments, "flextime" (flexible schedule), shift work, short-term contracts, telecommuting, and with more responsibility, for example, multi-skilled teamwork. Qualifications that were in high demand in the past are no longer relevant today. At the same time, new skills are required. If employees want to thrive, they must be able to adapt to changing conditions (Lockwood, 1998; Sparrow, 2014).

So, organizations and people alike must be flexible and adaptive, able to develop new capabilities in the face of new demands and opportunities (Collings et al., 2017). The key to this is the ability to learn (Dunn, 1998). Learning is the acquisition of skills, knowledge and the understanding that this is capable of developing new skills. Learning can help change the way of thinking and belief. The ability to learn can improve work performance, but it has much wider implications for each individual. It helps people make changes and decide on actions that they think are good for them (Efron & Ort, 2010).

Learning has fundamental implications in the organization. Arie de Geus, Planning Manager at Shell, said in 1998: "The ability to learn faster than competitors may be the only competitive advantage.

2. Material and methods

Such approach was applied in an automotive corporation, which choose to no disclose its name. The case study is based on real data. In the following sub-chapters, the detailed process will be described.

After the Pandemic period, there are two elements that from one year to the next create increasingly difficult and critical conditions at the same time for the provision of qualified and specialized labor for existing companies. The first element being the job market, regardless of geographic location, fewer and fewer countries still have a workforce available at discretion. In addition to this aspect related to the

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decreasing availability of qualified personnel on the market, we also find an accelerated speed of transformation in the era of Digitization, Robotization and Automation, where the number of personnel is reduced, but the need for the existence of specialized personnel, especially in certain fields e.g., Smart Production, Digitization, IT, Programming, Automation, etc. In conclusion, the staff is getting reduced and the requirements are getting bigger, one of the options is to hire staff directly from the faculty, or non-specialized and with internal and external efforts to be specialized through a well-structured and defined staff development concept.

The case study took place in a company in the automotive industry, observing the effects of the implementation of the "People Development Concept", over a period of approximately 3 years, with the aim of ensuring a favorable environment for new employees from the moment they join the company and throughout career in the company.

The concept studied during the implementation includes six elements, which ensure the efficient integration of the new employee, the planning of the employee's development, the identification of needs, the periodic evaluation and the development of the teams.

In the figure below we find the elements present in the People Development Concept.

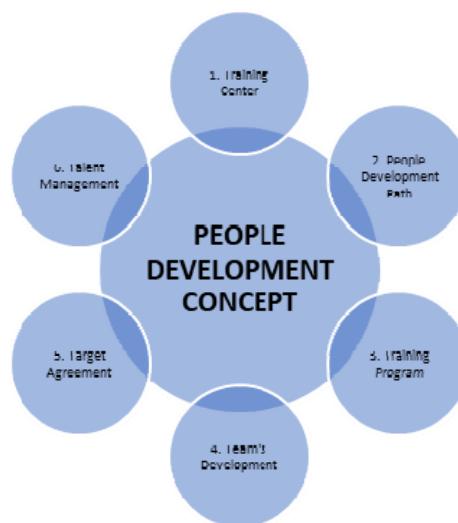


Figure 1. People Development Concept, applied in the case study for automotive company

In the following subsections, the elements and the observed effects are described.

2.1. Training Center

It is an integration program for new employees regardless of their position, from Operator to General Manager, it covers a series of theoretical and practical activities so that at the end of the training period there is a standardization of basic knowledge.

In order to achieve this, a dedicated area for theoretical and practical training called the Training Center was implemented, where all newly hired personnel benefit from a 2-week training, as follows: in the first 2 days, several theoretical materials are covered, which ensure minimum knowledge required for the automotive industry, regardless of the position held within the organization. Following that the remaining 3 days will be dedicated to practical learning at training stands in the Training Center. These stands are meant to develop the skills needed to make the product through repetitive movements. The last 5 days of the training program are spent directly in Production, and this time the new employees have the opportunity to make products under the direct supervision of the instructors.

2.2. People Development Path

Together with the company's Management Team, a matrix was developed that includes the entire list of functions within the company and the entire training package necessary for the automotive industry and legal requirements (49 necessary courses were defined, enumerating a few: IATF, VDA 6.3, Lean, 5S, SMED, APQP and others). Thus, in matrix form, the perfect "profile" of each function was defined, by defining the necessary training package to be applied to reach the maximum level of training/development. For example, for the position of Process Engineer, the maximum package included 23 specialized trainings, or the Quality Manager 33 trainings are included.

The entire training package for each function includes a prioritization in 3 stages of implementation, for a duration of approximately 3-5 years or even more.

Based on the ideal profile, each employee was evaluated, identifying the needs where planning is needed for certain trainings and specialized specializations.

[illegible]

2.3. Training Program

Figure 3: Example of Training program

next evaluation.

2.5. Target Agreement

Within the Concept of People Development, we also find the element related to the definition of objectives and the periodic evaluation of results. The purpose of this activity is to ensure individual and team objectives for each individual, clear knowledge of the objectives that must be achieved annually by each employee and also ensure a feedback system, with the aim of improvement. The objectives included in the Target Agreement Sheet are related to the measurable results for the process for which the employee is responsible and also include 3 competencies that the employee together with the superior will focus on for improvement in the following year. For the development of the respective competencies, the superior plans training programs to support the employee.

VARIABLE COMPENSATION SYSTEM - Personal targets						
Only the yellow marked fields must be completed by the superior						
Name	Ionit Morar			Variable compensation level	3	
Site	TM - Tirgu Mures			Fiscal year	2022	
Function	Production Manager					
Definition of Target				Achievement		
Personal targets	Performance	Description	Weighting %	Achiev. of target %	Achiev. after weighting %	Total %
Number of customers complaints TM02.1 H1/H6(50%) Scrap Serial TM02.1 (20%) PPM scrap SPP TM02.1 (30%) <i>Quality</i>	Above plan 120 %	Target Reclamatii serie: < 56/year, according with rum-down plan -0,5%	20%			0%
	On plan 100 %	Target Reclamatii: 57-63/year, according with rum-down plan				
	Below plan 80 %	Target Reclamatii: > 63/year, bellow the rum-down plan				
Productivity (TM02.1) <i>Production</i>	Above plan 120 %	according with rump-up plan +1%	20%			
	On plan 100 %	according with rump-up plan				
	Below plan 80 %	bellow the rump-up plan				
Inventory differences TM2.1 (50%) Level of production Backlog TM2.1 (30%) FOOT/FOQR TM2.1 (20%) <i>Logistics</i>	Above plan 120 %	Inventory results <0,65% Under "BL maxim" (weekly average) Target >96%	20%			
	On plan 100 %	Inventory results <0,7% between "BL maxim" si "BL Alerta" (weekly average) Target >95%				
	Below plan 80 %	Inventory results >0,7% over "BL Alert" (weekly average) Target <95%				
Total Cost RateTM: 50% Lean Projects and Efficiencies (Time Changes, Efficiency Projects, CIP Projects) 50% <i>Production & Lean</i>	Above plan 120 %	Target Total Cost rate: over the target from KPI Monitor TM1: Target > 250K euro	15%			
	On plan 100 %	Target Total Cost rate: according with target from KPI Monitor TM1: Target 250-200 euro				
	Below plan 80 %	Target Total Cost rate: above target from KPI Monitor TM1: Target <200K euro				
Go-live new projects/transferred (Production lines transfer e.g. SG05, SG10, 2F, etc.) (80%) NPI process efficient (20%) <i>Tehnic</i>	Above plan 120 %	meeting customer/internal requirements, cycle time requirements, scrap targets - according with plan NPI: >94%	15%			
	On plan 100 %	meeting customer/internal requirements, cycle time requirements, scrap targets - with minor deviations NPI: 92%				
	Below plan 80 %	new NPI process implemented mith major deviations bellow the target NPI: <90%				
Communication/Networking <i>Human resources</i>	Above plan 120 %	Target >80%	10%			
	On plan 100 %	Target 80%				
	Below plan 80 %	Target <80%				
			Total weighting must be 100%:	100%		
Agreement Date and signature employee Date and signature superior						
Achievement Date and signature employee Date and signature superior						

Figure 4. Example of Target Agreement Sheet, Variable Compensation System

Based on the result obtained in the annual evaluations, one-to-one feedback is given and the result is also correlated with a financial bonus system.

2.6. Talent Management

Based on the existing statistics, the percentage of the population for very talented people with a high level of intelligence is approximately 2%. Similarly, within the company, there is a certain percentage of talented people with high potential for development. To ensure the retention of talents in the company (also called Key players) and to identify people with potential, the "Talent Management" element was implemented (Nilson, 2002; Humphrey, 2006). At least once a year, each employee was evaluated by his superior and placed in one of the following categories:

- Alpha – very talented person, who has a very good knowledge of the job requirements and brings a positive impact on the company's profitability;
- Wolves – the person who can be promoted, having the ability to take over the attributions of the Alpha person at any time;

- Bee – competent person in the position he is in, without having Alpha or Wolve skills;
- Black Sheep – the person who does not correspond to the position he is in.

Based on the periodic evaluations of the staff, the people who had the necessary skills for promotion and/or the people who are either not suitable for the position or need development support were identified.

In order to ensure the necessary motivation of the identified talented people, the existence of two elements was ensured: one on the part of challenges and permanent involvement in projects that ensure the continuity of the development of skills and avoid stagnation in comfort zones, and the second element being the financial remuneration that was supposed to reward the level of competence conforms to the existing level on the labor market.

Department: Management (Shortcut) Leader: Sebastian Candea (last + first name)			
Step 1: Rank a maximum of 10 key-positions (less is more!) within your responsibility based on their impact on the company's profitable growth. Afterwards fill in the name of the actual job holder and evaluate him/her based on the following four selection categories in the context of our core values (Passion, Cooperation, Focus).			
	Category	Description	
	Alpha (High Performer)	Will and competence to to an excellent job on the actual position for the next 5 years	
	Wolve (High Potential)	Will and competence for moving towards a more responsible position within the next 3 years	
	Bee (Performer)	Will and competence to do a good job on the actual position for the next 5 years	
	Black Sheep (Low Performer)	Not enough will or competence to do a good job on the actual position within the next year	
	To be defined	The position is not occupied at the moment or the candidate can not be categorised right now (e.g. new employee, ...)	
Ranking	Key-position for profitable growth	Name (last + first)	Category
1	Francean Calin	Maintenance	Alpha (High Performer)
2	Corina Sandu	Lean	Bee (Performer)
3	Radnoti Simion	Production TM02	Alpha (High Performer)
4	Szilaghi Florin	H of Logistics	Bee (Performer)
5	Kovacs Cristian	Tool Shop	Alpha (High Performer)
6	Sorin Mardare	H of Quality	Alpha (High Performer)
7	Augustin Kiss	Production 01	Black Sheep (Low Performer)
8	Cosmin Gheorghe	H of Tehnology	Alpha (High Performer)
9	Sandel Marinescu	Product Development	Bee (Performer)
10	Codrin Vlad	Project Management	Alpha (High Performer)
Step 2: List a maximum of 10 other employees (less is more!) within your responsibility deserving the category Alpha Wolve, or Black Sheep which have not been mentioned in step 1.			
Number	Actual position	Name (last + first)	Category
1	Adriana Goiceanu	E&HS	Alpha (High Performer)
2	Cristina Nan	IMS	Bee (Performer)
3	Igret Calin	Apprenticeship	Bee (Performer)
4			
5			
6			
7			
8			
9			
10			
Step 3: Fill in a comment if necessary and relevant.			
Comment			

Figure 5. Example of Talent Management Evaluation Sheet

Note: Due to confidential data, fake names were used in the documents presented in this case study.

3. Results

The results of the successful application of all the elements of the People Development concept could be observed in the following performance indicators:

- The degree of qualification growth monitored through the Development Path Matrix, in the first two years the degree of qualification growth increased by 10%;
- The level of competences in the Matrix of competences, there were increases of 6%;

- The degree of integration of new employees, the rate of turnover of new employees in the first month of employment was reduced by 30%;
- The degree of achievement of the factory's performance indicators, the exact influence of this concept could not be measured, because the growth recorded was affected by the application of several concepts and methods of improvement;
- Increasing the degree of retention in the company, there was a 10% increase in the first two years of applying the concept;
- The result of the Yearly Team's evaluations, due to confidentiality, the values obtained by each department in the period 2020-2022 could not be highlighted in this work, but in the figure below, the results of the annual evaluations between departments can be visualized, observing an increasing trend of improvement.

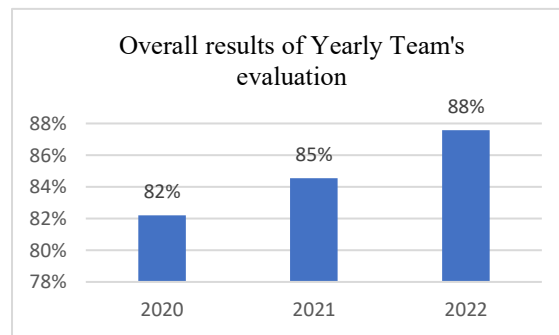


Figure 6. Case Study Company, overall results of Yearly Team's evaluation

4. Discussion

Through the practical application of the elements present in the People Development Concept, permanent progress has been observed in the development of personnel from the beginning of the activity in the company, through the "Training Center" element, then during the period of activities, during the "maturity" period of to the employee in the company, when the development was supported through the "People Development Path" and "Training program" processes.

A need for periodic evaluation of the competences in the organization was observed, with the aim of identifying the existing level of competences and the need for training and development. These evaluations were possible through the "Team's Development", "Target Agreement" and "Talent Management" elements. An important element observed in the successful development of employees was the provision of systematic feedback, regardless of whether it is negative or positive feedback, the employee constantly needs confirmation or refutation vis-à-vis the results obtained and the level of competences achieved. Also, the employee needs transparency and clarity in knowing the objectives on the development side, this was possible by applying the "Target Agreement" element (Colling, 2011).

The development of each individual is not enough, as is very well known, individual performance is not enough to raise the organization to a level of performance, of excellence. For this, a synergy between individuals is needed, a collaboration, a completion of the competencies so that the groups of individuals form a high-performance team. This systematic evaluation of team performance was possible by applying the "Team's Development" element.

It was observed that by defining the "People Development Path", i.e. by designing the package of trainings that must be received as a basis, specific for each individual position throughout the evolution of the career, the employee has the perspective of the trainings he will receive in the future. Also, this program ensures the delivery of the specific basic training package to everyone. Otherwise, in many other companies, development programs can be identified that focus only on the lacks experienced by employees, on filling an existing gap and not on consolidating already existing knowledge, or on perfecting certain skills. This "People Development Path" is like a recipe for success specific to each position in the organization, containing the necessary training package to obtain the best results.

5. Conclusions

Any organization is mainly represented by people and not by equipment, buildings and any other forms of assets. People are the ones who manage the assets, they are the ones who give life to things, the ones who set things in motion, they are the most important in an organization (Carter, 2010). The higher the level of competence in an organization, the higher the level of performance (Brian, 2001).

When a company stops investing in people, it stops evolving and begins to record deterioration in performance, reaching bankruptcy in extreme situations.

The quality of the products or services delivered by a company is directly proportional to the level of competence that the employees of this company have.

Based on the effects and results observed in the case study, the "Employee Development Concept" is considered an element that is the basis of the entire company and production management system, without this well-structured and effectively implemented concept, the rest of the activities initiated in the company they have little chance of success.

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